



Training methodology for teachers and trainers

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Table of Contents

Introduction	3
Section 1. Engaging students in environment-related challenges through Social Innovation/Entrepreneurship curricula	4
Section 2: Learning methodologies, tools, and techniques	7
Students Learning Characteristics	8
Teaching Strategies - Learning Methodology	10
Stages of the process	13
Section 3. The role of e-Learning space in blended training.....	15
In-person	14
Online delivery	17

Introduction

This framework acknowledges the utilization of action-based learning with educational resources and training toolkits that, combined with an effective training methodology, allow High School students (HSS) to explore businesses with a social and sustainable mission. This document is dedicated to **Teachers/Trainers/ Researchers** and anyone who is interested (**direct target audience**) in learning about the training methodology in a blended learning environment and targets specifically the followings topics:

- Section 1 - Describes the **theoretical foundation** of training methodology and tools based on practice, collaborative, transformational and online learning pedagogies .
- Section 2 - Provides **Tools / Techniques** and **Methodological styles** examples
- Section 3 - Elaborates on the **synchronous** and **asynchronous** delivery of the training program and includes the rationale of using the **online environment** (E-learning platform and mini-games) as the main tools for learning.

The training methodology, defined as a body of practices, procedures and rules used by those following a "discipline", aims to provide high school teachers with specific methodological approaches for effective blended learning in a classroom and from a distance and plays a vital role in delivering the training program effectively.



Section 1. Engaging students in environment-related challenges through Social Innovation/Entrepreneurship curricula

Environmental complexity or the simultaneous ecological challenge and support, along with issues of social progress reached through effective social innovation solutions and the establishment of a social entrepreneurial mindset, are important features for promoting students' engagement (Shernoff, 2013). It has been shown that student engagement is positively related to academic performance, whereas disengagement has the opposite effect (Kelly, 2008). On the other hand, according to Christenson et al., 2012 and the National Research Council and Institute of Medicine of the National Academies, 2004; student engagement is highly influenced by the learning environment, a factor over which teachers have some control.

Developing effective solutions to challenging often systemic social and environmental issues in support of social progress, gives prominence to the set of challenges, tasks, activities, goals, structures, and expectations designed to guide student action or thinking; they are prescriptions for desired behavior (Csikszentmihalyi et al., 1997, Hektner and Asakawa, 2000, Newmann, 1992). Providing students with environmental support refers to providing instrumental, social, and emotional resources to assist them in meeting environmental challenges, developing social responsibility and promoting social change. By deploying social innovation and social entrepreneurship, HSS are encouraged to critically innovate and refine effective ideas and solutions to address major social and environmental issues identified. The process of developing and

implementing their social innovation projects motivates and challenges them cognitively, as well as at an instinctive level (Reeve and Jang, 2006, Zhang et al., 2009).

Various approaches have been employed to uncover and identify the learning needs of High school students regarding Social entrepreneurship and Social Innovation applied in addressing social and environmental problems. Those approaches were but not limited to interviews, focus group discussions, and surveys. The general learning tips that could be applied by teachers in all partner countries are as the following:

Practical Tips for Teachers and Trainers

Knowing the subject and understanding the core definitions of Social Innovation and Social Entrepreneurship, environmental problems, climate change, green practices and sustainability is essential.

Keeping interested and motivation high is an essential factor for the success of the training. At the same time, the teacher is a coach and a mentor, and with proper motivation, HSS feel included in the training program.

In addition, to maximize the training results, make the training curricula interactive and use games/activities employing the relevant digital technology available.

Provide clear procedures and acceptable practices. Make sure their expectations are clearly stated. This way, students are not confused about what the expectations are.

Respect and be proactive with student communication. Ask questions and give feedback to students. Provide examples of how students could answer questions and concerns positively.

Last but not least, multiple aspects of environmental challenges have been associated with student engagement, including clear goals, clear and high expectations, providing opportunities for students to explore and solve meaningful problems, and master new skills. The high expectations of teachers for their students, which are relevant to students' everyday activities are also important factors in a successful training program (Dickey, 2005, Wang & Eccles, 2013, Allodi, 2010, Ladd, 1999).

Students' engagement has been implicated in many dimensions of environmental support, including supportive relationships with teachers and peers, teachers' support for autonomy, and peer acceptance (Skinner & Belmont, 1993, Akey, 2006, Hughes & Kwok, 2006, Dickey, 2005, Reeve, 2006). Such studies have suggested a positive relationship between creating a supportive relational environment and student engagement (Roorda, Koomen, Spilt, & Oort, 2011).

References

- Akey, T. M. (2006). School context, student attitudes and behavior, and academic achievement: An exploratory analysis. New York, NY: MDRC. Retrieved from <http://www.mdrc.org/publications/419/full.pdf>.
- Allodi, M. W. (2010). The meaning of social climate of learning environments: some reasons why we do not care enough about it. *Learning Environments Research*, 13(2), 89-104.
- Christenson, S., Reschly, A. L., & Wylie, C. (2012). *Handbook of research on student engagement* (Vol. 840). New York: Springer.
- Csikszentmihalyi, M., Rathunde, K., & Whalen, S. (1997). *Talented teenagers: The roots of success and failure*. Cambridge University Press.
- Dickey, M. D. (2005). Engaging by design: how engagement strategies in popular computer and video games and inform instructional design. *Educational Technology Research and Development*, 53(2), 67-83.
- Hektner, J., & Asakawa, K. (2000). Learning to like challenges. *Becoming adult: How teenagers prepare for the world of work*, 95-112.
- Hughes, J. N., & Kwok, O. M. (2006). Classroom engagement mediates the effect of teacher-student support on elementary students' peer acceptance: a prospective analysis. *Journal of School Psychology*, 43(6), 465-480.
- Kelly, S. (2008). Race, social class, and student engagement in middle school English classrooms. *Social Science Research*, 37(2), 434e448. <http://dx.doi.org/10.1016/j.ssresearch.2007.08.003>.
- Ladd, G. W. (1999). Peer relationships and social competence during early and middle childhood. *Annual Review of Psychology*, 50(1), 333-359.

- National Research Council. (2004). *Engaging schools: Fostering high school students' motivation to learn*. National Academies Press.
- Newmann, F. M. (1992). *Student engagement and achievement in American secondary schools*. Teachers College Press, 1234 Amsterdam Avenue, New York, NY 10027.
- Reeve, J. (2006). Teachers as facilitators: what autonomy-supportive teachers do and why their students benefit. *Elementary School Journal*, 106(3), 225-236.
- Reeve, J., & Jang, H. (2006). What teachers say and do to support students' autonomy during a learning activity. *Journal of Educational Psychology*, 98(1), 209-218.
- Roorda, D. L., Koomen, H. M. Y., Spilt, J. L., & Oort, F. J. (2011). The influence of affective teacher-student relationships on students' school engagement and achievement: a meta-analytic approach. *Review of Educational Research*, 81(4), 493-529.
- Sherhoff, D. J. (2013). Optimal learning environments to promote student engagement.
- Skinner, E. A., & Belmont, M. J. (1993). Motivation in the classroom: reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology*, 85(4), 571-581.
- Wang, M., & Eccles, J. S. (2013). School context, achievement motivation, and academic engagement: a longitudinal study of school engagement using a multidimensional perspective. *Learning and Instruction*, 28, 12-23.
- Zhang, J., Scardamalia, M., Reeve, R., & Messina, R. (2009). Designs for collective cognitive responsibility in knowledge-building communities. *Journal of the Learning Sciences*, 18(1), 7-44.

Section 2: Learning methodologies, tools, and techniques

The world is changing, and with it, the way people learn. There is an urgent need to re-invent teaching practices and methodologies to adapt them to new contexts and thus guarantee meaningful learning.

What does this mean?



Students must now be the protagonists of a system gradually overcoming the traditional paradigm where the teacher is the center of knowledge. Today, developing a diversity-oriented teaching style is indispensable. Learners, professionals, and collaborators should update their skills and find new ways to learn differently. For example, they have different needs, interests, potentials and learning styles. The teaching will depend on this, together with the skills and capacity of the trainer. Finding the right **teaching style** will be an objective that considers these aspects and the trainer's goals and characteristics. There are several teaching styles to choose from depending on the variables. Among the main ones are:

Individualising style

This is based on teaching to a small team of people or even to a single individual. It considers the abilities, interests and wishes of each of the people in the group.

Personalised teaching

The teacher uses state-of-the-art tools, technologies and methods, following the most relevant global trends.

Process-oriented teaching

Instead of teaching facts or a way to do something, the teacher acts more as a facilitator, scaffolding the students' process of coming up with ideas and thinking about the process itself.

Innovative style

A project is prepared with the mutual collaboration of the teacher, who guides and advises and the student, who investigates, analyses and draws conclusions.

Cooperative style

The teacher allows students to choose the topics that interest higher from a range of different options and also allows them to approach it from the perspective that motivates them the most. Following the interests of students increases engagement and inspiration to learn.

Student-centred style

The teacher predominantly uses the lecture style, so that the learner retain as much information as possible and reproduce it orally or in writing

Content-focused learning style

The teacher tries to involve the learner in the subject appreciatively.

Students Learning Characteristics

Every student is different from the others. By the same token, the learning characteristics are different between students. These differences influence the student's attitude towards learning and

also how they learn. They also affect how students respond to different teaching styles and approaches in the classroom and how successful they are at learning (Perera, 2018).

As you will see below, some things seem like common sense but are often forgotten by experienced trainers who mechanise their work. In addition, this is how you find yourself with courses that are not very practical or do not respond to the real needs and interests of the participants. Using the right styles and methodologies to maximise the learning advantages and address the learning challenges of HSS can make all the difference in their learning success.

A student's maturity plays a role in his/her learning ability. Maturity means growing up physically, mentally and emotionally. In our case, high school teenagers have major similarities in maturity levels affecting learning. The points below indicate major similarities that should be considered when choosing the appropriate teaching methodologies.

Most HSS have achieved the formal operational stage in relation to Cognitive Development (Pennington, M., 2008).

These students can think abstractly and need fewer concrete examples to understand complex thought patterns. Generally speaking, most students share the following characteristics:

- Need to understand the purpose and relevance of instructional activities
- Are both internally and externally motivated
- Need to learn how to learn and overcome cognitive barriers to learning
- Want to establish immediate and long-term personal goals
- Want to assume individual responsibility for learning and progress toward goals

HSS are experimenting with adult-like relationships – Social Development (Pennington, M., 2008).

In particular, most students share the following characteristics:

- Interested in co-educational activities
- Desire adult leadership roles and autonomy in planning
- Want adults to assume a chiefly support role in their education
- Developing a community consciousness
- Need opportunities for self-expression

Teaching Strategies - Learning Methodology

To achieve any goal, we always need an effective strategy. The same applies to education. To achieve learning outcomes, we designate a series of practice-based pedagogies, active learning, design thinking, creative thinking, team working, transformational learning, and online learning pedagogical strategies called "INITIATION's Teaching - Learning Methodology". This teaching methodology has been proven to be very effective in enhancing students' concentration, association, and knowledge acquisition, making the teaching interesting and engaging.

The teacher employs practice-based pedagogies and provide students with spaces for the exercise of meta-cognition, which consists of discovering, reflecting and organizing one's learning processes and strategies. Learning cannot be rushed; the complex cognitive activity involved in integrating information takes time.

According to Klausmeier (1985), students, especially in school settings, are often faced with tasks that do not have apparent meaning or logic. It can be challenging to learn with understanding initially; they may need to explore underlying concepts and generate connections to other information they possess. To facilitate the learning process and make teaching more interesting and engaging for HSS, a number of learning methodologies are depicted and shortly described below. Such educational pedagogies are available and can be very effective for the teacher in enhancing students' concentration, knowledge acquisition, association, creative thinking, design thinking, collaboration, team working, problem solving and decision making.

Active Learning

The teacher facilitates activities and resources to involve the high school students in the construction of their own knowledge, through the design of discovery, comprehension and application activities.

Meaningful Learning

The teacher plans activities based on the students' previous knowledge, which will serve as an anchor for the new knowledge to facilitate its understanding, assimilation and retention.

Challenge - Based learning

The teacher proposes challenging activities around a business problem, promoting research and innovation in real contexts, the application of knowledge and the efficient use of resources.

Experiential learning

The teacher engages students in hands-on experiences and reflection to advance the process of learning by doing. Students can be better able to connect theories and knowledge learned in the classroom to real-world situations.

Transformational learning

The teacher nurtures autonomous thinking by allowing students to construct knowledge through their experience in the world. Previously held thoughts, feelings, perspective, convictions, behaviours or assumptions about the nature of reality and the situation of the self are challenged and changed.

Learning to learn

The teacher provides the student with spaces for the exercise of meta-cognition, which consist of discovering reflecting and organizing one's own learning processes and strategies.

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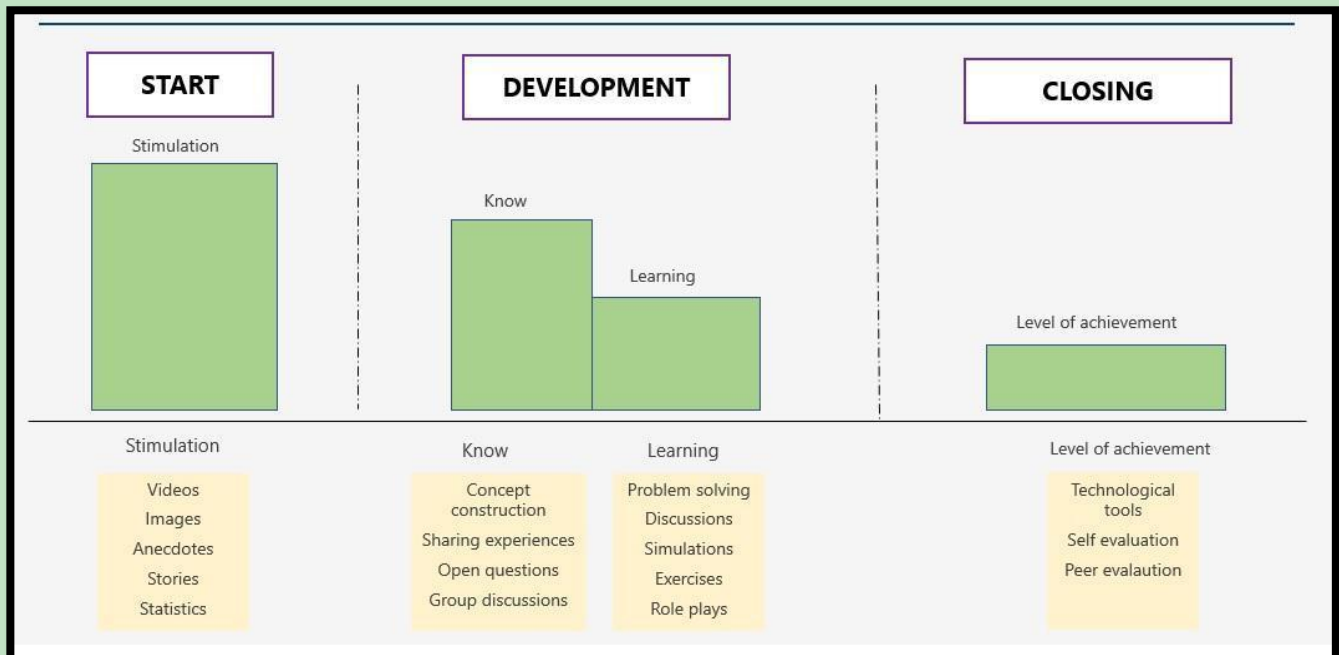


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Stages of the process



While most educators switch between teaching styles to accommodate the student's needs or adjust to the topic, one style usually stands out above the others as their preferred method. Each teaching style has pros and cons for both the teacher and the student.

When preparing your next training course or course materials, keep in mind the keys to high school learning. HSS learn when:

- They need and want it.
- They are aware of the benefits that the training can bring them and the problems they will be able to solve through learning.
- The lessons make time for students to reflect and practice the skills they learn.
- The learning is appropriately paced, and activities are appropriately varied and challenging.
- The lessons teach less, and students learn more. Students acquire the necessary experiences, knowledge and skills they need in order to meet the learning goal – but in so doing, they cover a smaller amount of curriculum content but in far greater depth and detail and from a range of different perspectives than they would be able to achieve if they attempted to “get through” more content.

References

Pennington, M. (2008). *Characteristics of High School Learners*. Retrieved from: <https://ezinearticles.com/?Characteristics-of-High-School-Learners&id=1641532>

Perera, N. (2018). *Learner characteristics*. Retrieved from: <https://www.tktcambridge.com/module-one/learner-characteristics/>

Klausmeier, H. J. (1985). *Developing and institutionalising a self-improvement capability: Structures and strategies of secondary schools*.

Section 3. The role of e-Learning space in blended training

The role of the e-Learning space is significant in self-paced online learning. Offering self-paced online learning is **key to empowering your students** with access to easily digestible content anytime, anywhere. This flexibility provides online training with a new universe of opportunities to deliver continuing education and online training programs that align with the needs of today's students.

With the availability of collaboration software and cloud storage, education is making it as convenient as possible for students to set aside time for completing the desired training program at their own pace and availability.

Students' characteristics impact the personalization of learning within the technology-Enhanced Learning (TEL) field. In TEL, personalization is a key approach to overcoming the plethora of information in the Knowledge Society. It is expected that personalized learning established in the INITIATION web-based digital platform has the potential in principle to, create more effective learning experiences, accelerate study time to competence development, and increase collaboration between learners (Drachsler, Hendrik & Kirschner, Paul.,2011).

The INITIATION web-based digital platform provides instant access to the full suite of digital learning resources developed in the INITIATION project. The platform combines a repository of online tools, learning recourses, mini-games, and networking opportunities to help students work collaboratively on social innovation subjects.

Rich informational material will be freely available online for students and schools interested in learning more about social entrepreneurship and social innovation mind, while the gamified environment of the Digital Platform; (mini-games) will serve as a one-stop-shop, providing instant access to the full suite of the SE and SI mini-games.

During the mini-games, HSS will have to make decisions to experience a simulation of a real-life scenario related to generating an idea around SI and SE, developing an action plan and other possible real-life situations they might encounter.

Last but not least, using the Virtual Social Enterprises tool HSS will have to work together to identify the causes of social and environmental problems and make decisions so as to plan social enterprises that can provide viable solutions to these problems.



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Last but not least, some points regarding in-person and online delivery of a course are pointed out below to take into consideration:



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In person delivery

Using Online Tools

Face-to-face classes can highly benefit from the use of online tools. There, the components of the course that can be implemented with the use of online tools should be identified and then the instructor should choose the tools that suit the purpose of the lesson. Some useful tools are: Padlet, Ideaboardz, Mindmeister, Popplet etc.

Classroom Discussion

The instructor should provide a safe environment where learners can explore their thoughts on a subject with the others. It is an effective way for students to consider different perspectives. The sharing of personal experiences should be enhanced.

Team working & project work

The trainer can use the Virtual Social Enterprise (VSE) tool and the online mini-games to help students take advantage of networking opportunities and work collaboratively on small scale projects. Using the tool is an effective way for students to engage in reflection group activities, exercises, teambuilding and team working, peer learning, moral dilemma exercises, action plan.

Online delivery

Online Lecture

- Provide links to related resources and other websites.
- Distribute the course or notes via e-mail to the learners.
- Break a long presentation into shorter segments. Short lectures provide enough information to serve as a basis for further reading and other learning activities.

Discussion

Most learners like the discussion as an instructional strategy because it is interactive and encourages participatory learning. Discussion encourages learners to analyse alternative ways of thinking and acting. Through this, learners explore their own experiences to become better critical thinkers. The discussion is often the heart of an online course.

Small Group Work

You can divide the group in smaller groups in order for the learners to discuss content, share ideas, and solve problems. The learners can present their ideas, as well as consider ideas that will be put forth by others. In this way, they see a variety of viewpoints on a subject.



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Hybrid teaching

Do's

- ✓ Make your remote learners feel like they're still part of your class even though they're still learning from home. Your remote learners should still be able to participate in the same activities and lessons that your hybrid students are.
- ✓ Maintain in-person and remote learners interacting with each other often, via breakout rooms or on apps like Jamboard, Kahoot, or FlipGrid to maintain a sense of community.
- ✓ Set learning expectations for in-person and remote learners. While they may be different for both groups, learners should be aware of the expectations while on Zoom, such as cameras, participation, and safety.
- ✓ Give your remote learners a variety of ways to demonstrate that they're engaged during your lessons. Just because their screens may be off, doesn't mean they're not there.
- ✓ You can encourage them to unmute themselves, use the chat box, use reactions or hand signals to share.

Dont's

- Don't forget to unmute (or mute) yourself.
- Don't overextend yourself. Find 2-3 apps and stick to them.

References

Drachsler, Hendrik & Kirschner, Paul. (2011). *Learner Characteristics*. 10.1007/978-1-4419-1428-6_347.

Kaltura (2017). *2017 education survey reveals 135 percent increase in remote teaching and learning*. Retrieved from <https://www.ecampusnews.com/2017/09/28/survey-increase-lecture-capture/>

