

MODULE 3

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

3.1 INDIVIDUAL DEVELOPMENT AND PROBLEM-SOLVING SKILLS

Learner-Centered Primary Education: Enhancing Co-Created Learning Processes. Individual Development and Problem-Solving Skills.

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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.

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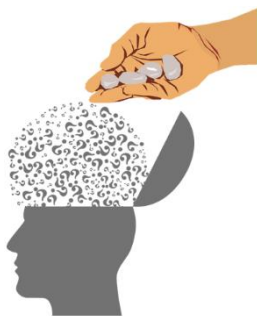
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1 EMPOWERED AND SELF DETERMINED STUDENTS

Traditionally, students have taken passive roles in educational settings. They have followed a set of rules and norms handed down by authority figures and embedded in the culture of society. Students follow schedules which have been created for them, they complete tasks and tests developed by teachers or educational boards and they move through a system in which they are given little choice (Zacarian & Silverstone, 2020). These traditional teaching techniques – most especially those based on rote memorization – often reduce student curiosity to the elemental ‘what do I need to pass this exam?’ Moreover, what is expected to be learnt is generally not demanding of higher-order thinking skills and often perceived as being irrelevant to the student’s future career path, leading to a lack of motivation and frustration (McCombs, 2000).

Expectations like these date from the early days of a universal public education, the point of which was to help all students acquire the skills and dispositions necessary to promote the acquisition of knowledge and involved citizenry. Underlying the foundation of a universal education was the assumption that children were empty vessels who would receive the knowledge, attitudes, and moral leanings presented to them by teachers, who acted as stand-ins for their parents and religious authorities. (Zacarian & Silverstone, 2020, p. 9)

This traditional education system, in which students are viewed as empty



containers into which educators place knowledge, was coined **the banking model of education** by Paulo Freire, an educator and philosopher who critiqued traditional education. While the students in this model are labeled ‘empty containers,’ teachers are expected to be authority figures who deposit the knowledge into

The banking model of education states that instead of communicating the teacher issues communiqués (statements) and makes

their passive students (i.e., into a bank), ignoring any previous knowledge or experiences they may already have (Freire, 1970).¹

By applying Ford's factory model to schools and seeing students as objects to whom techniques are applied, students can be disconnected from their learning. This approach can end up disempowering, rather than empowering, students, particularly as the behavior that is usually rewarded by teachers is passive, such as following of the teachers' instructions, doing homework, learning class content, and completing work on time. This focus on compliance, with the aim of making classrooms "manageable," can squash the development of students' sense of empowerment. (Broom, 2015, p. 80)

There has, however, been a revolution in thinking amongst educationalists since Freire's time. Whereas previously students were expected to be obedient, compliant, submissive and passive, now students are expected to be creative, confident, insightful and collaborative. Figure 1 below illustrates the changing ideals of positive student characteristics over time.

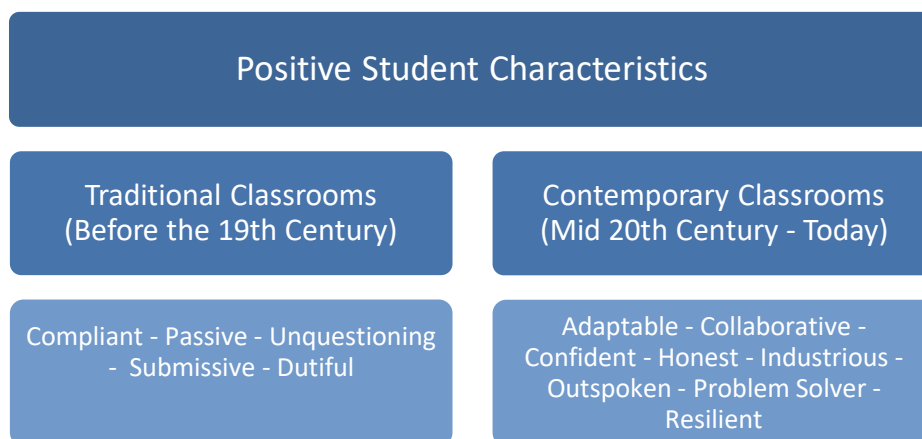


Figure 1: Positive Student Characteristics²

deposits which the students patiently receive, memorize, and repeat. This is the "banking" concept of education, in which the scope of action allowed to students extends only as far as receiving, filing, and storing the deposits. (Freire, 1970, p. 72)

¹ Picture source: Open source from pixabay.com

² Adapted from Zacarian & Silverstone (2020).

This growing importance of student empowerment is a concept that Zacarian & Silverstone (2020) argue is rooted in two major factors: personal action and collective responsibility. Today's students should have the ability to guide their own learning experience by making choices both big and small. The more students are able to exercise their own choice and agency in academic situations, the more empowered they will become (Zacarian & Silverstone, 2020).

Broom (2015) views empowerment as closely linked to self-efficacy, or the belief that "one controls one's life and that one can make positive changes in one's surrounding environment" (p. 80). Empowered students can consider various perspectives, make their own thoughtful decisions and engage in problem solving. When students become empowered, there are benefits for both the individual and the society (Broom, 2015).

Sullivan (2002) defines student empowerment as "a philosophy that creates an atmosphere in which individual students are supported by the classroom community to take responsibility for their lives in trying to meet their needs within learning settings" (p. 2). Therefore, student empowerment should be focused on working with and not over others. The sharing of power, from both teacher to student and student to student, is essential.


Students who are involved in power-with relations are more likely to feel a sense of belonging than if they are involved in **power-over** relations. Furthermore, if students satisfy their need for belonging in the classroom and there is a sense of community, then it seems reasonable to expect that they are more likely to achieve a sense of **power-with**. Additionally, gaining a sense of **power-to** would contribute to students satisfying their need for power because students would be more likely to be able to pursue and realize their social goals. (Sullivan, 2002, p. 2)

In all of these definitions, the importance of both autonomy (thinking and acting on one's own volition) and collaboration (sharing power and ideas) are


There are three conceptions of power that are useful for examining empowerment

- **Power-over** can be considered a negative force of power in the form of domination as the effect on the individual(s) over which the power is wielded is likely to be a position of powerlessness.
- **Power-with** can be considered as a positive force of power because it is about equal power relationships rather than domination.
- **Power-to** exists when a person

highlighted. While these terms autonomy and collaboration may sound paradoxical, the small classroom example below shows the subtle ways in which an empowered student uses one to support the other:




Andrew is struggling with a math exercise.




Emily understands the exercise but notices her partner is having trouble. Without being prompted by the teacher or Andrew, Emily asks Andrew if he wants to complete the exercise together. Andrew admits that he does not understand the exercise and would like to work on it together with Emily.

Their teacher hears them



talking quietly while doing the exercise and gives them a thumbs up.¹



perceives that they have the ability or capability to act and thus can be considered a positive force of power. (Sullivan, 2002, p. 1)

In this example, Emily feels confident she knows the answer and that she has the capacity to help. She is also empathic towards her classmate and wants to collaborate with him. Andrew is accepting of help and secure enough in his environment and with his classmate to admit he needs help. Their teacher is willing to share her ‘power’ with Emily and is happy to see her students working together.

It should be stated that student empowerment does not ask educators to completely abandon the norms or systems of the past. Teachers should continue to instill the importance of respect and compliance with important rules (e.g., following protocol when the fire alarm rings or listening when someone is speaking), but in order for students to thrive in any environment (classroom and beyond), they must feel empowered in contributing to an interdependent community.

2 THE IMPORTANCE OF BECOMING AN EMPOWERED AND SELF DETERMINED STUDENT

Teachers are trained as professionals and experts in their field and should be respected as such, but this does not mean that students should not harness power in the classroom as well. When teachers listen to their students and honor their voices, students are more likely to display initiative, commitment and confidence. Teachers, even those who believe student empowerment is important, may be hesitant to abandon the traditional system in which the teachers have the authority and “they may incorrectly feel that empowering their students disempowers them” (Broom, 2015, p. 81). When teachers share power with their students, it does not mean that they have less.

If instead of micromanaging their students, teachers can learn how to empower them, teachers will make their own lives easier, avoid burnout, and help students take responsibility for guiding their own learning. They will thus benefit their students, themselves, and our society overall. It seems counter-intuitive, but by giving students power, teachers gain power and better classroom control. (Broom, 2015, p. 82)

Below are some ways empowering students will support positive outcomes in their learning.

2.1 Empowered Students Are Lifelong Learners

Empowered students are equipped with the ability to act on their own behalf or on behalf of their community to accomplish a goal or establish an outcome. Ultimately this extends outside of the classroom and encourages them to be lifelong learners, something that is extremely important in today’s rapidly developing society.

The development of information and computer technologies has led to a dramatic change in the expectations of what students should be capable of doing as adults. The shift from basic manufacturing to the often highly automated production of more sophisticated goods together with the rapid development of the knowledge-based service sector and the pace of technological developments has led to an increase in the need for critical thinking, problem-solving and collaborative communication skills. In recognition of this seismic shift in the social environment, lifelong learning has become increasingly important. Figure 2 below outlines the core attributes of effective lifelong learners (Murdoch & Wilson, 2008).

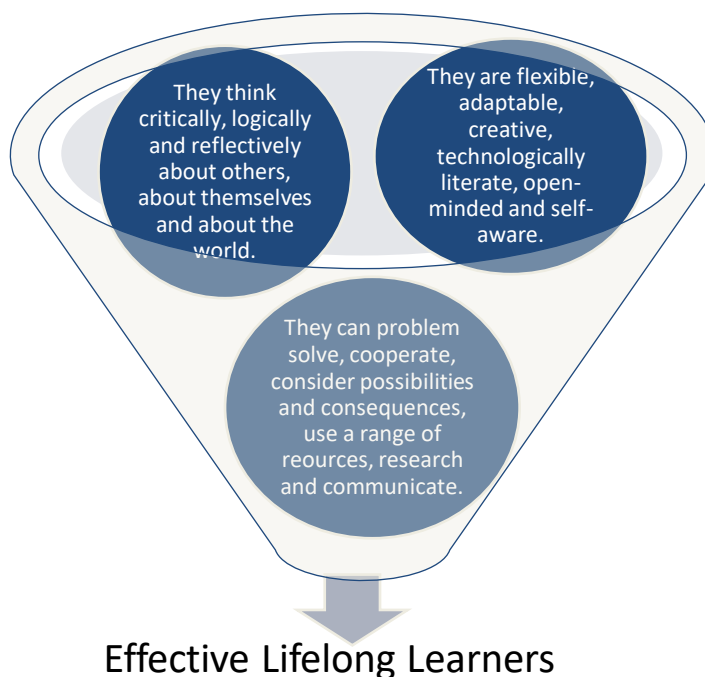


Figure 2: The Core Attributes of Life-Long Learners³

Learning is something students do their whole lives in various different forms, therefore it is necessary to encourage students to be architects of their own learning from an early age. When teachers instill the trust in students to take

³ Adapted from Murdoch and Wilson (2008).

great ownership of their own learning (i.e., empowerment), they develop more independent and self-directed learners.

2.2 Empowered Students Are Confident

When teachers give their students greater control and choice over their learning, students gain more confidence in their abilities. Confident students become more independent and begin directing their own learning inside and outside of the classroom; confidence develops optimism, which leads to action (Broom, 2015). Confidence is synonymous with self-efficacy and they are both correlated with “achievement-related behaviours, including cognitive processing, achievement performance, motivation, self-worth and choice of activities” (Seifert, 2004, p. 137). Students who are confident are more inclined to be self-starters, strategic thinkers and adaptive in various situations, whereas students who are less confident may avoid difficult or challenging tasks and refrain from asking questions (Seifert, 2004).

2.3 Empowered Students Develop Empathy

Empowered learners are able to see the difference they can make and how their education and learning can impact those around them. Just as was displayed in the example of Andrew and Emily in part 1 of the text, empathy encouraged her to help her classmate solve a problem. When students are encouraged to create safe and empathetic communities in the classroom, they will make the connection between social responsibility in the greater community to serve a greater good.

To take such actions, students must have a good deal of awareness and the capacity to pick up the verbal and nonverbal messages others are sending. It is fair to say that practicing social responsibility begins with awareness—with paying careful attention to others. These skills do not come naturally to all students and may need to be encouraged or explicitly taught and

practiced. Teachers can model such skills by being empathetic with students and seeking to identify personally with the situations they face. (Zacarian & Silverstone, 2020, p. 15)

Community solidarity can be cultivated in the classroom by letting students know they are seen and heard and giving them the opportunity to experience, build and nurture relationships.

2.4 Empowered Students Are Not Afraid of Failure

Failure is unavoidable and ultimately an important part of a student's growth. Empowered students understand that failure is a part of life and a natural part of learning (e.g., because they have been introduced to the work of intellectual greats who have failed before reaching success or they have been allowed to fail in the classroom). Failure can be seen as something that does not end the learning process, but instead as a form of feedback for continued growth. This will also contribute to their path to become lifelong learners, as knowledge itself is changing quickly and continuously based on new information (Broom, 2015).

Teachers can see knowledge as living and something acquired by students as they actively engage with their experiences. That is, teachers do not “give” their students knowledge, students “acquire” knowledge through their interactions with others in what Dewey called “experiences.” Teachers can help students make sense of their experiences through reflection, or discussion. In short, teachers can empower their students through student-focused lessons that engage them in inquiry and reflection and that are nurtured in and through relationships. (Broom, 2015, p. 83)

John Dewey was an educational scholar and reformer who advocated for a revolutionary model of education, proposing that a public school enterprise should be a place of vision, discovery, intellectual

3 THE IMPORTANCE OF LIFE-SKILLS IN BECOMING AN EMPOWERED STUDENT

There are certain abilities and behaviors (or life skills) that enable students to meet the demands and challenges of everyday life to become empowered students, lead self-determined lives and be productive members of society. Some students will acquire these life skills naturally, while others will have to work harder to perfect their skills. Life skills can be modelled and taught by parents, guardians, loved ones and, in the educational setting, teachers. Schools provide an ideal setting for students to acquire these skills.

According to the World Health Organization (WHO), there is a core set of life skills that promote the health and well-being of young people. These are outlined in table 1.

Table 1: Core Life Skills⁴

| CORE SKILL | DEFINITION |
|------------------------------------|--|
| Decision-Making | Helps us to deal constructively with decisions about our lives. |
| Problem-Solving | Enables us to deal constructively with problems in our lives. Significant problems that are left unresolved can cause mental stress and give rise to accompanying physical strain. |
| Critical Thinking | Our ability to analyze information and experiences in an objective manner. |
| Creative Thinking | Contributes both to decision-making and problem-solving by enabling us to explore the available alternatives and various consequences of our actions or inaction. |
| Communication | Means that we are able to express ourselves, both verbally and nonverbally, in ways that are appropriate to our culture and situations. |
| Interpersonal Relationships | Help us to relate in positive ways with the people we interact with. |
| Self-Awareness | Includes our recognition of ourselves, of our character, of our strengths and weaknesses, of our desires and dislikes. |

challenge, adventure, and excitement—a place where ‘all individuals have the opportunity to contribute something, and in which the activities in which all participate are the chief carrier of control.’ (Zacarian & Silverstone, 2020, p. 10)

| | |
|-----------------------------|--|
| Empathy | The ability to imagine what life is like for another person, even in a situation that we might not be familiar with. |
| Coping with Stress | Recognizing the sources of stresses in our lives, recognizing how this affects us, and acting in ways that help to control our levels of stress. |
| Coping with Emotions | Involves recognizing emotions in ourselves and others, being aware of how emotions influence behavior and being able to respond to emotions appropriately. |

The life skills outlined in table 1 are essential because they can guide young people to improve their lives, help them gain a better understanding of themselves and others, make better choices and learn to cope with changing events in the world they inhabit. More specifically, life skills learning can help students become more in tune with: “(i) what they are doing; (ii) how they are doing things; (iii) how they obtain information; and (iv) other people and how they think, feel and behave” (World Health Organization, 2020, p. 19).

In addition to the life skills mentioned above, the American Psychological Association (APA) focuses on 14 psychological factors that are under the control of the student and deal holistically with real-world learning situations. This list of 14 research-validated Learner Centered Psychological Principles can help teachers focus on “understanding learning and motivation as natural processes that occur when the conditions and context of learning are supportive of individual learner needs, capacities, experiences, and interests. [...] [This] foundation [...] is essential to designing technology-supported practices that attend holistically and systemically to the needs of all learners” (McCombs, 2000, p. 5). It applies to all learners, regardless of age and the learning environment. The list includes:

- metacognitive and cognitive factors;
- affective and motivational factors;
- developmental and social factors; and
- individual difference factors.

⁴ Adapted from World Health Organization (2020, p. 18).

Focusing on learner-centeredness is important because it begins with a full understanding of how students see their world and it approaches the process of learning both inside and outside the classroom. Focusing on what is learned and how learning takes place with individual learner needs, interests, and capacities can help teachers understand how to help students direct their own learning. The fourteen core Learner-Centered Psychological Principles identified by the APA (1997, adapted from McCombs, 2000) are outlined in table 2.

Table 2: The Fourteen Core Learner-Centered Psychological Principles⁵

| Cognitive and Metacognitive Factors | | |
|--|--------------------------------|---|
| 1 | Nature of the learning process | Learning of complex material is based on a desire to learn it, based on information reinforced by past experience. |
| 2 | Goals of the learning process | The learner should be able to create meaningful, coherent representations of new, personally relevant knowledge over time with support and instructional guidance. |
| 3 | Construction of knowledge | The learner is able to relate new information to their existing knowledge in meaningful ways. |
| 4 | Strategic thinking | The learner is able to adopt and use a repertoire of thinking and reasoning strategies to achieve complex learning goals. |
| 5 | Thinking about thinking | Students can learn how to learn better through analysing their higher order strategies and how these have helped them to already facilitate their creative and critical thinking. |
| 6 | Context of learning | Teachers and students need to recognize that learning is influenced by environmental factors including culture, existing perceptions of teacher-student relations and other variables such as access to the appropriate technologies. |
| Motivational and Affective Factors | | |

⁵ Adapted from McCombs (2000).

| | | |
|--|---|---|
| 7 | Motivational and emotional influences on learning | Students need to actively want to learn for the best outcomes: this will depend on their individual interests and goals, habits of thinking and beliefs, as well as their emotional state. |
| 8 | Intrinsic motivation to learn | This depends on the learner's natural curiosity and the encouraging of their creative drive through the further development of higher-order thinking skills. |
| 9 | Effects of motivation on effort | Students are motivated by tasks designed to be relevant to their personal interests and which are both novel and challenging; however, guidance (rather than coercion) is needed to maintain the initial momentum. |
| <u>Developmental and Social Factors</u> | | |
| 10 | Developmental influences on learning | External factors play an important role, based on different opportunities that individuals encounter and the different constraints for learning which they experience; teachers need to take this into account when considering the class as a whole. |
| 11 | Social influences on learning | Learning is influenced by social interactions, interpersonal relations, and communication with others. |
| <u>Individual Differences Factors</u> | | |
| 12 | Individual differences in learning | Learners have different strategies, approaches, and capabilities for learning that are a function of prior experience and heredity. |
| 13 | Learning and diversity | Learning is most effective when differences in learners' linguistic, cultural, and social backgrounds are taken into account. |
| 14 | Standards and assessment | Setting appropriately high and challenging standards and assessing the learner and learning progress – including diagnostic, process, and outcome assessment – are integral parts of the learning process. |

Being aware of and embracing the principles and core skills in tables 1 and 2, can help teachers understand how to include learners in decision making (e.g., how they will learn, what they will learn, and how the learning will be assessed), how to value and accommodate each student's unique background, interests and abilities and how to treat students as co-creators and partners in

the teaching and learning process. All of this understanding will lead students to be empowered and self-determined students who take increased responsibility for their own lives.

4 KEY POINTS

- ✓ In traditional educational settings, students are considered to be empty containers into which educators place knowledge. This kind of education has become known as the banking model of education.
- ✓ In this traditional understanding of education, students are passive receivers of knowledge, which might lead to a disconnection between the learner and their learning process and thus disempower students.
- ✓ In contemporary classrooms, students are empowered to guide their own learning experience by making choices both big and small.
- ✓ In the 21st century classroom, students should be involved in power-with relations, i.e. the collaboration and cooperation between students and between the teacher and students, where everyone is considered to be equal. They should thus gain a sense of power-to, i.e. the perception that they have the ability or capability to act autonomously.
- ✓ Empowered students are life-long learners who know that they are the architects of their own learning processes, which makes them independent and self-directed.
- ✓ Empowered students are confident and thus self-efficient in developing and adapting strategies in various situations.
- ✓ Empowered students develop empathy to see the difference they can make and how their education and learning can impact those around them.
- ✓ Empowered students are not afraid of failure but understand that it is a part of life and a natural part of learning.

5 REFERENCES

- APA Work Group of the Board of Educational Affairs (1997). *Learner-Centered Psychological Principles: A Framework for School Reform and Redesign*. Washington, DC: American Psychological Association.
- Broom, C. (2015). Empowering Students: Pedagogy That Benefits Educators and Learners. *Citizenship, Social and Economics Education*, 14(2), 79–86.
- Freire, P. (1970). *Pedagogy of the Oppressed*. New York: Continuum.
- McCombs, B.L. (2000). *Assessing the Role of Educational Technology in the Teaching and Learning Process: A Learner-Centered Perspective*. The Secretary's Conference on Educational Technology.
- Murdoch, K. & Wilson, J. (2008). *Creating a Learner-Centred Primary Classroom: Learner-Centered Strategic Teaching*. Routledge.
- Seifert, T. (2004). Understanding Student Motivation. *Educational Research*, 46(2), 137–149.
- Sullivan, A.M. (2002). The Nature of Student Empowerment. *Self-Concept Research: Driving International Research Agendas*.
- World Health Organization (2020). *Life Skills Education School Handbook: Prevention of Noncommunicable Diseases. Introduction*. Geneva. Retrieved from: <https://apps.who.int/iris/handle/10665/331948> [2021, May 19].
- Zacarian, D. & Silverstone, M. (2020). *Teaching to Empower: Taking Action to Foster Student Agency, Self-Confidence, and Collaboration*. Alexandria, VA: ASCD.

5.1 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 Characteristics of empowered students. Mark the words in the table below that you would use to describe an empowered student:

| | | | |
|-----------------|----------------|--------------|-----------------------|
| Open-minded | Unempathetic | Experimental | Confident |
| Self-determined | Flexible | Indifferent | Not afraid of failure |
| Self-efficient | Problem Solver | Mindful | Empathetic |
| Collaborative | Obsessed | Teasing | Lifelong learners |



B In the following table you find descriptions of students in traditional education. Mark the words that describe an empowered student:

| | | |
|---------------|------------|-----------------------------|
| Submissive | Obliging | Careless |
| Passive | Respectful | Not criticizing/questioning |
| Conscientious | Servile | Dutious |



C Choose the 10 core life skills defined by the World Health Organization from the list below:

communication – bragging – critical thinking – empathy – living in the moment – problem solving – coping with emotions – being a lone fighter – coping with stress – leadership – self-awareness – interpersonal relationships – being dreamy – creative thinking – decision-making



D Drag and drop the right term to the matching definition:

Power-over – Power-with – Power-to

| Description | Term |
|---|------|
| Equal power relationships rather than domination | |
| A person perceives that they have the ability or capability to act | |
| There is a dominated individual which is in a position of powerlessness | |



E Answer the following multiple-choice questions:

1. Which sentence best describes the role of the teacher in the Learner-Centered approach?
 - a) The teacher equips the student with subject knowledge.
 - b) The teacher guides the student to acquire knowledge.
 - c) The teacher brings out and develops his/her potential.
2. Which is the INCORRECT statement about the Learner-Centered classroom?
 - a) The learner has vast capabilities and limited potential.
 - b) The excitement and eagerness to learn through discovery should be fostered throughout the life of the learner.
 - c) The teacher creates an environment that generates curiosity.
3. The environment in the Learner-Centered classroom should reflect a healthy relationship between the teacher and the learner.
 - a) True
 - b) False
4. Problem-solving skills and critical thinking skills are important for the future development of a child.
 - a) True
 - b) False
5. The teacher should not include students in the decision-making process.
 - a) True
 - b) False
6. There should be opportunities in the classroom for the student to bring out creative ideas.
 - a) True
 - b) False

7. One of the fourteen core Learner-Centered Psychological Principles identified by the APA is thinking about thinking.
 - a) True
 - b) False

8. Which of the following statements characterize empowered students? **MULTIPLE** answers are possible.
 - a) They are lone fighters.
 - b) They are empathetic.
 - c) They are flexible regarding changes in the classroom or school setting.
 - d) They collaborate with the classmates.

STEP 1 PRACTICE EXERCISES – SOLUTIONS



A Characteristics of empowered students. Mark the words in the table below that you would use to describe an empowered student:

| | | | |
|-----------------|----------------|--------------|-----------------------|
| Open-minded | Unempathetic | Experimental | Confident |
| Self-determined | Flexible | Indifferent | Not afraid of failure |
| Self-efficient | Problem Solver | Mindful | Empathetic |
| Collaborative | Obsessed | Teasing | Lifelong learners |



B In the following table you find descriptions of students in traditional education. Mark the words that describe an empowered student:

| | | |
|---------------|------------|-----------------------------|
| Submissive | Obliging | Careless |
| Passive | Respectful | Not criticizing/questioning |
| Conscientious | Servile | Dutious |



C Choose the 10 core life skills defined by the World Health Organization from the list below:

communication – bragging – critical thinking – empathy – living in the moment – problem solving – coping with emotions – being a lone fighter – coping with stress – leadership – self-awareness – interpersonal relationships – being dreamy – creative thinking – decision-making



D Drag and drop the right term to the matching definition:

Power-over – Power-with – Power-to

| Description | Term |
|---|------------|
| Equal power relationships rather than domination | Power-with |
| A person perceives that they have the ability or capability to act | Power-to |
| There is a dominated individual which is in a position of powerlessness | Power-over |



E Answer the following multiple-choice questions:

1. Which sentence best describes the role of the teacher in the Learner-Centered approach?
 - a) The teacher equips the student with subject knowledge.
 - b) The teacher guides the student to acquire knowledge.
 - c) The teacher brings out and develops his/her potential.
2. Which is the INCORRECT statement about the Learner-Centered classroom?
 - a) The learner has vast capabilities and limited potential.
 - b) The excitement and eagerness to learn through discovery should be fostered throughout the life of the learner.
 - c) The teacher creates an environment that generates curiosity.
3. The environment in the Learner-Centered classroom should reflect a healthy relationship between the teacher and the learner.
 - a) True
 - b) False
4. Problem-solving skills and critical thinking skills are important for the future development of a child.
 - a) True
 - b) False
5. The teacher should not include students in the decision-making process.
 - a) True
 - b) False (Correct Answer: Students should be included in the decision-making process.)
6. There should be opportunities in the classroom for the student to bring out creative ideas.
 - a) True
 - b) False

7. One of the fourteen core Learner-Centered Psychological Principles identified by the APA is thinking about thinking.
- a) True
 - b) False
8. Which of the following statements characterize empowered students? MULTIPLE answers are possible.
- a) They are lone fighters.
 - b) They are empathetic.
 - c) They are flexible regarding changes in the classroom or school setting.
 - d) They collaborate with the classmates.

STEP 2 PRACTICE EXERCISES



A Read the following case studies. Decide which one describes the banking model of education and which one a learner-centered model:

Case Study 1

It states in the curriculum that students have to learn about different poems and writers. Mrs. Kamari gives the children the task to choose from one of three poems that the children have to learn by heart and have to recite the following week in front of the class.

Case Study 2

It states in the curriculum that students have to learn about different poems and writers. Mrs. Kamari gives the children the task to choose from one of three poems, read their chosen poem and try to reenact the poem in their own words in front of the class.

- a) Banking Model of Education:
- b) Learner-Centered Model of Education:



B Read the following case studies. Decide which one describes empowered students:

Mrs. Kamari takes the students on a field trip to collect different leaves for their herbarium and learn about trees on the way. The path goes uphill and one student, Devi, has problems keeping up with the pace of the other children. Two other students, Esha and Avan, notice that Devi is way behind the other children, catching her breath.

Case Study 1

Esha and Avan look at each other and decide to walk back down to Devi. They ask if they can help her walk the rest of the way. Devi agrees, so Esha takes her left arm and Avan her right and together they keep walking uphill.

Case Study 2

Esha and Avan look at each other and then look at Mrs. Kamari teaching the other children about an old oak they discovered. They decide it is better to join the others and listen to what Mrs. Kamari has to say so they do not get in trouble for staying behind and not listening.

- a) Empowered Students:
- b) Not Empowered Students:



C Watch the following video about the Student Empowered Teaching Method (STEMP) (https://www.youtube.com/watch?v=SgmF1OXogrM&ab_channel=USMEXFUSIONAC; audio transcription can be found in the appendix of this document). Drag and drop the words below into the appropriate category:

Teacher has the power¹ – Students are protagonists of the teaching process² – Teacher as guide, planner and evaluator³ – Teacher spends most of the time in front of the class⁴ – Students have to learn for themselves⁵ – Teamwork is an important part⁶

| Traditional class | Student Empowered Teaching Method |
|-------------------|-----------------------------------|
| | |



D Look at the pictures below and drag and drop the characteristics of empowered students to the matching picture. Characteristics can be assigned to MULTIPLE pictures:

Students help each other.¹ – Students collaborate.² – Students are confident in asking questions and interacting with the teacher.³ – Students are empathetic.⁴

| | |
|---|--|
|  | |
|  | |



Picture Sources: Open Source from pixabay.com



E Watch the following video regarding Problem Solving

(<https://www.youtube.com/watch?v=Ahha-igVmJw>; audio transcription can be found in the appendix of this document). Read the description of a problematic situation below and put the steps of problem solving in the right order:

Situation:

Two children in Mrs. Kamari's class are fighting about who gets to sit next to the window. They cannot figure out how to solve this problem and therefore ask Mrs. Kamari for help.

- The children decide to take weekly turns sitting next to the window.
- Mrs. Kamari has to understand what the problem and the goal is and what keeps the children from finding a solution.
- After a month Mrs. Kamari checks in with them, asking if the solution still works fine for both kids.

- d. Mrs. Kamari asks both students to come together and talk about the problem, brainstorming about ideas on how to solve the problem.

Step 1:

Step 2:

Step 3:

Step 4:



- F** Below you find a description of different subjects that the students have to learn. You also find two possible methods for ways to approach the topics. Out of the two, select the method that might be more useful in empowering students:

| Subject | Method A | Method B |
|--|--|--|
| The students should learn about different occupations. | <i>Mrs. Kamari asks the students to look through their textbook, search for different jobs of the characters and write them down.</i> | <i>Mrs. Kamari asks the students to interview each other, asking about the occupations of the family members of their classmates and what they want to become later in life. To get a sense of the different working fields, the children are asked to research these different occupations.</i> |
| The students should learn about different animal species. | <i>Mrs. Kamari asks the children to pick their favorite animal and do research on it. She then asks them to present their research to the class.</i> | <i>Mrs. Kamari has a list of animals that she wants to cover so she looks for books about these animals. She then prepares a text with all the important information for each animal that she writes on the blackboard for the students to copy.</i> |
| The students should learn about different geometrical figures. | <i>Mrs. Kamari looks for books about geometry for children. She talks about the subject to the children while she draws big geometric figures on the blackboard.</i> | <i>Mrs. Kamari draws a big triangle on the blackboard. Then she asks the children to walk around the classroom and try to find items that have the same shape as the drawing on the blackboard. She proceeds with this method until they have found all relevant geometrical figures. After that she asks the students to think of further</i> |

| | | |
|--|--|--|
| | | <i>objects outside the classroom that show the discussed shapes and asks them to draw these objects.</i> |
|--|--|--|

References

- “Problem Solving” by Teach for Life. Retrieved from: <https://www.youtube.com/watch?v=AhhahigVmJw> [2021, Mar. 08]. This publication is available in Open Access under the Attribution 3.0 Unported (CC BY 3.0) license (<https://creativecommons.org/licenses/by/3.0/legalcode>).
- “What is STEMP? Students Empowered Teaching Method” by USMEXFUSION AC. Retrieved from: <https://www.youtube.com/watch?v=SgmF1OXogrM> [2021, Mar. 08]. This publication is available in Open Access under the Attribution 3.0 Unported (CC BY 3.0) license (<https://creativecommons.org/licenses/by/3.0/legalcode>).

STEP 2 PRACTICE EXERCISES - SOLUTIONS



A Read the following case studies. Decide which one describes the banking model of education and which one a learner-centered model:

Case Study 1

It states in the curriculum that students have to learn about different poems and writers. Mrs. Kamari gives the children the task to choose from one of three poems that the children have to learn by heart and have to recite the following week in front of the class.

Case Study 2

It states in the curriculum that students have to learn about different poems and writers. Mrs. Kamari gives the children the task to choose from one of three poems, read their chosen poem and try to reenact the poem in their own words in front of the class.

- a) Banking Model of Education: **Case Study 1**
- b) Learner-Centered Model of Education: **Case Study 2**



B Read the following case studies. Decide which one describes empowered students:

Mrs. Kamari takes the students on a field trip to collect different leaves for their herbarium and learn about trees on the way. The path goes uphill and one student, Devi, has problems keeping up with the pace of the other children. Two other students, Esha and Avan, notice that Devi is way behind the other children, catching her breath.

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Esha and Avan look at each other and decide to walk back down to Devi. They ask if they can help her walk the rest of the way. Devi agrees, so Esha takes her left arm and Avan her right and together they keep walking uphill.

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Esha and Avan look at each other and then look at Mrs. Kamari teaching the other children about an old oak they discovered. They decide it is better to join the others and listen to what Mrs. Kamari has to say so they do not get in trouble for staying behind and not listening.

- a) Empowered Students: **Case Study 1**
- b) Not Empowered Students: **Case Study 2**



C Watch the following video about the Student Empowered Teaching Method (STEMP) (https://www.youtube.com/watch?v=SgmF1OXogrM&ab_channel=USMEXFUSIONAC; audio transcription can be found in the appendix of this document). Drag and drop the words below into the appropriate category:



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| Traditional class | Student Empowered Teaching Method |
|-------------------|-----------------------------------|
| 1, 4 | 2, 3, 5, 6 |



D Look at the pictures below and drag and drop the characteristics of empowered students to the matching picture. Characteristics can be assigned to MULTIPLE pictures:

Students help each other.¹ – Students collaborate.² – Students are confident in asking questions and interacting with the teacher.³ – Students are empathetic.⁴

| | |
|---|---------|
|  | 3 |
|  | 1, 2, 4 |

| | |
|--|----------------|
|  | <p>1, 2, 4</p> |
|  | <p>1, 2, 4</p> |

Picture Sources: Open Source from pixabay.com



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(<https://www.youtube.com/watch?v=Ahha-igVmJw>; audio transcription can be found in the appendix of this document). Read the description of a problematic situation below and put the steps of problem solving in the right order:

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- Mrs. Kamari has to understand what the problem and the goal is and what keeps the children from finding a solution.
- After a month Mrs. Kamari checks in with them, asking if the solution still works fine for both kids.

- d. Mrs. Kamari asks both students to come together and talk about the problem, brainstorming about ideas on how to solve the problem.

Step 1: b.

Step 2: d.

Step 3: a.

Step 4: c.



- F** Below you find a description of different subjects that the students have to learn. You also find two possible methods for ways to approach the topics. Out of the two, select the method that might be more useful in empowering students:

| Subject | Method A | Method B |
|--|--|--|
| The students should learn about different occupations. | <i>Mrs. Kamari asks the students to look through their textbook, search for different jobs of the characters and write them down.</i> | <i>Mrs. Kamari asks the students to interview each other, asking about the occupations of the family members of their classmates and what they want to become later in life. To get a sense of the different working fields, the children are asked to research these different occupations.</i> |
| The students should learn about different animal species. | <i>Mrs. Kamari asks the children to pick their favorite animal and do research on it. She then asks them to present their research to the class.</i> | <i>Mrs. Kamari has a list of animals that she wants to cover so she looks for books about these animals. She then prepares a text with all the important information for each animal that she writes on the blackboard for the students to copy.</i> |
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| | | |
|--|--|--|
| | | <i>objects outside the classroom that show the discussed shapes and asks them to draw these objects.</i> |
|--|--|--|

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. THESE ESSAY ANSWERS GO INTO YOUR PERSONAL PORTFOLIO!

1. Think of a situation when you felt self-empowered as a student. How did you react, what were your feelings?

STEP 4 PORTFOLIO TASK – TEACHING PROJECT



Create your own personal teaching project. How do you stimulate learning processes in which empowerment, cooperation and participation are central components of the joint work? Always refer to the topic and the hypothetical class you have chosen in module 1.1. This portfolio task should be approximately 800-1000 words long. THE TEACHING PROJECT GOES INTO YOUR PERSONAL PORTFOLIO!

APPENDIX

Transcript: Video - STEM P

If your classes still resemble the traditional method where the teacher has the power and spends almost all of the time in front of the class, it's time for a paradigm shift. This method will serve to empower your students and will allow you to perform formative competency-based assessment on a daily basis. STEM P stands for students empowered and this method will allow you to give power to the students so that they can learn, they can be and they can do. To let students learn, we let them learn for themselves, so they can be, we let them be and so they can do, we let them do. To achieve this we need to remove the teacher from the front of the class and let the magic happen leaving students to learn, be and do. The teacher then becomes a guide a planner and an evaluator. The teacher guides the progress of the course in order to achieve the class outcomes. The teacher plans the entire course assigning responsibilities to all students from the beginning of the course in a calendar or planner. The teacher carries out ongoing formative assessment for each student. These types of assessment forms shape students, in other words this type of assessment will help students better themselves in the learning process. Students take ownership of the course and become protagonists of the learning processes that occur both inside and outside of the classroom. In teams, students facilitate classes, prepare materials, and monitor learning. They create and perform scenarios where they represent real life situations applying the knowledge skills and attitudes covered in class. They become linking agents both international and intercultural. They link the class with reality by bringing guest speakers from the community including international guests as well as guests from regional indigenous communities or other cultures. If you want to know more about how to implement the STEM P method in your classes, please visit our website usmaxfusion.org and you will have open access to STEM P training videos. Thank you for watching.

Transcript: Video – Problem Solving

Problem solving is a method teachers can use to guide students through any kind of problem. There are four steps to problem-solving: 1. Define the problem 2. Make a plan 3. Put the plan into action, and 4. Check the result. As an example, you'll see how these ants use the four steps. The first step is to clearly define the problem, to understand what the goal is, and what is keeping you from reaching that goal. The ants want to move this cookie into their anthill, but it's too big to fit. The second step is to make a plan for solving the problem. This step includes talking about information and ideas that will be helpful. The ants decide to break the cookie into small pieces and move them into their anthill. The third step is to put the plan into action. They break up the cookie and move the pieces. And the fourth step is to check the result. It looks like it's working! Sometimes, the plan does not solve the problem. For example, this piece is still too big to fit. But that's okay. The four steps may need to be done more than once. It's an ongoing process until a solution is found. 1. Define the problem. 2. Make a plan. 3. Put the plan into action, and 4. Check the result.

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!

