

HOW TO PROMOTE STUDENTS' ROLE AS PROTAGONISTS IN THEIR SCHOOLS AS DRIVERS OF CHANGE INFLUENCING LOCAL AND VIRTUAL COMMUNITIES AND BECOMING GLOBAL AGENTS OF CHANGE?

SCHOOLS AS DRIVERS OF CHANGE PROJECT RESEARCH STUDY



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SCHOOLS AS DRIVERS OF CHANGE

Building Young Students' 21st Century Capacity through School-driven
Community Change Actions

How to Promote Students' Role as Protagonists in their
Schools as Drivers of Change Influencing Local and Virtual
Communities and Becoming Global Agents of Change?

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CONTENTS

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| EXECUTIVE SUMMARY | 4 |
| INTRODUCTION | 7 |
| Open science schooling method | 7 |
| Community-change missions | 8 |
| THEORETICAL FRAMEWORK | 10 |
| Schools’ organizational change..... | 10 |
| Agency & empowerment | 12 |
| Transformative participation | 14 |
| RESEARCH METHODOLOGY | 16 |
| Qualitative content analysis..... | 16 |
| Tools used in the study | 17 |
| FINDINGS AND ANALYSIS | 20 |
| RQ1 – What are the key mechanisms and characteristics of Open Schooling and the project that make the young students prepared for life in 21st century? | 20 |
| RQ2 – How can school help the students to develop their agency using OS methods in community-change mission’s implementation? | 30 |
| RQ3 – What are the most important knowledge shortages in the field of making various forms of open schooling that drive student agency, such as Schools as Drivers of Change, a reality? | 43 |
| CONCLUSIONS | 44 |
| REFERENCES | 46 |
| Students Survey (Pre and Post) | 47 |
| School administration survey | 51 |

EXECUTIVE SUMMARY

This research presents a study of community-change/transformation featuring by five European schools that took part in the Erasmus+ Schools as Drivers of Change project (2021-2022). For each school the story begun in different way and circumstances, but for all it meant one thing: to make their communities better places for all. The objective of this research paper is to better understand how the schools that participated in this project became drivers of change in their communities and how students' agency development can be supported by their schools and teachers within the context of community collaboration. We hope this supports other schools to take similar actions towards becoming change agents in their local communities. The study also sheds light on what does it take for a teacher to be able to develop the students' agency – how a teacher becomes the agentic teacher and how school nurtures and supports this process. To develop this research, we adapted and expanded the Gender at Work Framework for social and organizational change. The research exploration is also guided by the mode of the Schools as Drivers of Change implementation that is anchored in active participation, co-design and co-creation of the project activities by the involved actors combined with application of Open Schooling method of learning.

WHAT DID THE SCHOOLS' MISSIONS CHANGE IN THEIR COMMUNITIES?

Looking at the initiatives and the motivations behind the different missions carried out by the schools, we notice that at the heart of change mission was the community well-being. The ability of the young people to detect the community needs was impressive, with them drawing and turning attention to current and urgent, real-life issues. While the students supported by their teachers were implementing missions, their schools created networks of local stakeholders that included a great variety of actors.

In Finland, the school team's missions took shape through the students' activism, building several bridges through community well-being. Their **Spreading Kindness mission** bridged generations, the young and the elderly, and while having fun in the snow in fact meant reinstating connection between the Finnish traditional survival skills and the present living reality of the students. In Romania, **local community places were given personality**, were re-created, re-invigorated. The impact it had on the community life was that the community members started to enjoy their city more, they admired the changes brought about by the youth and got a place to be, to go and feel proud about. This further led to a feeling of 'I belong here' – not only in the place but rather with the people, who care about it (Mission story). Their focus on **mental well-being and psychological resilience** as their second set of the mission activities reflected how well the young people observed and analysed their community needs: mental issues are often invisible and easily dismissible. In cases of other countries and missions, they were concentrated on **community awareness** regarding urgent and pertinent issues such as climate change and natural environment as well as health both somatic and mental. The missions' objectives translated into activities focused on sharing knowledge and teaching skills on how to properly sort trash, how the old items can be upcycled and how to develop stress resilience, especially after the COVID19 related lockdown that wore out/strained emotional flexibility of all, the young especially.

KNOWLEDGE-BASE OF THE RESEARCH

The SADC research' distinguishing feature is that it is based on a variety of research tools that were strategically used to collect data at the key moments of the project implementation. The project's rich pool of data consists of input derived from the mission documentation, surveys, focus group discussions as well as semi-structured discussions and inquiries implemented during the interactive activities during the project events. The data

analysis was done using qualitative approach. The data was systematically enriched and grew exponentially in quality and quantity as the project progressed. Additionally, the data collection was done in an iterative way meaning that a set of gathered and analysed data fed into design of the research tool in a subsequent step of data collection. This way, each set on new data enriched and significantly deepened the researchers' understanding of the explored issues.

KEY TAKEAWAYS AND GENERAL INSIGHTS

The project research is summarised through the following insights based on the main research questions asked:

RQ1. What are the key mechanisms and characteristics of Open Schooling and the project that make the young students prepared for life in 21st century?

This research question looks at how secondary schools can change to become agents of change in the local community, including the wider benefits of open schooling models could bring for the community.

RQ2. How can school help the students to develop their agency using OS methods in community-change mission's implementation?

This research question looks at internal and external changes needed to be implemented at school level so that implementation of approaches such as open science schooling could sustainably thrive through integration in the school curricula.

RQ3. What are the most important knowledge shortages in the field of making various forms of open schooling that drive student agency, such as Schools as Drivers of Change, a reality?

This research question looks at the areas that need further investigations and analysis, as uncovered during the implementation of the Schools as Drivers of Change activities.

CHANGES NEEDED IN ORDER TO SUPPORT SCHOOLS BECOMING DRIVERS OF CHANGE IN THEIR COMMUNITY (RQ1)

The changes that a school needs to introduce to become driver of change in community need to take place at the individual and intuitional level. On the individual level, school needs to support students' and teacher's motivation and commitment to change and work to strengthen their individual perceptions of ability to make a change. For the students this means becoming agents of change while for the teachers mastering their agentic teachers' skills to facilitate the process of students' becoming change agents.

In order for this to happen, the teachers and students need access to certain types of resources including time, equipment and supplies, training as well as administration support in community outreach. On the institutional level, therefore a level of school as organization, the school administration also needs to adopt an open-mind approach regarding changes and collaboration with the community as well as showing believe and trust in the teachers' skills. Our research also finds that a school aspiring to be change driver creates and sustains change-friendly atmosphere and institutional culture.

To support that new approach more concretely, school can adopt a policy of community collaboration. On more practical side, changes may include establishment of formal partnerships with community partners including internationally, for example, schools' participation in Erasmus+ projects.

THE OPEN SCHOOLING MODEL OF STUDENTS' AGENCY DEVELOPMENT THROUGH COMMUNITY-CHANGE MISSIONS (RQ2)

Our research identified a four-step model in which students' capacities as agents of change emerge. The process of agency development begins from preparation of the nurturing ground for the agency to develop. The agency nurturing conditions entail re-framing the relationship between students and teachers towards equality and mutual respect as well as teacher's withdrawing from their commanding role in teaching and allowing students independence and accountability for their own learning. For their agency to grow, student need to know first their agentic skills that is talents, capacities – resources they can use to exercise their agency. Again, teachers' role in assisting in the students' agentic skills identification is crucial. The next, third step in the model entails exercising agency in community-change missions. Here students have opportunity to participate, collaborate as accountable author and solve important community issues. At Seeing the results of the community-change, impact of the missions further strengthens students' agency and motivates them to act again.

The teachers' role in this process is significant, every step of the way. Our research finds that to ensure students' agency development, the teachers should empathize with the students, appreciate their efforts, provide constructive feedback and be themselves a pioneer of change role models for the students.

Moreover, during the Schools as Drivers of Change project (SADC), the students learnt while implementing the community-change missions. However, the typical ways of evaluations like grades are not applicable when it comes to community-change missions. This educational innovation therefore requires also innovative ways of assessment in order to be easily integrated into school activities.

According to the teachers who participated in the SADC project, community-change missions' educational outcomes for the students can be evaluated taking into consideration three aspects: students' motivation (development of their interest and engagement), learning effects including acquisition of new knowledge as well as honing new skills, and the students' intrapsychological growth or inner growth.

Mission's success should be also measured based on the teachers' satisfaction; the SADC teachers underlined. Additionally, because the community missions involved community members and were focused on improvement of the community well-being, another criterion to assess the mission's outcomes is joy – happiness that was brought to people through mission implementation. Hence, the SADC teachers suggest a combination of qualitative and quantitative methods. Mission can be assessed using statistical data analysis on the one hand and interviews, pre- and post-surveys, focus group discussions as well as self-reflection and observation, on the other hand.

TO MAKE OPEN SCHOOLING A REALITY – MORE RESEARCH AND PRACTICE ARE NEEDED (RQ3)

Our research shed light on such issues as school's organizational change in order to assume driver of change role in community. However, more research is needed to better understand the change processes and dynamics of those changes, particularly in different socio-cultural contexts and educational traditions, the European schools function. Our analyses clearly concluded that to become agents of change students need to be guided by agentic teachers. Our research provides profound analysis of the characteristic of an agentic teacher. Nevertheless, more research is needed on the process of transition from teacher to agentic teacher.

INTRODUCTION

Motivation behind this research was to examine how schools help the students to acquire the capacity to act in society, to take initiatives and to manage constant change – skills needed in 21st century. This research is urgently needed as the needs of the current generations of learners have changed and evolved significantly since the time their parents were at school. At the same time, the educational systems have not evolved much. To attune to the students' needs and requirements of present times the schools need to transform internally and proactively open up to the world around while the teachers need to assume new roles in these changed realities.

To address the research problem, the following research questions have been formulated:

1. **What are the key mechanisms and characteristics of Open Schooling and the project that make the young students prepared for life in 21st century?**
 - How the OS methods and community-change missions promote development of the students' agency?
 - What are the wider benefits of students' community missions?
2. **How can school help the students to develop their agency using OS methods in community-change mission's implementation?**
 - What are the external and internal changes school needs to carry out to become driver of change in community?
 - How the OS missions can be integrated into curriculum?
 - How the OS missions can be assessed?
3. **What are the most important knowledge shortages in the field of making various forms of open schooling that drive student agency, such as Schools as Drivers of Change, a reality?**
 - To what extent do we understand the schools' and teacher's role in supporting student' becoming change agents?
 - To what extent do we know how to measure the educational effectiveness of change missions?

The research findings are presented through the lens of the adapted and expanded accordingly Gender at Work Framework and embedded in it key concepts such as agency and empowerment. Data has been gathered using a variety of methods including surveys, focus group discussions, open ended discussions as well as during face-to-face and online project activities. The valuable set of data consists of the mission documentation collected by the project practice partners.

OPEN SCIENCE SCHOOLING METHOD

Starting in 2020, a consortium of educators, researchers, and students, as part of a European endeavour, implemented an Open Science Schooling (OSS) approach to education with community stakeholders in Greece, Lithuania, Turkey, Finland and Romania, in which students are active agents at the heart of inquiry-oriented science learning. In the OSS project, students identify and frame the research problems that they are intrigued and interested in tackling, and they lead the discovery of solutions and innovations, helping situate science in every-day life. We believe that such a framework of science education for responsible citizenship, which contributes to solving social problems in the learners' own context, can work as an educational setting that re-engages students with science by incorporating scientific practices and ways of thinking, i.e., by developing a science identity (Ryan, 2015). In this project called Schools as Drivers of Change, secondary school students

worked in teams to engage or re-engage in science learning through an OSS approach; the students engaged in real-time and real-life science challenges in physical and virtual communities. The science engagement methodology included originally four progression elements. This methodology and its progression ensured that the project built its results on solid and authentic student team practice from the science engagement missions:

PROBLEM CONTEXTUALIZATION. Students are engaged in understanding what are the real problems that affect their local community and how science can offer support to understand and meliorate the situation. In order to understand the problems students are prompted to involve the local community as collaborators in their investigations, including research and innovation centres, industries, NGOs, and other social stakeholders. The result of this phase is a selected problem that students 'teams will work on.

KNOWLEDGE AND IMPLEMENTATION. Once a problem has been selected to be tackled, students receive training and information on demand from schoolteachers and other stakeholders from the local community as well as from their own investigations. This invites the acquisition of digital literacy skills, cross-subject matter and cross-disciplinary knowledge as well as the development of self-regulation, collaboration and communication skills, cultural awareness, creativity and problem-solving efficacy. Here the students benefit from learning through a variety of practice-oriented work forms that support different learning style and practically test and implement their solutions.

DOCUMENTATION AND SELF-REGULATION. The students are encouraged to keep a record of their process and involvement on their projects. This serves the students as a tool for self-reflection on the work accomplished and provides them with a narrative of their experiences and gives them the opportunity to understand how their learning experience is progressing, what they have so far achieved and what else they need to do/learn to complete their work.

SHARING AND REFLECTING. The students are also encouraged to share their experiences and solutions with peers in their schools and also with their local community. The sharing can take place online, e.g., through websites and social media, at scientific conferences, through eBooks, etc. The sharing and reflecting process is fundamental and can occur at any time during the learning experience –through this process the students internalise the knowledge and skills acquire and are ready to let others know what they know.

COMMUNITY-CHANGE MISSIONS

Community-change missions mean that students work in teams to learn through taking action to change whatever needs changing in the community. "Community" in this context is a very broad term; it might mean region, or even virtual community. Missions are projects carried out in real-life and in collaboration with real stakeholders. This method is developed for the project but builds on more than 15 years of educational innovation experimentation.

Students as change agents denotes that student learn through continuously detecting what should be changed in the community. Change agents need to connect and collaborate with stakeholders in the community. Roles of school in supporting students' agents of change is crucial. School needs to be a leader of change itself to promote change in the community. In the contexts of Schools as Drivers of Change in the community expressions "eco-systems of community collaboration" and "infrastructures of community collaboration" are used. When we talk about school becoming an agent of change in the community, one of the most important and continuing tasks is to create sustainable collaboration between key stakeholders in the community.

SADC COMMUNITY-CHANGE MISSIONS

For the SADC participants in Finland, the journey towards community transformation started in the middle of Finnish winter; literally in the middle of it as they dug in deep snow and carved ice blocks for the igloo, they were building reminiscing their ancestors struggles to survive in the harsh arctic like environment (Mission I: "Up-keeping Local Traditions").

In Lithuania, the school teams were caught up in the middle of a challenge of a different kind – grounded by the COVID pandemic restrictions they were cracking their heads over how to persuade and encourage their fellow citizens to vaccinate against the virus (Mission I: "Vaccination Awareness").

Those in Turkey were called into action motivated by their concern for local environment and how climate change was negatively affecting in (Mission I: "Rising Green Deal Awareness"). While the Greeks felt compelled to do something about the appalling problem of high prevalence of smoking in their community and country (Mission I: "Spreading Awareness: Dangers of Smoking").

As the Finns were busy ice-fishing and Lithuanians, Greeks and Turks were designing their awareness raising campaigns, a Romanian student in a city of Oradea walked casually across town. But this time it was different as she notices that many places including the central city park lacked personality (Mission I: "Giving Personality to Local Spaces").

What happened in those five different places on the European map was that students, young people begun to notice issues in their local communities that needed their attention and acted upon it. This is what fuels the machine, engine of transformation – attention, concern, and interest, noticing that something is not right. In all the schools' cases the concerns towards/ about community translated into community-change missions designed and implemented by the students, guided from the back by the teachers (Guide has more details).

During implementation of these missions' students were immersed in their communities and developed various agentic competencies like collaboration and communication skills, English fluency, survival skills or critical thinking. These skills were further honed on in the second round of community-change. Equipped with first Mission experiences and deepened understanding of community needs, more confident collaborators, the students developed second series of missions.

Finnish students, motivated by realization that *everyday life is very busy and positivity and consideration for others can be rare* decided to *spread kindness, goodness and positivity specially to elderly people* in Joensuu region (Mission II: "Spreading Kindness"). For the students in Romania psychological wellbeing of their community. Oradea's change agents made issues of stress and anxiety their fellow students faced after prolonged lockdown (COVID-19 pandemic) key focus of their mission activities (Mission II: "Boosting Resiliency against Stress").

For other school teams, it was the natural environment that became front and centre of their second round of missions. Students in Pasvalys (Lithuania) took on mitigation of environmental daily damage by upcycling clothes, textiles, and paper (Mission II: "Upcycling for the Environment"). Greek students investigated the community attitudes regarding environmentally friendly actions and engaged community in beach cleaning and bike riding (Mission II: "Environmental Action"). For Turkish change agents it was also important to engage community members in taking care of their environment. They initiated a robust information campaign that was followed up by recycling in practice: showing how to do it correctly and encouraging community members to sort their garbage (Mission II: "Raising awareness of environmental responsibility").

THEORETICAL FRAMEWORK

The research is based upon organizational change analytical framework into which additional concepts of Agency, Empowerment and Participation have been embedded. Organizational change framework is applied to better understand the change processes schools need to initiate to become drivers of change in communities and help the students' become agents of change in those communities. **Agency, empowerment and transformative participation** are the key concepts involved in students becoming agents of change through implementing community-change missions, which ultimately directly influence **school's organisational change** – key aspects of the Schools as Drivers of Change project (see Figure 1).

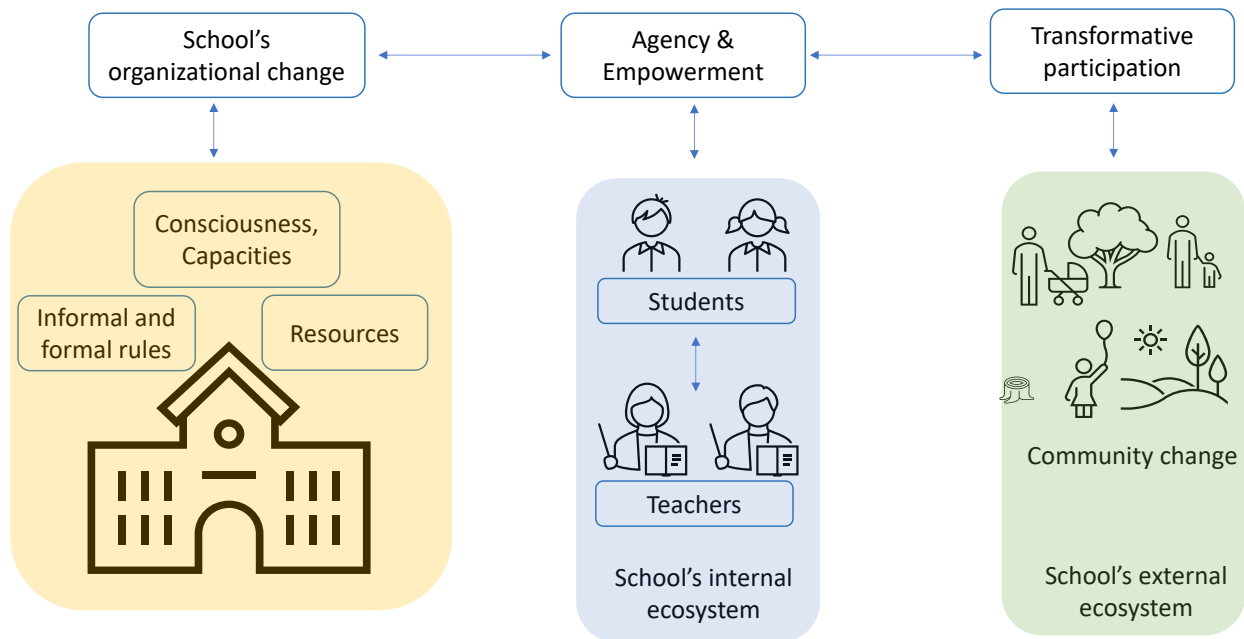


Figure 1. Theoretical framework highlighting the key aspects of the project research study

Figure 1 describes how the research theoretical framework is used to explain the process in which school helps students become agents of change in the community. The students' becoming agents of change hinged upon their school's institutional change that involves consciousness and capacities of teachers, resources available to them as well as formal and informal rules governing how the school functions. The school's transformation towards the objective of becoming engine of change in the community impacts both students and teachers. The school's organizational change is necessary to help the teachers become agentic teachers which means that teachers are equipped with capacities and motivated to mediate students' agency. Agentic teachers help students to become agents of change by identifying the students' agentic skills and involving them in various outside school initiatives. As a result, students – agents of change, guided by their agentic teachers exercise their agency by making changes in their local communities through transformative participation.

SCHOOLS' ORGANIZATIONAL CHANGE

The Gender at Work Framework is applied as the main theoretical framework to analyse internal change within school as an institution to support development of students' agency and nurture agency in teachers too. The framework was adapted to match the context of the educational institution schools. Additionally, it was

expanded to include in the analysis the context – community in which the school operated, with whom it collaborated and in relation to which it needs to undergo necessary changes.

In the context of the Gender at Work Framework additional concepts related to agency, empowerment, different dimensions of power operating to exercise agency and facilitate transformation are discussed. Adaptation of the 'Gender at work' organizational change framework. The Framework has been developed to analyse organizational change processes in various organizations from the perspective of gender relations in those organizations. Schools as Drivers of Change project does not touch upon the gender relations of the schools – however, school as an organization is a platform where different power relations work: student-teacher, teacher-teacher, and teacher-school administration. One of key objectives of Schools as Drivers of Change research is to examine what kind of changes a school needs to implement to become driver of change in its community. To attain that goal a school needs to be looked at from the perspective of the organizational change (and examine power relations embedded in the organization) and Gender at Work framework can be successfully adapted to perform that analytical task, as it is rooted in the organizational change and learning research and theory (Rao;Sandler;Kelleher;& Miller, 2016). Its purpose is to determine/ tell which changes/ interventions have transformational potential, how different efforts work together to produce change which converges with our research question: what kind of external and internal changes need to take place at school, so it becomes a driver of change.

The Gender at Work Framework enables us to look at how organizations of all kinds (also schools) change emphasising the role of stated as well as unstated institutional norms and practices that may impede changes. The collection of those is named 'deep structure' of organizations and it describes various principles and norms that govern gender relations in the organization and keep them in place preventing changes (Rao;Stuart;& Kelleher, Gender at Work: Organizational Change for Equality, 1999). For the purpose of the framework adaptation to the context of the Schools as Drivers of Change study, we propose that the stated and unstated norms, and practices refer to attitudes to traditional methods of learning versus innovative ones (beliefs in the superiority of the former) that result in general obstructed or facilitated institutional ability to innovate. They are at that same time attributes and characteristics of an organization, in case of a school, a school may be open to changes and experimentation or, on the other end of the attitude to change spectrum, resistant to changes and deeply traditional. They are also reflected in the processes within the organization that facilitate or prevent changes. They are visible to and experienced on a daily basis by the organizational actors – the school's teachers, administration, students as well as parents.

Gender at Work Framework emphasises the four following areas as crucial in organizational change: 1) consciousness and capabilities, 2) resources – referring to change that takes place at the level of individuals within the organization; as well as 3) informal rules and 4) formal rules – that are related to the changes on the institutional level (how a school as an organization functions). Change in an organization takes place through interactions and pressures, often synergic between the four abovementioned areas.

INDIVIDUAL LEVEL OF ORGANIZATIONAL CHANGE

CONSCIOUSNESS AND CAPABILITIES

This concerns individual in the organization or community, do they accept their subordinate role or do they display self-assertion, are they willing and capable to take action towards change. This area of the framework was developed based on the work of Paulo Freire for whom the change process is a process of getting critical consciousness - *conscientizacao* (Freire, 1981). Consciousness acquisition denotes, as Freire explained coming

to realization of the (unequal) power relations around people and taking action to transform those relations. This area of the framework was developed based on the work of Paulo Freire for whom the change process is a process of getting critical consciousness - *conscientizacao* (Freire, 1981). Consciousness acquisition denotes, as Freire explained coming to realization of the (unequal) power relations around people and taking action to transform those relations.

RESOURCES

Resources available to make the change like access to leadership (in the school context, access to administration that makes decisions), budget allocations, access to skills development and training.

INSTITUTIONAL LEVEL OF ORGANIZATIONAL CHANGE

FORMAL RULES

Formal rules include policies, rules, or arrangements, in case of schools an example of it may be a national curriculum.

INFORMAL RULES

Informal rules are constituted of stated and unstated norms and practices what govern the organization functioning for example decision-making practices, communication styles and nature of relations in the organization.

AGENCY & EMPOWERMENT

The Schools as Drivers of Change project concentrated on developing students' agency towards becoming agents of change in their local communities and beyond. To approach that objective and understand how students' agency develop, this research supports, refers to the contents of agency and empowerment, as process through which agency develops, emerges. Because the agency development in the context of the project takes place in two intersecting and overlapping contexts of school and educational process on the one hand and community and social relations outside of school on the other, we draw on insights on agency and empowerment from both research in educational and social sciences that complement each other.

Agency can be defined as *people's capacity for autonomous social action during which they intentionally transform and refine their social and material worlds and thereby take control of their lives. Thus, agency can be defined as the capacity to initiate purposeful action that implies will, autonomy, freedom and, choice* (Lipponen & Kumpulainen, 2011). Agency has been linked to power to transform the object on/at which agency is exercised. At the same time agency is interactive, as it is constructed in the social interaction context (Lipponen & Kumpulainen, 2011). It has been considered as something people do in social context – agency is being exercised, rather than something that people are (Greeno, 2006).

Agency is exercised through work and dynamics of power within an individual and between the individuals. Agency can emerge and develop in three different dimensions: personal, relational and social context. Personal dimension of agency - developing a sense of self and individual confidence and capacity and undoing the effects of internalised oppression (feeling and conviction that one cannot do anything about the situation, acceptance of disadvantaged situation) (Rowlands, 1997). To acquire a sense of one's agentic self, and to become an agent, one must be treated as if one can do something of one's own volition: one needs to have experiences that exercise agency (Edwards & D'Arcy, 2004).

Relational dimension of agency: developing the ability to negotiate and influence the nature of a relationship and decisions made within it (Rowlands, 1997). Edwards and D'Arcy call this agency a relational agency (2004) and explain it in reference to using the support of others and of seeing the needs of others for support. In other words, agency denotes using others' support and being support for others. Relational agency is a skill that contains a mutual relationship, reciprocal support and sharing by the actors working on a problem.

Social context-based: where individuals work together to achieve a more extensive impact than each could have had alone. Collective action may be locally focused — for example, groups acting at village or neighborhood level — or be more institutionalized, such as the activities of national networks or the formal procedure (Rowlands, 1997). In educational research on agency, this form of agency is defined context-bound and is explained in by student-teacher relations of power, namely individual's experiences and interpretations of relations and opportunities afforded by the environment

RESOURCES AND ACHIEVEMENTS OF AGENCY

Resources are the medium through which agency is exercised. Together with agency, they make up people's capabilities: that is, their potential for living the lives they want (Kabeer, 2005). In the context of education, the students' resource for agency development is their teacher. As resource for agency, the teacher acts as an orchestrator who facilitates reciprocity and dialogue among participants and ensures equal opportunities for participation, to make choices and to influence (Jääskellä; Poikkeus; Vasalampi; Valleala; & Rasku-Puttonen, 2017).

The term 'achievements' refers to the extent to which this potential is realised or fails to be realised; that is, to the outcomes of people's efforts. In relation to empowerment, achievements have been considered in terms of both the agency exercised and its consequences (Kabeer, 2005). Rowlands explains this in more detail, presenting achievements as not merely doing something but doing it with purpose – active agency, and when the purpose is change, Rowlands calls it a transformative purpose (Rowlands, 1997).

Educational research completes the picture of agency achievements by pointing out that agency develops when one can see practical implications of his/her ideas, actions (Lipponen & Kumpulainen, 2011).

DEVELOPMENT OF AGENTIC TEACHERS

Literature that addresses the issue/topic of students' agency often ponders the special and active role of teachers in the process of students' agency development. The term often mentioned in this context is 'agentic teacher'. Agentic teacher is a teacher who does *not merely deliver the curriculum, but also has the skills and will to strengthen their own and their pupils' capabilities for life-long learning and sustained professional growth* (Lipponen & Kumpulainen, 2011). Teacher's agency is at the same time key important for their professional development as it constitutes part of their identity.

Teachers are taught to plan lessons and follow the curriculum but less so to respond to complex classroom situation. Teachers also need to work more across their professional boundaries to develop their relational agency – take resource from others and share with them yours (Lipponen & Kumpulainen, 2011). This capacity, relational agency, is evidenced in being able to utilize the support given by others as well as being a resource for others (Edwards, 2005).

In traditional educational settings, teachers are considered to be experts who are supposed to lead, and students, on the other hand, are expected to follow (Boaler & Greeno, 2000) These teacher-student

relationships and positions are socially constructed, shaped by the historical features of the cultural practices in schools, and are always vulnerable to conflict, resistance, and change (Lipponen & Kumpulainen, 2011). Teachers need to withdraw from controlling and commanding and instead connect and reciprocate with the students (Lipponen & Kumpulainen, 2011), (Edwards, 2005).

EMPOWERMENT – HOW AGENCY EMERGES

Development of one's agency or actual recognition of it and exercising is called empowerment. Empowerment denotes a process through which individuals become aware of their interests and how those interests are similar to others interests that are in same position (Rowlands, 1997). The key concept embedded in the process of empowerment is power and agency means capacity to exercise one's power.

Empowerment entails change, being able to make choices. The concept of empowerment can be explored through three closely interrelated dimensions: agency, resources, and achievements. Agency represents the processes by which choices are made and put into effect. It is hence central to the concept of empowerment (Kabeer, 2005).

For the empowerment to take place, there has to be an initial state of disempowerment (Kabeer, 2005) where an individual is denied or unable to use own agency. The relation of power between the individual and the relevant context is 'power over' – refers to the capacity of some actors to override the agency of others through, for example, the exercise of authority or the use of violence and other forms of coercion (ibid). As Eteläpelto et al. (Eteläpelto; Littleton; Lahti; & Wirtanen, 2005) point out power *relations* exist both between the teacher and students and among students. The next step in the process of empowerment is related to gaining critical consciousness – 'the power to' which refers to people's ability to make and act on their own life choices, even in the face of others' opposition. Agency in relation to empowerment, therefore, implies not only actively exercising choice, but also doing this in ways that challenge power relations. The realization that one does not have to accept the unjust, unequal treatment, position is further supported by emergence of 'power from within' that can be defined as the spiritual strength and uniqueness and is based on self-acceptance and self-respect which extend, in turn, to respect for and acceptance of others as equals (Kabeer, 2005).

Finally, 'power with' that points to the fact that agency (=power) emerges in social context, with other people who share and experience similar disempowering treatment. 'Power with' denotes a sense of collective power, addressing problem(s) together or, simply solidarity (Rowlands, 1997), (Ibrahim & Alkire, 2007).

TRANSFORMATIVE PARTICIPATION

As pointed out by Greeno (2006) agency develops by having opportunity to participate and contribute while interacting with others. Opportunity to participate may be also considered a resource students may use in support of their agency development. However, there are certain participation parameters to be met if the participation is to contribute to agency emergence. The conditions of this participation position a student as accountable author who is in charge of one's actions. The agency development conducive participation is a participation in which one has opportunity to shape and direct future (Emirbayer & Mische, 1998 & Mische, 1998)

Sarah White described different ways people may participate in society, defining special parameters for the most meaningful thus transformative participation. As White explains, participation can be empowering when the practical experience of being involved in considering options, making decisions, and taking collective action to fight injustice is itself transformative (White, 1996).

Lipponen's and Kumpulainen's analysis (Lipponen & Kumpulainen, 2011) demonstrate that when teacher educators create interactional spaces that break away from the traditional learning spaces, teachers are able to attain what has called transformative agency (Virkkunen, 2006). These interactional spaces are spaces where students are positioned as accountable contributors whose input is recognised and credited and where they can problematize and resolve noteworthy issues (Greeno 2006).

RESEARCH METHODOLOGY

Overall implementation methodology of project was based on participatory approach including researchers, students and teachers as well as direct and active community involvement (see IO1 – The Guide). The research methodology benefited from the participatory process during the collection of authentic data that forms the knowledge-base of this study. The research methodology primarily follows a qualitative research design, as the direct participation of the different stakeholders in the project made it possible to collect such data richly. Nevertheless, the data includes both qualitative and quantitative inputs that has been analysed accordingly. The quantitative data has been presented in graphs and as descriptive statistics and refers to the project's demographical information as well as to the results of the students' agentic skills survey (pre- and post).

QUALITATIVE CONTENT ANALYSIS

The research data analysis was carried out through a qualitative lens. Qualitative research is a research strategy that usually emphasises words than quantifications in the collection and analysis of data. As a research strategy is it broadly inductivist, constructionist and interpretivist (Breman, 2012, s. 380).

The data in this research was analysed using qualitative content analysis (Williamson;Given;& Scifleet, 2018). This method was applied to approach the narrative of mission stories, as well as the narrative elements of the Students and School administration survey and all of the descriptive content gathered during the workshops and Jamboard activities.

To visually support the qualitative research analysis findings, the research paper presents the original data input as collected during the project implementation with the description of what the data refers to as well as graphs that synthesise the research insights.

1. Selection of pieces of most relevant data guided by the focus on to the research objectives:
 - Mechanisms and process of OS and community-change missions that support students' agency development
 - Changes (external and internal) that school need to implement to become drivers of change in the community
 - Ways to integrate OS method into the school curriculum
 - Ways community-change mission evaluation
2. Coding the selected pieces of data – units of analysis – phrases were given succinct labels.
3. Categories creation. Subsequently, the identified codes were analysed across and compared that led to development of broader analytic categories which further deepened the data analysis and produced final results.
4. Discussion of the final results. The final results were brought to discussion in the context of previous research in the field.

The project research data was collected in an iterative manner. The iterative approach denotes that data was gathered in phases – strategic moments of the Schools as Drivers of Change project implementation. As the project developed, the data developed too with new input being fed into the previously collected data.

The iterations embedded in data collection also meant that the subsequent sets of gathered data were 'talking' to each other, providing new perspective on previously identified issues and insights and feeding in the design of the research tools to be used in the next steps of data collection step to come.

TOOLS USED IN THE STUDY

Table 1 compiles all the tools created and used in data collection process in the SADC project.

Table 1. Tools developed and used in the research.

| Project documentation | | |
|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| | Description | |
| Mission stories, video clips, pictures | Finland | |
| | | Up-keeping Local Traditions (Mission I) |
| | | Spreading Kindness (Mission II) |
| | Greece | |
| | | Spreading Awareness: Dangers of Smoking (Mission I) |
| | | Environmental Action (Mission II) |
| | Lithuania | |
| | | Vaccination Awareness (Mission I) |
| | | Upcycling for the Environment (Mission II) |
| | Romania | |
| | Giving Personality to Local Spaces (Mission I) | |
| | Boosting Resiliency against Stress (Mission II) | |
| Turkey | | |
| | Rising Green Deal Awareness (Mission I) | |
| | Rising Green Deal Awareness (Mission II) | |
| Surveys | | |
| | Description | |
| Schools as Drivers of Change - Students Survey Pre-survey | The survey probed into agentic skills and attitudes to change: Personal, relational and context related agency Interest, motivation and active citizenship, commitment to change Participation: opportunities and tendency | Finland (n) 9 |
| | | Greece (n) 17 |
| | | Lithuania (n) 10 |
| | | Romania (n) 8 |
| | | <u>Turkey (n) 9</u> |
| | | Total (n) 53 |
| Schools as Drivers of Change - Students Survey Post-survey | Collaboration attitudes Self-efficacy and competency beliefs Change agent characteristics | Finland (n) 8 |
| | | Greece (n) 11 |
| | | Lithuania (n) 5 |
| | | Romania (n) 8 |
| | | <u>Turkey (n) 15</u> |
| | | Total (n) 47 |

| | | |
|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Schools as Drivers of Change - Agentic Schools (teachers and school administration survey] | The survey probed into: School's collaboration with community partners School's support for development of agentic teachers and students-agents of change School as driver of change in community characteristics | Finland (n) 2 T Greece (n) 1T, 1 Prncpl Lithuania (n) 1 Prncpl Romania (n) 3T, 1 Prncpl Turkey (n) 2T, 1 vPrncpl Total (n) 12 |
| Students focus group discussions | | |
| Schools as Drivers of Change – Students' Voices Students' focus group discussion | The focus group discussion focused on the topic of identification the agentic teacher's characteristics' - what kind of a teacher do the students need to become agents of change. | Finland (n) 8 Greece (n) 3 Lithuania (n) 14 Romania (n) 3 Turkey (n) 9 Total: (n) 37 |
| Data gathered during the projects' key events | | |
| Students' and Teachers' discission during Empowerment Mobility Online, 1-2.06.2021 | | |
| Implementation | | |
| Students' and teachers' workshop on school and change and school as a change driver in practice | Students and Teachers discussion prompted by Jamboard activity open-ended questions regarding: Change and when it is needed, Agent of change. | Finland's Schools Teams Greece's School Teams Lithuania's School Teams Romania's School Teams Turkey's School Teams |
| Teachers' discussion during Transnational Partners Meeting II Greece, 11-13.11.2021 | | |
| Implementation | | |
| Teachers' World Café I workshop 'Am I an agentic teacher?' | A gallery walk, semi-structured and open-ended questions regarding: Who is an agentic teacher? Developing students' agency Teachers' own development | Finland's Schools Teams Greece's School Teams Lithuania's School Teams Romania's School Teams Turkey's School Teams |

| Students and teachers' discussions during Empowerment Mobility II | | |
|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Online, 25-27.05.2022 | | |
| Implementation | | |
| Schools as Drivers of Change- 'The skills we have learned' Students' impressions on the agentic skills they have learnt | Students' group discussion prompted by Jamboard activity open-ended question: What skills you have learned during the missions' implementation | Finland's Schools Teams Greece's School Teams Lithuania's School Teams Romania's School Teams Turkey's School Teams |
| Teachers' discussion: 'How is your school becoming a change agent' | Teachers' group discussion prompted by Jamboard activity based on Edward de Bono 6 Thinking Hats method | Finland's Schools Teams Greece's School Teams Lithuania's School Teams Romania's School Teams Turkey's School Teams |
| Teachers' discussions during the 5-day Mobility | | |
| Poland, 5-9.09.2022 | | |
| Implementation | | |
| Teachers' 'World Café workshop II – teachers' feedback to the students' idea of agentic teacher | A gallery walk preceded by presentation and teachers' discussion on the insights from 'Agentic teacher's characteristics' (students' focus group discussion's report). | Finland's Schools Teams Greece's School Teams Lithuania's School Teams Romania's School Teams Turkey's School Teams |
| Teachers' IOs Input collection during Transnational Partners Meeting III, Part II | | |
| Online, 25.11.2022 | | |
| Implementation | | |
| Teachers' discussion and provision of input on specific issues contributing to development of SADC intellectual outputs | Teachers' Jamboard exercise supported by Basecamp-based input collection | Finland's Schools Teams Greece's School Teams Lithuania's School Teams Romania's School Teams Turkey's School Teams |

FINDINGS AND ANALYSIS

RQ1 – WHAT ARE THE KEY MECHANISMS AND CHARACTERISTICS OF OPEN SCHOOLING AND THE PROJECT THAT MAKE THE YOUNG STUDENTS PREPARED FOR LIFE IN 21ST CENTURY?

This sub-chapter consists of two parts. The first focuses on presenting and discussing the analysis results regarding what Open Schooling (OS) mechanisms implemented in Schools as Drivers of Change (SADC) mediate students' agency and how does it happen. The second part discusses the wider benefits of schools becoming drivers of change for wider community.

HOW DOES SCHOOL CAN HELP THE STUDENTS TO DEVELOP THEIR AGENCY – USING OS METHODS IN COMMUNITY-CHANGE MISSION'S IMPLEMENTATION? KEY MECHANISMS OF THE PROCESS.

This section showcases how the convergence of the Open Schooling (OS) method key features, and the community-change mission's characteristics facilitate the development of students' agency -students becoming agents of change in their communities.

Our research presents how the key OS characteristics and mechanisms like student centredness, problem contextualization, knowledge and implementation, and sharing and reflection interact in the community-change mission to mediate students' agency. Our analysis reveals that these mechanisms need to be additionally supported by ongoing and parallel special teachers' approach-attitude that encompasses on the one hand empathy with and for the students, continuously displayed appreciation for their efforts and provision of constructive criticism; and teachers' being change role models for the students on the other hand.

Figure 2 shows the representation of the emergence of the students' agency through implementation of community-change mission guided by Open Schooling methodology from creation of nurturing conditions for agency growth, identification of students' strengths (agency resources), exercising agency and strengthening it. This process is additionally conditioned by ongoing support, every step of a way of agentic teachers – skilful gardeners of students' agencies. The analysis of the subsequent sections explains in detail each of the four steps of agency development.

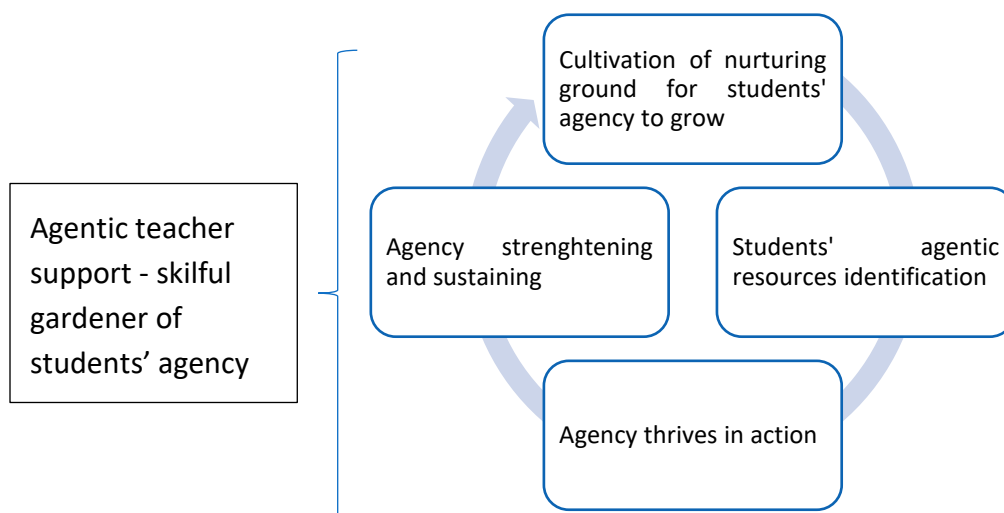


Figure 2. Student's agency development model.

CULTIVATION OF NURTURING GROUND FOR STUDENTS' AGENCY TO GROW

Our research finds that the prerequisite conditions for the students' agency growth are created by the OS' student centredness focus combined with community-change mission feature that puts students in charge of mission implementation. We also found that the agency development conducive environment is an environment in which student-teacher relations are redefined towards equality and typical positions of students and teachers in learning shift towards emphasizing students' agency.

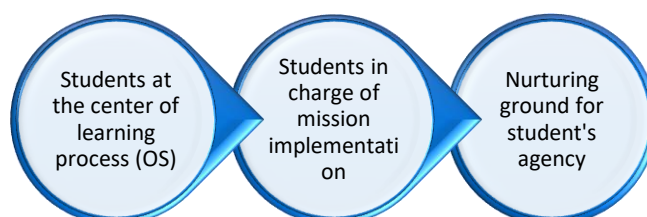


Figure 3. First step in the students' agency development

Our research shows that the initial step leading to students' empowerment (development of their agency) entails placing students at the centre of learning process (OS) and in charge of the mission's design and implementation (Figure 3). In the words of one of the SADC teachers, the student centredness means putting the students in the centre of the mission:

We put the students in the light, the student realized that they can do something for those around them. (Romanian teacher in: (Schools as Drivers of Change Agentic Schools Survey)

Our analysis reveals that for intersection of the OS student-centredness and SADC emphasis on students' being protagonists of the mission to result in developing student's agency some other conditions must met simultaneously. It is not real student-centred and student as protagonist approach, if the student-teacher relation is not redefined towards equality and respect. And, although it may sound self-explicit, it must be ensured that the goals realized in learning and mission are truly authored and owned by the students.

REDEFINING STUDENT-TEACHER RELATIONS

To put the students in the centre of the learning process means re-thinking the traditional student-teacher relationship towards student-centredness with a renewed teacher's role. This ultimately redefines the student-teacher power relations that tend to be typically unequal hierarchical with teacher's supreme position vis-à-vis student (*power over*). Now, the student is a protagonist of the learning process, teacher observes from the back seat, guides, and intervenes when asked or when necessary.

The more power-balanced nature of the teacher-student relationship has been voiced by the students in the SADC project as conducive factor to becoming change agents. For the students their relationship with teachers should also be 'close and honest', based on 'mutual respect'. Students also expressed they need a friendly relationship with their teacher to develop their agency. In the students' opinions such relationship is 'friendly but respectful' and it is key to reduce stress and anxiety and improve their learning (Students focus groups). In these interactions it is students' relational agency that evolves.

WHOSE GOALS TO ACHIEVE?

For the students to discover and grow their agency in the process of learning is it important that they are given true opportunity to act, participate, express their opinions, and develop ideas. This also means that the students take ownership of their learning and decide about activities they want to initiate and engage in. As explained by the SADC teachers, it all begins from the students while teachers are there to encourage them and stimulate:

The ideas and processes have started from the students. [Finnish teacher in: (Schools as Drivers of Change Agentic Schools Survey)]

We encouraged and stimulated the students to feel free, power and with ability to decide about the change missions. [Romanian teacher in: (Schools as Drivers of Change Agentic Schools Survey)]

The emergence of students' ideas and decisions about the mission can be mediated by the discussions between the students and teacher and dialogic learning – another aspect of the Open Schooling methodology. This style of interactions between teachers and students are crucial for the students to develop their sense of agency as pointed out by the SADC students in discussions on how the teachers can support them in becoming change as (Schools as Drivers of Change – Students' Voices).

For students to claim the ownership of the learning process, teachers first need to relinquish control over the learning process. Based on the experiences of the SADC teachers, this starts from the teachers answering whose goals are to be achieved in the learning process, in the mission. It is not the teachers' goals anymore, but the students' while teacher's role is to support the kids in fulfilling their objectives as put by a SADC teacher from Finland:

My mission is to support our students to achieve their goals [Finnish teacher in: (Schools as Drivers of Change Agentic Schools Survey)]

This quote demonstrates very clearly the shift of roles and positions of students and teachers in the learning and mission implementation processes. When the positions are swapped, students become the active proactive contributors, creators – in fact the most apt word here is agents in the processes while the teachers support them in their missions. It fundamentally challenges the typical learning methodology in which the students need to obey and follow passively the teachers in their teaching mission – here, the students' agency is inactive.

IDENTIFICATION OF THE STUDENTS' AGENTIC SKILLS – AGENT OF CHANGE, KNOW YOUR 'SUPER POWERS'

According to your findings, once the favourable conditions for agency development are created, students need to identify their personal resources (capacities, skills, talents) through which they will exercise their agency. We call these personal resources agentic skills. Identification of agentic skills is supported by the Open Schooling emphasised focus on skills development, particularly collaboration and communication skills, creativity and problem-solving efficacy. Identification and development of students' agentic skills have been an integral part of the SADC community-change mission implementation.



Figure 4. Second step in the students' agency development.

To support the student's agency in this nascent form it is crucial to identify the students' capacities and talents (*resources*) that they could use to exercise their agency leading the community-change (Figure 4). Students need to be aware of their resources and capacities not only to tap on them in change mission but also to develop a very personal sense of agency – *power within* and *personal agency*. The SADC Romanian team made an identification of the students' personal resources– or as they put by it *super-powers* an important step in mission preparation:

We asked students to identify their super-power [Romanian teacher in: (Schools as Drivers of Change Agentic Schools Survey)]

The agent's skills the Romanian team members identified included: open-mindedness, improvisation, love to nature, teamwork, being organized, sociability, leadership, sense of observation, adaptability, active listening (SADC Online Empowerment Mobility I, Jamboard workshop exercise).

At the same time, the recognition and development of students' agentic skills was a recurrent topic in all the project events, especially in capacity building activities. As a result, the SADC students became confident and fluent indicating the agentic skills they acquired during the change mission implementation. Figure 5 presents a variety of agentic skills the students' honed implementing SADC project (Online Empowerment Mobility, 25-27.05.2022).



Figure 5. Jamboard exercise - students' reflection on their agentic skills.

To read more about agentic skills acquired by the students in SADC please refer to [IO1 - The School Guide](#).

AGENCY IN ACTION – AGENCY THRIVING THROUGH COMMUNITY-CHANGE MISSIONS' IMPLEMENTATION

In the third step towards agency development, students put their agency in use in community missions (Figure 6). Their agency thrives mediated by the real-life focus of Open Schooling concretised by the emphasis on the community needs in SADC. Agency grows through meaningful and transformative mission participation, particularly through being engaged in solving relevant, important community problems. The agency dimension that emerges at this stage is context bound.



Figure 6. Third step in the students' agency development.

This section investigates how does the overlap of the OS' real-life problems focus and SADC emphasis on community problems nurture students' agency. The mission focus on the community needs and problems is a natural concretisation of the real-life, real-time feature of the Open Schooling approach creating conditions for the students in which they can be active participants and valuable contributors.

In the framework of the OS' community-change missions in the Schools as Drivers of Change project, students were encouraged to look around, observe their community, be sensible and inquisitive about what was happening or what was not happening (while it should) in their communities and bring these observations and concerns back to the classroom as problems that require solutions:

We ask students to observe the community (their neighbourhood, the people on the street, the green places, the physic road between their home and school).(…) and to identify what the community needs. [Romanian teacher, (Schools as Drivers of Change Agentic Schools Survey)]

After the students made community observations and were able to identify what changes needed to be done, the students were encouraged to come up with solutions to the earlier established community needs:

We ask students what they can do about it. We encourage the students to act and not react (not to blame others and authorities). [Romanian teacher, (Schools as Drivers of Change Agentic Schools Survey)]

Based on the analysis findings, we conclude that the community-change missions are interactional spaces in which students are accountable authors and credited contributors. Community-change missions are thus interactional spaces facilitated by the teachers, in which teacher's guide the students in their delivery of solution to the community problem(s). These conditions are conducive to the agency thriving because they allow the students to claim space and freedom to be independent but at the same accountable solution-creators. By turning focus to community needs and designing relevant solution, students get a chance to learn that they have ability to make a change - affect their communities and this constitutes what has an empowering effect on students' agency.

Our research finds that for the students to be truly valuable participants and credited contributors they need to be given opportunity and space to be independent but also to be accountable for their decisions and actions:

Allow them to be independent. [Lithuanian teacher in: (Schools as Drivers of Change Agentic Schools Survey)]

Let the students figure things on their own and make mistakes (Schools as Drivers of Change – Students' Voices)

Assign tasks and responsibilities to students ((Schools as Drivers of Change – Students' Voices)

At the same time, as the SADC teachers and students emphasised, it is necessary for the teachers to step back and make room for the students' ideas and creative efforts:

'Do not teach – give students opportunities to learn.' (SADC Teachers' World café, Mobility in Szczecin)

[Agentic teacher] [g]ives ideas and suggestions (guides) but does not tell exactly – encourages creativity' (Schools as Drivers of Change – Students' Voices)

AGENCY STRENGTHENING AND SUSTAINING - OBSERVING OWN AGENCY OUTCOMES

Students' agency is strengthened and sustained when they can see the effects of their transformative efforts. The agency strengthening is facilitated by the Open Schooling 'sharing and reflection' that encourages students to share the outcomes of their work with broader public (See Figure 7).

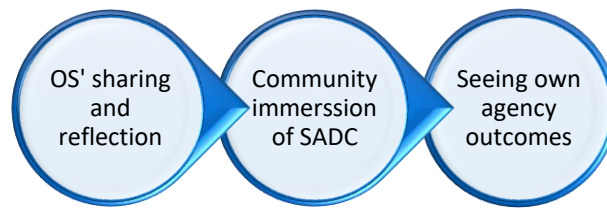


Figure 7. Fourth step in the students' agency development.

According to the OS method's students share and reflect on their learning, mission activities. In this process, the students are encouraged to share the outcomes of their work via diverse channels and reflect on what have they accomplished and learnt. In the case of the SADC project – the OS community-change missions provided the students with the opportunity to further strengthen their agency and cement their identity as change agents in community by being immersed in community. Our research shows that seeing the transformative results of community work and receiving the community members feedback and appreciation additionally fuelled the students' perception of their 'super-powers'.

This mission had the wished result and made the wanted impact: our collaborators declared that they were really proud of our work and are very happy to see the students taking action. The elders manifested their gratitude and thanked the students even while working. Also, we observed a big number of social media posts and pictures showing admiration and praising our work. A lot of press articles wrote about us and lauded our implication in the community's wellbeing. The local community members were happily after our first mission. (Romanian teacher, Basecamp questions)

Seeing not only the immediate outcomes of their change but the lasting effect of the change contributed significantly to the development of students' agency:

The most important one was that they made something with their hands and brains for the community. They were concrete active members in the local community. And even now, after almost one year, they still can see their contribution [Romanian teacher in: (Schools as Drivers of Change Agentic Schools Survey)]

AGENTIC TEACHER - SKILFUL GARDENER OF STUDENTS' AGENCY

Additionally, our research revealed that to sustainably mediate students' agency in the OS-SADC mechanisms teachers need to display certain attitudes and develop approaches. These attitudes and approaches make up what we call the 'agentic teacher' – skilful gardener of students' agency and include:

Emphasizing with the students by providing them with emotional support:

'Empathize with them. ...' [(Lithuanian teacher in: (Schools as Drivers of Change Agentic Schools Survey))]

'Maybe 'there is something going on' emotionally so they feel it is not worth trying, low self-esteem' (Schools as Drivers of Change – Students' Voices)

Appreciating and valuing them by recognizing their efforts, providing positive feedback and constructive criticism:

'Provide positive feedback and recognize their efforts' [(Lithuanian teacher in: (Schools as Drivers of Change Agentic Schools Survey))]

'Gives feedback and constructive criticism without harming self-esteem and courage to voice ideas' (Schools as Drivers of Change – Students' Voices)

Being role models for them, particularly being pioneers of change:

Lead them by example...[(Lithuanian teacher in: (Schools as Drivers of Change Agentic Schools Survey))]

'Teachers should be leading by examples – be role model for us. (Schools as Drivers of Change – Students' Voices)

WHAT ARE THE WIDER BENEFITS OF OPEN SCHOOLING MODELS FOR THE COMMUNITY?

This section describes and discusses in what ways the community can benefit from Open Schooling models implementation. Our research identified four key aspects of OS pedagogy that offer long-term benefits for community. The text below discusses how community can profit from creating young students' agents of change and agentic teachers. Next, we ponder the benefits of introduction of community relevant issues to school curriculum and more generally profits of sustainable and systematic school-community collaboration

DEVELOPMENT OF AGENTS OF CHANGE – 'MINDFUL CITIZENS'

Collaboration between school and community means that the students are directly involved and engaged in the real-life community issues: understanding them and addressing them. Through this meaningfully participatory engagement they learn and develop set of skills that promote their agency; we call those skills agentic skills. ([See – IO1 The Guide](#))

Equipped with the agentic skills the students, being immersed in the community life, the students shape their citizen attitudes – active, caring, responsible, with a strong sense of community belonging in the word of our respondents a 'mindful citizens' [Greek Principal in: (Schools as Drivers of Change Agentic Schools Survey)].

Such agent of change and a 'mindful citizen' at the same time is an asset to the community, as a person equipped with such skills and presenting such an attitude to the common well-being is very likely to actively work to promote the community well-being either in terms of professional career or a general like outlook. We conclude that Open Schooling method is likely to produce empathetic leaders, compassionate entrepreneurs, community innovators and resilient activists that can operate anywhere they go, locally, nationally as well as globally.

DEVELOPMENT OF AGENTIC TEACHERS

Our analysis shows that teachers who have been exposed to the Open Schooling methods of teaching that include community collaboration gain a new skill that enables them to support development of their students' agency and self-efficacy – they become agentic teachers. Equipped with the OS derived tools the teachers create and give space for the students' initiative, engagement, creativity and encourage mistakes as the learning tool (Student focus groups and Teacher World Café I and II). This frees up the students' potentials, including those with special needs and the shy ones and strengthens the students' independence and responsibility in the learning process fortifying the students' confidence:

The feeling of expressing themselves and doing something for the community increased their self-confidence. The growth in leadership and achievement beliefs also increased their school motivation. [Turkish teacher in: (Schools as Drivers of Change Agentic Schools Survey)]

Teachers who implemented the OS missions see the positive results of the collaborative and open pedagogy on the students' learning outcomes and their motivation and attitudes to learning. They consider the OS methodology as more attuned and responsive to the needs of the present generation of learners than the traditional way of teaching. The OS is a more practical way of knowledge acquisition and offers skills development – something the traditional learning focused predominantly on theory lacks. Another OS' advantage noticed by the teachers lies also in its dynamic nature – diversity of activities and tools that makes learning more attractive for the students. Students who learn through OS are more active and enthusiastic learners. Additionally, the OS develops students' critical thinking (The world Café discussion, teachers' input, 5-day Mobility, Szczecin, PL September 2022).

The agentic teachers play a crucial role in the development of the Open Schooling agency of their fellow teachers. Being pioneers and advocates of Open Science schooling methods they are not only examples for other educators to follow, but they also become their mentors by guiding others along the OS implementation. This spill-over effect benefits the society in the long perspective by having an effective influence on how students are being taught in general, supporting the development of agentic and mindful citizens.

Having said that, we cannot overlook the OS' effect on the teachers themselves – teacher's profession is a vocation, however, very often caught in the educational system stiffness and bureaucracy the educational spirit evaporates. Therefore, we conclude that the OS method helps to revive that spirit and tap into the teachers' potentials, being a platform where it can be realised. Teachers who worked in the OS process also develop their own agency and become what the students call natural educators (Student focus group discussion). It goes without saying what is the communal value for the development of the future generation of the teachers who are competent, confident, motivated, and satisfied with the educational work they perform every day.

UNDERSTANDING COMMUNITY BETTER - INTRODUCTION OF THE COMMUNITY RELEVANT ISSUES TO THE SCHOOL CURRICULUM

Our analysis shows that Open Schooling creates a bond between school and the community that does not only mean activism and collaboration but also it entails rendering real-life community issues and challenges a matter students approach from the perspective of science. Community issues become integrated into teaching and learning. This way learning is more meaningful for the students while at the same time the students become closer and more familiar with the community matters which fortifies their feeling of community belonging.

The students worked in real life problems and tried to provide solutions that could be really implemented [Greek teacher in: (Schools as Drivers of Change Agentic Schools Survey)]

To be useful and effective in the community motivated them positively [Turkish teacher in: (Schools as Drivers of Change Agentic Schools Survey)]

Getting familiar with community issues and working to understand them is closely followed by active solution seeking in the classroom. This scaffolds a unique students' mindset of solution seeking empathetic social innovators who use the school's education to address community challenges:

The students worked as researchers in order to detect the problem and then tried to find solutions to this problem. This is the way to "change" things. [Greek teacher in: (Schools as Drivers of Change Agentic Schools Survey)]

We conclude that the Open Schooling is about creating bridges between schools and community but the true meaning of it lays in forces fostering collaboration: interest and curiosity, as well as synergies resulting from collaboration that is deepened understanding and effort for common good.

SUSTAINABLE SCHOOL-COMMUNITY COLLABORATION

Our analysis of SADC project implementation shows that school that opens for community collaboration becomes an active community member. School has always been a community member, but its role has been limited to education of pupils following the national curriculum. Taking on an active community member role, school creates its new identity as a multidimensional partner that is genuinely and pro-actively interested in community well-being and attuned to its needs and which has resources to work with and for community – dedicated teachers and motivated students:

I think it means that school leads an important change and awareness first in itself then in the community [Turkish teacher in: (Schools as Drivers of Change Agentic Schools Survey)]

Schools are the places where the future of the countries form. It is so meaningful to make an awareness in the community about our nature and planet [Turkish vice-principal in: (Schools as Drivers of Change Agentic Schools Survey)]

By assuming new community responsibility – being a driver of change, school provides the community with a powerful transformational force that works in a bottom-up direction which makes changes and needed improvements easier to initiate and more sustainable in their nature.

RQ2 – HOW CAN SCHOOL HELP THE STUDENTS TO DEVELOP THEIR AGENCY USING OS METHODS IN COMMUNITY-CHANGE MISSION’S IMPLEMENTATION?

This sub-chapter discusses what can school do in order to become change driver in community. The sub-chapter is composed of four parts. First, the concept of school as driver of change is discussed as viewed by the SADC participants. Second part identifies key areas in which transformations (both internal and external) are needed if a school aspires to driver of change in community. Third part presents ways and practical approaches to assessment performance and outcomes of the community-change missions and finally, the fourth part explores how missions can be integrated into subject curriculum, based on experiences of the SADC’s schools.

SCHOOL DRIVING CHANGE IN COMMUNITY – DECIPHERING THE TERM



Figure 8. Word cloud-compilation of the SADC teachers understanding the term 'school as drivers of change'.

School, as understood within the Open Schooling methodology framework is not a brick-and-mortar entity limited to students and teachers connected in educational endeavour; rather it is an active member of the community that nurtures collaborative relations with a variety of local community stakeholders including students’ parents, other community groups, business, and industries as well as Innovation and Research Centres. Collaboration takes usually form of students’ engagement in community and with community with the purpose of knowledge learning and skills development. Change of the students and/ or community in this

collaborative process is not always the purpose, however, very often it is its natural outcome. What happens when a community-change is a planned and desired outcome of school-community collaboration in Open Schooling? The following section discusses the approaches to 'change' in SADC and understanding of school a driver of change concept

APPROACHING 'CHANGE' IN SADC

'Change', one of the key concepts of the School as Drivers of Change has been understood by the students/ participants through transformative terms of 'difference', 'replacement' – one thing is replaced by the other and revival of existing 'old' things (Jamboard SADC MOB 1 JUN 2021). These transformations are associated with positive features as improvements, better versions. The change can be brought about through action – doing something to affect the said 'difference', 'replacement or 'revival'. It can be also a result of our cognitive re-working, to put it simply it can be a result of looking at something in a different way – a change of perspective:

'(...) to see things in another way' [Greek student, Jamboard SADC MOB 1 JUN 2021]

Change is considered a part of life and, according to the students/ participants can affect various areas of life: someone's personality, education system, life in general. *Everything can be changed, if you want to change it* – optimistically conclude SADC participants from Lithuania.

Why and when do we need change? There are three key situational instances when a change is need. First, change is necessary in case of failure and malfunction and inefficiency, which can be also indicated by a lack of progress and impression of being stuck in a loop. Another instance when a change is welcome is related to rather subjective feeling of dissatisfaction and boredom that call for transformation. Finally, according to the SADC students/, we need to change to catch up with ever changing reality around (Jamboard SADC MOB 1 JUN 2021).

NEW UNDERSTANDING OF 'SCHOOL' – SCHOOL AS DRIVER OF CHANGE IN COMMUNITY

In SADC project, it is school that drives change in community. But before the community can be affected by a transformative effort of the school many changes have to take place within the school itself first. The word cloud to the right is a complication of the ideas and characteristics of 'school as driver of change' in community according to SADC teachers (Schools as Drivers of Change Agentic Schools Survey).

According to the SADC teachers, the concept of school as driver of change is built on two pillars: students and community that are connected by openness, development, and kindness. Such a school has passionate students and dedicated teachers. The school is attuned with community needs and encourages collaboration for development of innovative solutions for community issues (Figure 8).

CHANGES NEEDED SO THAT SECONDARY SCHOOLS CHANGE CAN BECOME DRIVERS OF CHANGE – INTERNAL AND EXTERNAL ECOSYSTEM CHANGES

This subchapter presents and discusses the research analysis results regarding the changes required to be implemented by schools that aspire to become drivers of change in their communities. Our analysis focused on internal and external aspects of the school change.

INTERNAL ECOSYSTEM OF SCHOOL'S CHANGE

This section focuses on the internal aspects of change to be introduced by school to become driver of change in community. First, we present our analysis of identified changes to be undertaken. Next, we discuss the findings as organized into four areas: Consciousness and Capabilities, Resources, Informal rules and Formal rules.

IDENTIFICATION OF THE AREAS THAT REQUIRE TRANSFORMATION.

Table 2 presents issues identified by the teachers' participants in Schools as Drivers of Change project as challenges and obstacles preventing schools from becoming drivers of change in their communities and possible solutions (left and middle column) that are subsequently translated into change intervention areas according to the Gender at Work framework (right column).

Table 2. Identification of areas that require change by school to become driver of change in community.

| Difficulties associated with the process of school becoming agent of change | How can/does the school support the teachers in their task to develop the students' agentic skills and the agent of change attitudes? | Areas that require change (based on Gender at Work framework) |
|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Teachers do not have time* | Give chance to do extracurricular work (if funds available) | Resources Provision of more time and money resources for extracurricular work |
| | Support the integration of mission into curriculum | Formal rules Facilitate curricular mission integration |
| Teachers may not want to give energy to this kind of projects* | Encourage originality Appreciate*** | Consciousness and Capabilities Build up and strengthen teachers' motivation |
| | Provide equipment and supplies Provide training Offer support*** | Resources Provision of supplies, training and support |
| Teachers do not want to give time from their lessons* | Support the integration of mission into curriculum*** | Formal rules Facilitate curricular mission integration |
| We should know the community before, and after that we can collaborate and do things that would be needed* | Use your contacts and networks Help reach out to the community*** | Resources Support community outreach |
| Your headmaster does not support you* | Provide training Make it easy to take students out of school Provide equipment and supplies Offer support, advice*** | Resources Provision of supplies, training, support and advice |

| Difficulties associated with the process of school becoming agent of change | How can/does the school support the teachers in their task to develop the students' agentic skills and the agent of change attitudes? | Areas that require change (based on Gender at Work framework) |
|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Your headmaster does not trust your skills, you have to prove your skills* | Trust their vision Give chance to initiate Give opportunities to express themselves Appreciate*** | Consciousness and Capabilities Trust and appreciation for the teachers' work Support in teacher's agency |
| Lack of students' motivation* | Provision of supplies Incentives, awards, and appreciation to proactive attitudes Facilitate contacts with community Organization of collaborative activities at school Provision of extracurricular activities Help, time, resources Creation of space to act, initiate Choice of interesting activities*** | Resources Provision of supplies, awards and incentives Community outreach Collaborative and extracurricular activities Space for initiatives |
| | Making them believe themselves*** | Consciousness and Capabilities Stimulate and sustain students' motivation and commitment Develop teachers' capacity to foster development of the students' agency (agentic teacher) Develop students' agency (agentic skills, agent of change) |
| Students change prejudice** | Be a pioneer of change**** | Informal rules Create change friendly attitudes and atmosphere |
| Teachers' mindset (attachment to traditional ways of teaching) and prejudice to change** | Inviting teachers to Open Schooling lesson demonstration (Project discussion, 5-day Mobility, Poland) | Resources Provide training and advice |
| | Encourage originality*** | Consciousness and capabilities Stimulate and sustain teachers' motivation and commitment Develop and nurture change friendly attitudes |

| Difficulties associated with the process of school becoming agent of change | How can/does the school support the teachers in their task to develop the students' agentic skills and the agent of change attitudes? | Areas that require change (based on Gender at Work framework) |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Inter-group relations** | Cultural change approach to etch the change permanently by conducting sensitivity training, team building, and employee surveys** | Informal rules Improve institutional communication and relations Instil culture of change |
| | Cultural change approach to etch the change permanently by conducting sensitivity training, team building, and employee surveys** | Resources Provide social skills training |
| Communication** | Strengthen communication** | Informal rules Improve institutional communication, in general |
| | Using digital technologies for fast and effective communication** | Resources Use of digital tools to communicate |
| Decision-making** | Cultural change approach to etch the change permanently by conducting sensitivity training, team building, and employee surveys** | Informal rules Instil culture of change |
| | Cultural change approach to etch the change permanently by conducting sensitivity training, team building, and employee surveys** | Resources Social skills training |

*How is your school becoming an agent of change? Jamboard activity, MOB2 May 2022

** Jamboard –exercise on internal and external changes, Basecamp

*** [School staff and administration survey, Webropol]

**** Students focus group discussions

CONSCIOUSNESS AND CAPABILITIES

Based on the analysis of the teachers and students' input (table above) we identify the following four areas that require intervention within the Consciousness and Capabilities domain:

- Building and sustaining of change friendly attitudes of students and teachers
- Stimulation and sustainment of teachers' and students' motivation and commitment
- Development of teachers' capacity to foster development of the students' agency
- Development of students' agency

Building and sustaining change friendly attitudes among students and teachers

A school's becoming a driver of change in community happens through work, initiative and engagement of teachers and students. Within both groups there are prejudices against change (Turkish teachers) that need to be addressed by school or on a school level. Therefore, a first task for a school is to build a change friendly atmosphere among students as well as teachers.

Besides the 'natural biases' that people generally have against 'new', 'different' ways, perspective, and approaches both within the teachers and students we can identify group specific change prejudice. When it comes to the teachers, what needs special attention and work relates to adaptation of traditional mindsets (Romanian teachers) to new ways of teaching.

When it comes to the students, the key direction, focus is students' motivation, especially those who are 'shy but brilliant' (Romanian teachers, Jamboard exercise, Transnational Project Meeting III, Part II).

Taking care of teachers' motivation

Within the top-down approach – how can the administration incentivise the less motivated teachers to the collaborative work? Encouraging of originality and sustaining a culture of innovation and new ideas by the school administration is a way forward. To be more motivated, teachers need to feel they have the support needed and that their work in general is noticed and appreciated, as already mentioned. Lower or lack of motivation stems sometimes from the impression, feeling that someone is not able to do something, does not have the necessary skill and knowledge. Thus, to adapt to the 'agentic teacher role they (may) need extra training and education. Supplies and equipment available for the educators also supports their motivation.

Support the teachers in their agentic teaching role (school survey)

The school's internal change is needed also in the way the school supports the teachers. Collaboration with the community stakeholders puts additional pressures and demands on the teachers. As the project participating teachers enlisted, key areas the teachers need support include limited time resources, low motivation of (some) teachers, lack of integration of the community collaborative work in the curriculum as well as lack of general support of the school administration for the teachers' initiatives and lack of trust in their skills.

A school that drives changes in a community provided all the needed support for the teachers so they can implement the collaborative work in practice, in the field.

Support for the students' agentic skills development – (this topic has been explored in [IO1 - The Guide](#))

RESOURCES.

Within the domain of Resources, the identified areas that require change include:

- Access to more time and money resources for extracurricular work
- Access to of supplies, training (including social skills training) and support (facilitation of community outreach)
- Access to collaborative activities and space for initiatives

Extra – curriculum

Carrying out community collaboration entails – especially in the beginning – teachers extra work. School may support that by providing opportunities for extracurricular lessons if funding is provided. More sustainable approach is, however, to assist the teachers on integration of the mission activities into the curriculum, that is rendering the mission activities parts of the relevant school subjects, lessons. (More on curricular integration of the community mission in the next chapter.)

Equipment, supplies and training

The school's internal change is needed also in the way the school supports the teachers. Collaboration with the community stakeholders puts additional pressures and demands on the teachers. As the project participating teachers enlisted, key areas the teachers need support include limited time resources, low motivation of (some) teachers, lack of integration of the community collaborative work in the curriculum as well as lack of general support of the school administration for the teachers' initiatives and lack of trust in their skills.

A school that drives changes in a community provided all the needed support for the teachers so they can implement the collaborative work in practice, in the field.

Facilitation of community outreach and collaborative initiatives

School's active presence in the community means, entails good knowledge of the community stakeholders' areas of activity and expertise as well as establishing contacts with them and maintaining, sustaining good relationships. This process maybe be difficult to begin, initiate for the teachers on their own. The school's administration needs to take on a new role, task of facilitating community contacts, building the schools' community network the teachers can easily tap into. Also, often the administration has a certain leverage in community contacts and relations due to its executive power and institutional position in the community, the teachers may need in planning and implementing the collaborative work.

INFORMAL RULES

Change becomes a norm. Among the areas that require transformation within the domain of informal rules we identify the following:

- Create change friendly attitudes and atmosphere, instil culture of change
- Improve institutional communication and relations

Rendering school's institutional atmosphere change friendly and instilling institutional culture of change

Part of the internal change required to be undertaken by the school considers improving the school's institutional culture. This should take place on three levels relational, communicational, and decision-making.

Relational level refers to good quality of intergroup relations within the institution and includes various types of relation configurations, administration-teachers, teachers-teachers, teachers-students, administration-students. This does not exclude relations with the students' parents who also constitute school according to the OS (Open Schooling) method. The second level that requires establishing good internal communication, that is key in managing change processes (SADC teachers, Jamboard exercise, Empowerment Mobility II). Good communication concerns both effective flow and transparency of information as well as nature of communication that is open and honest. Finally, a school that drives change in community has a consultative,

democratic, and inclusive decision-making system put in place (Greek teachers, Jamboard exercise, Transnational Partners Meeting III, Part II).

FORMAL RULES.

Facilitate curricular mission integration. School's formal partnerships and engagement in projects including internationally like Erasmus+.

EXTERNAL ECOSYSTEM OF SCHOOL – CHANGES

This section is focused on what is necessary to be done by schools to establish and sustain effective, mutually beneficial collaboration with the community stakeholders. The last part of the section introduces the community partnerships established by the schools participating in SADC.

ESTABLISHING COMMUNITY PRESENCE AND CREATING COMMUNITY MEMBER IDENTITY

School that drives community-change, presents itself in the community, or establishes its community identity as a multidimensional partner (Schools as Drivers of Change Agentic Schools Survey). A multidimensional partner denotes a partner with whom collaboration is possible in various areas and defined by ability to collaborate with various community partners, including internationally, Erasmus+. Driving changes in community demotes that school becomes a proactive community member. This means establishment and expansion of the school's contacts and relations with community stakeholders. These contacts need to be systematically sustained for example by organization joint events, collaborating around common values and purposes. Schools, driver of change with established community networks the work does not end, as the relations are consolidated through ongoing collaboration and new contacts are being made, including internationally. Part of promotion of the school's identity and establishing new partners may be done via social media

to reach more people in the community we can be active on social media as drivers [Turkish teacher in: (Schools as Drivers of Change Agentic Schools Survey)]

BEING AWARE OF AND ATTUNED WITH COMMUNITY NEEDS

To drive a change in the community, the school needs to turn its attention towards the community to better understand what it needs and how to address those needs. According to SADC teacher, school needs to be connected with the community needs and involved in them:

To be aware of the need of the community [separate answer] to respond positively to their needs. [SADC teachers in: (Schools as Drivers of Change Agentic Schools Survey)]

BRIDGING COMMUNITIES AND FACILITATING INVOLVEMENT

A new role, to which a school adapts in relation with community collaboration is being a bridge between the school's community and the local community. This is realized in providing an opportunity or being a channel for the voices and perspectives of the youth being sent and heard by the broader community, therefore the intercommunity and intergenerational dialogue – like in cases of community-change missions of SADC. Another aspect of communities bridging is facilitation of the activities' implementation – creating opportunities at the school for the community engagement and organizing opportunities with and in the community for the students' and teacher' activism and involvement

SADC SCHOOLS' ECOSYSTEMS OF COMMUNITY COLLABORATORS

This section presents the great variety of community partners that were invited into collaboration with the SADC schools in their community-change missions (Figure 9). We also show the ecosystems of community collaborators created by the SADC schools.

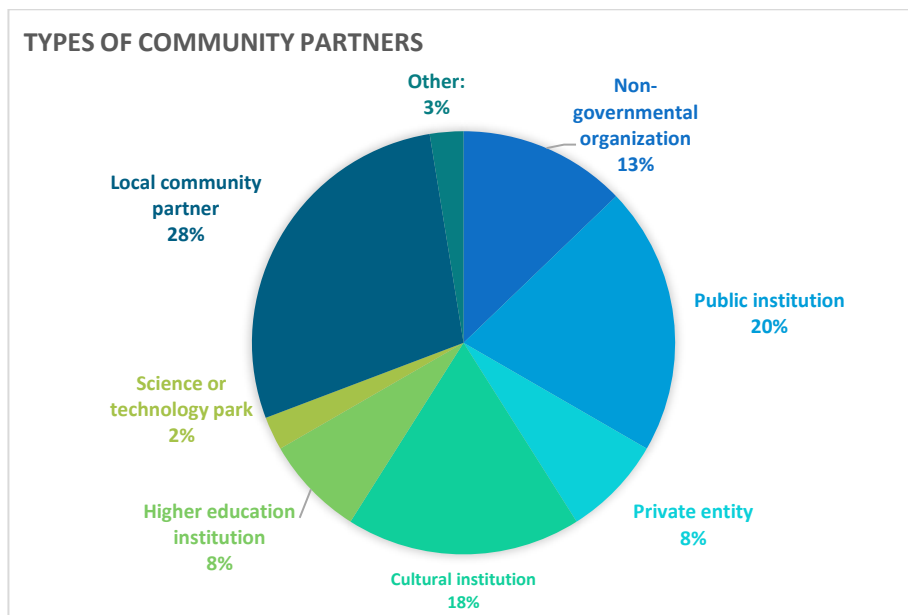


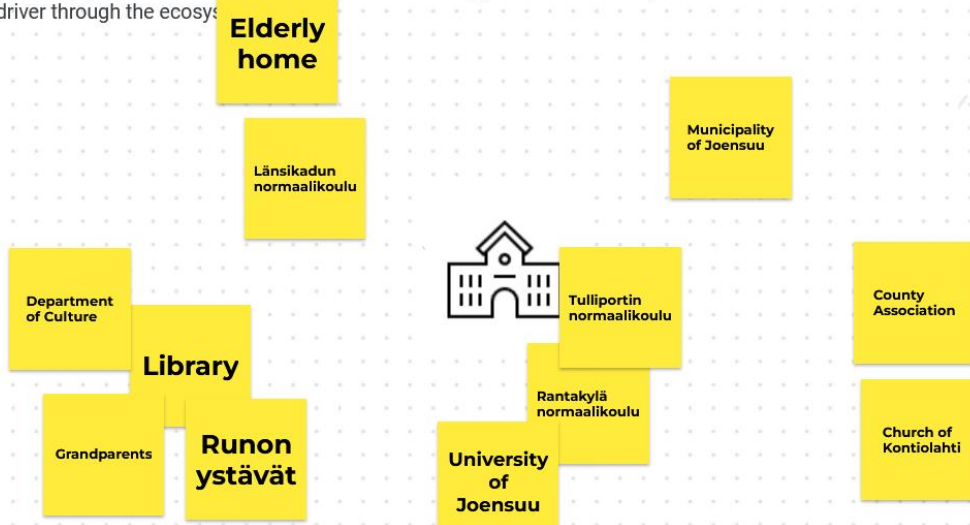
Figure 9. The variety of community partners the schools collaborated with in SADC project.

Finland

Finland’s ecosystem of community collaboration is composed of educational institutions, municipal actors, cultural institutions, NGOs as well as elderly care establishments and community individual members.

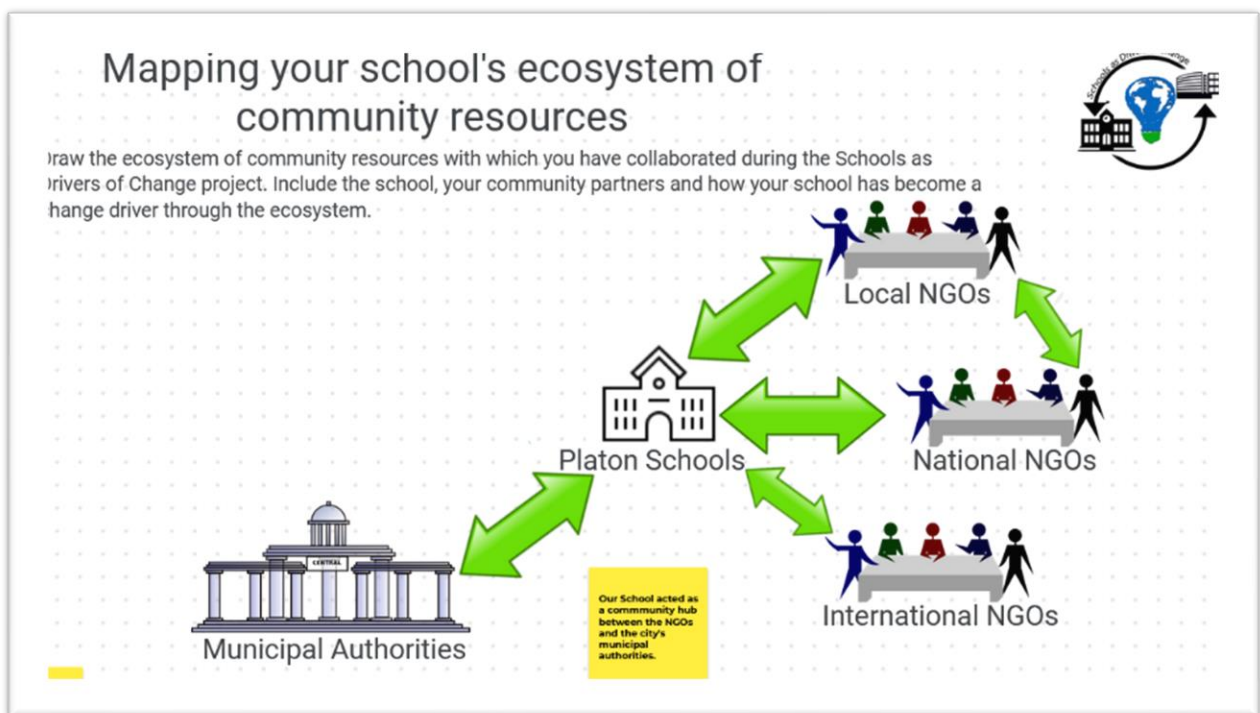
Mapping your school's ecosystem of community resources

Draw the ecosystem of community resources with which you have collaborated during the Schools as Drivers of Change project. Include the school, your community partners and how your school has become a change driver through the ecosystem.



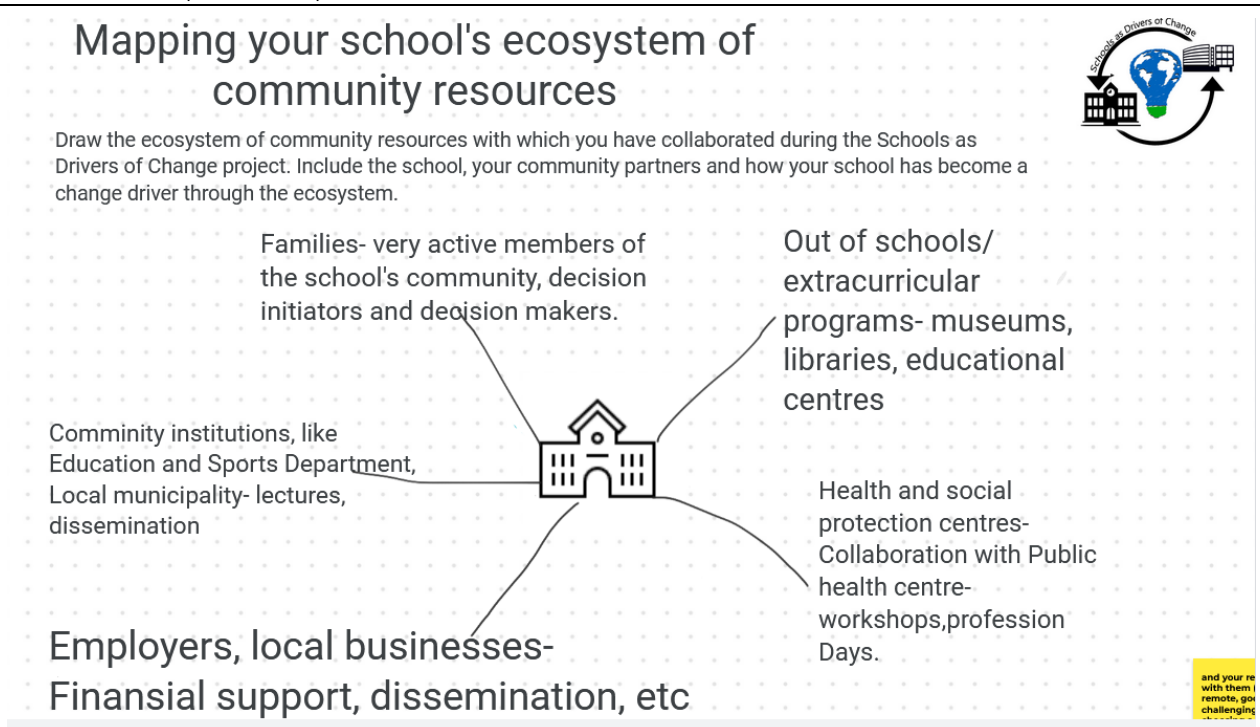
Greece

Ecosystem of community collaboration created by the SADC Greek partners consists of various NGOs working on various levels (locally, nationally, internationally) and municipal actors.



Lithuania

Lithuania's ecosystem of community collaboration is made of students' families, educational institutions, as well as various public and private sector actors.



Romania

Romania established collaboration starting from school administration to student' families as close community partners and with other, wider local community members.

Mapping your school's ecosystem of community resources



the large local community



parents & close community members

teachers & students

school management



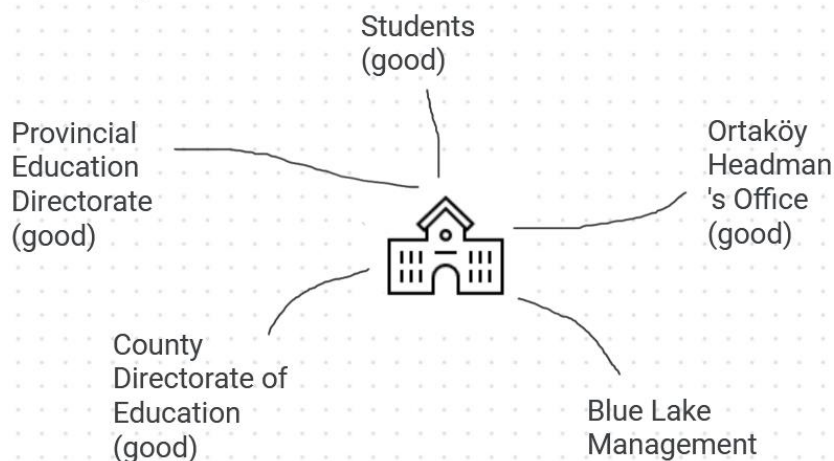
Turkey

Their ecosystem of community collaboration is composed of various public sector actors and provider of public services.

Mapping your school's ecosystem of community resources



Draw the ecosystem of community resources with which you have collaborated during the Schools as Drivers of Change project. Include the school, your community partners and how your school has become a change driver through the ecosystem.



HOW CAN AUTHENTIC OPEN SCHOOLING MODELS INTEGRATE IN SCHOOL CURRICULA?

This section provides insights on how the Open Schooling models can be integrated in school's curriculum. Based on SADC community-change missions' implementation, our analysis identified three ways in which OS models can be reflected and integrated into schools' curricular subjects (see Table 3).

Table 3. Identification of curricular subjects in the mission activities

| SCHOOLS SUBJECTS DIRECT IDENTIFICATION IN MISSION ACTIVITIES | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Mission: Giving personality to local places (Romania) | | Mission: Vaccination awareness (Lithuania) | |
| Mission activities | Subjects | Mission activities | Subjects |
| Planting | Biology | Research, seeking newest facts | English |
| Constructing fence | Mathematics | Understanding immunity and vaccination effects | Biology |
| Painting walls | Chemistry | Gathering and processing data | IT |
| Making chairs and chessboards | Art | - | - |
| OS' MISSION HANDS ON ACTIVITIES AS TO COMPLEMENTING THEORETICALL TEACHING | | | |
| Integration: mission activities are seen as complementary in terms of its practical and hands on character to the theoretically taught school subjects | | | |
| Mission: Raising awareness of environmental responsibility (Turkey) | | | |
| Mission activities | | Application | |
| Teams began to spread what they have learned to the community. They started from their closest environment and explained lots of things related to the green deal, its importance and the changes that began at our school about renewable energy. | | "Environmental education course" is carried out purely theoretically the skills gained and developed by the students have been realized as an application of this course | |
| SKILLS-ORIENTED INTEGRATION | | | |
| Integration: mission facilitate students' skills development and thus it can be treated as implementation of the national core curriculum regarding transversal skills and competencies focus | | | |
| Mission: Spreading Kindness (Finland) | | | |
| Mission activities | | Application | |
| Organizing happenings to spread goodness to our community. Christmas cards workshop with 1st graders to elderly people, participating in poem laundry cultural exhibition, learning skills to do these things. | | There are subject based and transversal skills and competences in the Finnish national core curriculum for basic education. All the skills we were learning can be seen as a part of the transversal competences. | |
| Integration: mission activities provided an opportunity to develop research (inquiry) skills to the schools' subjects | | | |
| Mission: Environmental Action (Greece) | | Application | |
| Students worked on the ecological footprint. They did some research about it, kept a diary about their | | They did research about the ecological footprint and worked with the "scientific way". | |

| | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <p>"energy consumption" habits and used a software to determine their ecological footprint, discussed it with students from other countries and proposed some solutions for this.</p> | <p>To learn how to do research, to work on problem solving techniques, to learn how to present their findings and disseminate them.</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|

HOW CAN OPEN SCHOOLING COMMUNITY MISSIONS BE ASSESSED– CRITERIA AND TOOLS?

This section discusses the research findings regarding the ways OS community-change missions can be assessed and evaluated. The analysis identifies assessment tools, input to be used in the evaluations and against what criteria to assess missions.

Assessment tools. The missions can be assessed using a combination of qualitative and quantitative methods. Quantitative methods include statistical data analysis. Qualitative methods include interviews, surveys (including before and after, focus group discussions, students’ interest progression, self-reflection, and observations.

Input for the assessment. To fully assess the missions all those who participated in the missions both directly and indirectly should take part in mission assessment. They include:

- students
- educators
- community partners
- students’ parents
- other schools

Assessment criteria

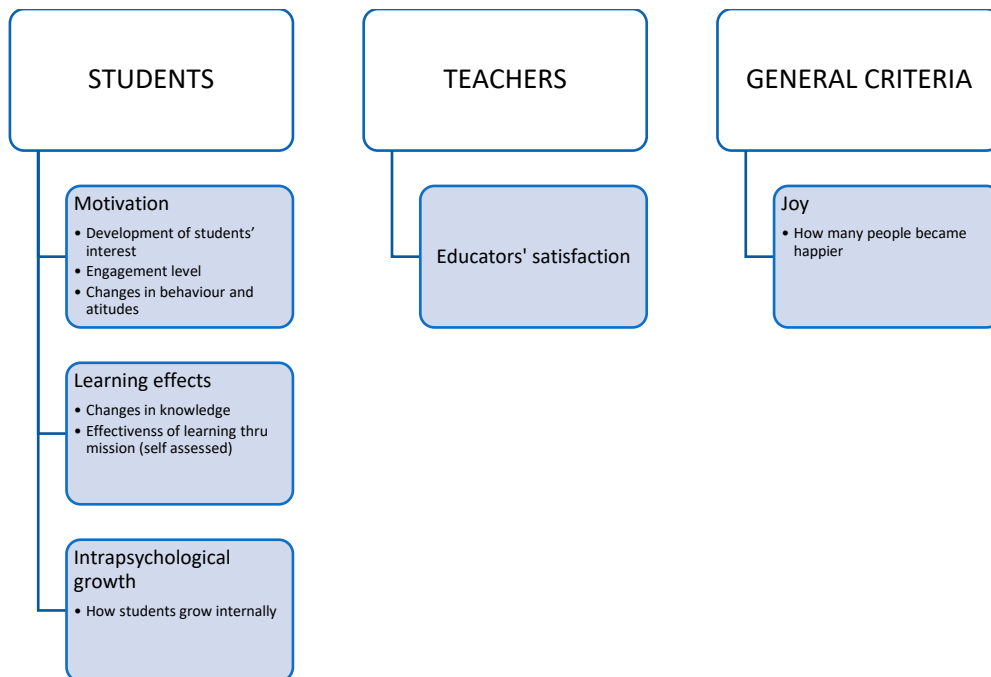


Figure 10. Compilation of criteria to assess change missions.

RQ3 – WHAT ARE THE MOST IMPORTANT KNOWLEDGE SHORTAGES IN THE FIELD OF MAKING VARIOUS FORMS OF OPEN SCHOOLING THAT DRIVE STUDENT AGENCY, SUCH AS SCHOOLS AS DRIVERS OF CHANGE, A REALITY?

SUPPORTING THE TEACHERS IN THEIR TRANSITION TO AGENTIC TEACHER ROLES

Our research clearly pointed out schools' obligation to support teachers in becoming agentic teachers. Our analyses also profoundly investigated the students' perspective on the agentic teacher feature –we identified skills, approaches, attitudes, and qualities that should characterize the agentic teacher. From the teachers' perspective, we learnt that they need access to supplies and equipment as well as training to be ready to support the students. They also need the schools' administration support in a form of motivation and belief in the teachers' competences.

However, what is still little known, is the process of transition from teacher to agentic teacher and how it can be verified. More research is needed to understand the practical aspects of teachers becoming agentic teachers and how the school's administration can support this process, especially when it comes to support of such unmaterial aspects of teachers' work as motivation.

SCHOOL BECOMING DRIVER OF CHANGE – CHANGE INTERVENTION IN PRACTICE AND IN VARIOUS SOCIO-CULTURAL CONTEXTS

Our research mapped and described in detail areas of intervention regarding school's organizational change towards becoming change driver in community. What is still under-researched is to understand how these changes can be implemented in practice. Does it matter in what area the change begins? How can the change be effectuated in different socio-cultural contexts of educational systems? Are there any prerequisites for the change to be successful?

Yet, the most important question that our research was not able to answer is how – in practical terms encourage change-friendly attitudes of the teachers, administration, and the students? How to create a change-friendly culture?

ASSESSMENT OF MISSION LEARNING IN PRACTICE

One of the objectives of this research was to understand better how the Open Schooling mission can be assessed. Being able to evaluate students' learning outcomes in mission is crucial for the OS method to be more popularly used among the educators. Our research identified tools that can be used in the mission learning assessment. We also established the assessment criteria against which the mission learning outcomes can be evaluated.

What is still to be researched is the creation of mission assessment tools and testing them in practice. More research is needed on how the criteria we identified can be embedded in the tools we identified and to what extent these tools can accurately grasp the students' learning outcomes.

CONCLUSIONS

The objective of this study was to better understand how students become agents of change in their communities implementing Open Schooling missions and how schools can support students' agency development in that process.

We began our exploration by probing into the students' agency development in community-change mission's implementation. We were particularly interested in how Open Schooling method key characteristics embedded in the mission concept support students' empowerment – their ability to exercise their agency. Based on our findings, we developed a four-step model of student' agency development in the context of OS mission implementation. The model consists of the following steps: creating conditions for the agency to grow, identification of the students' agency resources, exercise of the agency in community missions and strengthening the agency by seeing its long-term results and impacts.

We found that agency development begins from creation of favourable conditions for this development. As 'favourable conditions' we defined relations between students and teachers that are based on equal treatment and mutual respect. For Lipponen and Kumpulainen (Lipponen & Kumpulainen, 2011) such teacher-students relationship helps students develop their transformative agency. Another prerequisite for the students' agency growth we found is the teachers' stepping back from their authoritative positions in teaching and instead empathise with the students and allow them to be independent learners who claim responsibility for their learning. Similar understanding on new teacher position in teaching was reflected by Lipponen and Kumpulainen who claim that teachers' withdrawing from controlling and commanding in learning and reciprocating and connecting with the students instead frames and supports their accountability and this mediates agency in earning (ibid).

We concluded that teachers play crucial role in mediating students' agency – we called the agentic teachers skilful students' agency gardeners because they help them identify their skills and competencies – their 'super powers' – agentic skills and because they guide and not lead the students in their learning, mission implementation in the SADC context. Teachers are resources for the students' agency to develop (relational agency) – the types of teachers' support and the relationship with the students is a resource students can use to exercise their own agency, (Edwards, 2005). Teachers mediate student's agency also by creating for them spaces and opportunities to exercise their agency, so called interactional spaces (Greeno, 2006). In our research case these spaces were community-change missions spearheaded, designed and implemented by the students. More importantly, missions were opportunities to problematize and solve noteworthy community issues – thus they were opportunities for transformative participation (Boaler & Greeno, 2000) (Greeno, 2006) that facilitates students' empowerment (White, 1996).

Our research found that neither the teachers can become agentic teachers not students' agents of change if they are not adequately supported by school. During our research, we identified what kind of changes need to be implemented by a school aspiring to become driver of change in community. Based on the Gender at Work Framework (Rao;Sandler;Kelleher;& Miller, 2016), we concluded that a school that drives changes in community has students and teachers that are open to change. Teachers are determined and agentic and they guide their passionate students in community-change missions mediating their students' agencies. School, the engine of change provided all the necessary support for their teachers and students both material and non-material in a form of having opportunity to express ideas and spaces to start initiatives.

On institutional level, we concluded that school – driver of change is formally committed to work with community members that is expressed in forms of partnerships. One of the most important aspects of the school’s organizational change pertains to the unstated rules, norms and practices that govern how the school functions. We find that a school driver of change functions in organizational culture that encourages and welcomes change. This culture is supported by good quality of relations in the organization as well as good internal communication (Figure 11).

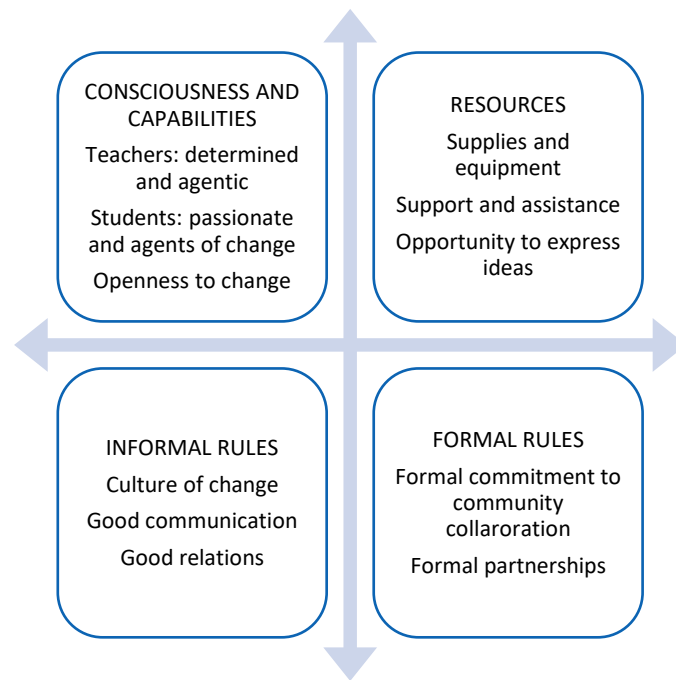


Figure 11. Gender at Work framework-description of the changes made by school - driver of change.

Our objective in this research was also to advance practical applications of Open Schooling pedagogy. For this purpose, we investigated how the OS community missions can be integrated into school curricula and how their learning outcomes could be assessed. We identified three approaches to integrating missions’ activities into the school subject learning. One approach implies direct identification of school subjects in mission activities. According to the other approach, missions can be treated as practical component of theoretical curricular school subject. Finally, the third approach focuses on using missions as opportunities to develop students’ study, research and transversal skills. Our analyses also shed light on how the mission’s learning outcomes could be assessed identifying tools and assessment criteria.

As part of conclusions of this research study we identify directions for further research especially regarding how in practical terms school can introduce organisational changes to become driver of change in community. Deeper understanding processes teachers’ becoming agentic teachers is needed to adequately support them in the transition. As it comes to OS mission assessment and integration, we suggest that the practical tools should be now designed and tested in the school realities.

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ANNEXES

STUDENTS SURVEY (PRE AND POST)

Schools as Drivers of Change - Students Survey

INTEREST AND MOTIVATION TO BE A CHANGE AGENT IN THE COMMUNITY

[Questions 1-6 are skipped; they referred to demographical data.]

7. What is important to you in life? Name at least three things. *
8. Is there something in your community you would like to change? *
9. How important is it for you to be able to have impact on the things that are part of your life? *
10. I consider issues of my school as important to me personally. *
11. I consider issues of my local community as important to me personally. *
12. I feel responsible about what and how is going on in my community. *
13. I want to be able to influence on things in my community, in my environment. *

INTEREST AND MOTIVATION - COMMITMENT TO GET INVOLVED, TO BE AN AGENT OF CHANGE IN COMMUNITY

14. I value opportunities that allow me to contribute to my community. *
15. I give time to make a difference to someone else. *
16. I am willing to act for the rights of others *
17. I am willing to devote time and energy to things that are important to me. *
18. I am committed to finding solutions to societal problems. *
19. I have courage to challenge how things are in my local community. *
20. I have courage to challenge how things are in my school. *

PARTICIPATION AND TENDENCY TO PARTICIPATE IN COMMUNITY ISSUES

21. Have you ever been absent from school because you have been active in your community i.e., demonstration? If your answer is 'no', the survey will take you directly to question 23. *
23. I seek the opportunities to influence things in my community. *
24. My school provides me with opportunities to influence changes in my community. *
25. I have participated in activities with aim to influence my community. *
26. I participate in activities that contribute to the common good. *
27. I have participated in decision-making in my community. *
28. When I participate in community activities it must be about matters that are important to me personally, that I care about. *
29. I participate in Schools as Drivers of Change because ... *

I want to be a change agent and do good for my community

I did not have a choice the teacher chose me for participation

I don't know why I participate in this project

COLLABORATION

30. I believe that better outcomes result when many people work together. *

31. Working in groups tries my patience*. *

32. I enjoy working with others towards common goals. *

33. I am seen as someone who works well with others. *

34. I can make a difference when I work with others on a task. *

35. My contributions are recognized by others in the group(s) I work with. *

36. I work with others to make my communities better places. *

COLLABORATION - COLLABORATING WITH PURPOSE

37. I work well when I know the collective values of a group. *

38. I belong to groups with which I do not have much in common*. *

39. It is important to me that my collaboration aims at doing something good and important to me and/or my community. *

COLLABORATION - CONTROVERSY WITH CIVILITY

40. Hearing differences of opinions enriches my thinking. *

41. When there is a conflict between two people, one will win and the other will lose*. *

SELF-EFFICACY

42. I am confident I can have impact on the things that are part of my community. *

43. I am confident I can have an impact on things around me at school i.e., common rules or optional subjects.
*

44. I know the ways and channels I could use to influence changes in my community. *

45. I believe I have knowledge and understanding of societal issues that are necessary to influence a change in my community. *

46. I believe I have the necessary skills to influence things in my community. *

47. My school provides me with skills and knowledge I can use to influence change my community. *

SELF-EFFICACY - MY SPECIFIC AGENTIC SKILLS (1)

48. I believe I can come up with innovative solutions and improvements to influence my community. *

49. I believe I can come up with solutions or improvements in my community and school that take into consideration the needs of others. *

50. I believe I can look at issues in my community and school from the perspective of others (not only my own perspective). *

51. I believe I know how to use social media to influence things in my society. *

52. I actively listen to what others have to say. *

- 53. I communicate ideas clearly, concisely, and precisely both orally and in writing. *
- 54. I can bring different perspectives together to make a decision or initiate action. *
- 55. I reflect on my thoughts, feelings and behaviour. I constantly learn about myself and the world around me.*
- 56. I carefully observe what is happening around me at school and in the community to understand it well. *
- 57. I can identify issues that need 'intervention' in my communities. *
- 58. I recognize the global dimension of what I can observe in my local community. *
- 59. I can set clear and realistic goals for my tasks and actions. *
- 60. I am confident I can express my opinions publicly. *
- 61. I feel comfortable taking part in discussions. *
- 62. I am not feeling comfortable taking part in discussions, but I have other skills I use in activities that aim at improving my society. (i.e., drawing, writing, playing an instrument, doing handicraft, baking etc.). *
- 63. I am easily discouraged from pursuing my goal when I face challenges*. *
- 64. I find it difficult to follow through on team tasks. *

SELF-EFFICACY - MY CHANGE AGENT CHARACTERISTICS

- 65. Which of the statements below characterize you best? *
- a. I can recover quickly after something unpleasant, unsuccessful happens to me. *
- b. I am hopeful and confident about the future, and I try to look for positive aspects of people and situations. *
- c. I can be described as a person who never gives up and never stops trying. *
- 65. Which of the statements below characterize you best?
- 65. Which of the statements below characterize you best?
- d. I am willing to work hard and give my time and energy to a task. *
- e. I am able to show strong enthusiasm for something in which I really believe or something that is very important to me. *
- f. I am able to wait for results and outcomes of my actions. *
- g. I understand and can manage my emotions in positive ways, for example I can relieve stress, communicate effectively, empathize with others, diffuse conflicts, overcome challenges. *
- 65. Which of the statements below characterize you best?
- 65. Which of the statements below characterize you best?
- h. I can confidently express my opinions, even if they differ from opinions of others. *
- i. I am confident I can persuade other people into ideas, actions etc. *
- j. I can understand how other person is feeling because I can imagine how it may feel to be the other person.
- k. I am true to myself and to others. *
- l. I act according to the principles about what is right or wrong *
- m. I know myself. I recognize and acknowledge my thoughts and feelings. *
- n. I like asking questions and learn about things and phenomena that interest me. *

ATTITUDE TO CHANGE

- 66. I am open to new ideas. *
- 67. I can identify the differences between positive and negative change. *
- 68. There is energy in doing something a new way. *
- 69. I am comfortable initiating new ways to do something. *
- 70. Change makes me uncomfortable. * *
- 71. New ways of doing things frustrate me. *
- 72. I believe I can say when a change in my community is needed. *
- 73. How much do you agree with the following continuations of the statement:

RELATIONAL ASPECTS OF AGENCY - TEACHER'S ROLE

The teachers working on implementing OSS missions with us... *

- a. Allow us to choose how to implement the tasks that they give us to do. *
- b. Let us work in groups on the solution to the tasks. *
- c. They are fully in charge of the group and do not allow our initiative*. *

The teachers working on implementing OSS missions with us... *

- d. They give us ready solutions, and we learn by repeating those solutions*. *
- e. We know we can ask the teachers' support when we need it. *
- f. They believe we are capable of doing the work influencing our society. *

73. How much do you agree with the following continuations of the statement: The teachers working on implementing OSS missions with us... *

- g. They encourage us to express opinions and give comments. *
- h. They are interested in our opinions and feedback. *
- i. They inspire us to get involved in activities in our school and local community. *

RELATIONAL ASPECTS OF AGENCY - PEERS

74. How much do you agree with the following statements? *

- a. I can help others with whom I work on a community activity. *
- b. I can utilize help of others when working on a task. *

74. How much do you agree with the following statements? *

75. How much do you agree with the following continuations of the statement:

- c. I can ask for help when I need it. *
- d. I can inspire others to get involved in activities. *
- e. I can be a leader or a follower, depending on situation. *

The teachers teaching us school subjects ... *

- a. Allow us to choose how to implement the tasks that they give us to do. *

75. How much do you agree with the following continuations of the statement:

The teachers teaching us school subjects ...

- b. Let us work in groups on the solution to the tasks. *
- c. They are fully in charge of the group and do not allow our initiative*. *
- d. They give us ready solutions, and we learn by repeating those solutions. *
- e. We know we can ask the teachers' support when we need it. *
- f. They believe we are capable of doing the work influencing our society. *

75. How much do you agree with the following continuations of the statement:

The teachers teaching us school subjects ... *

- g. They encourage us to express opinions and give comments. *
- h. They are interested in our opinions and feedback. *
- i. They inspire us to get involved in activities in our school and local community. *

6.2. RELATIONAL ASPECTS OF AGENCY - EXTERNAL RESOURCES

76. I can identify and use external resources (i.e., a local organization, local municipal office, private company) in a society to help me make a change in my community. *

SCHOOL ADMINISTRATION SURVEY

[Questions 1-6 are skipped; they referred to demographical data.]

- 7. Describe briefly your first round of mission in the Schools as Drivers of Change project. *
- 8. What were the mission's key objectives? *
- 9. What were the mission's main activities? *
- 10. How was science reflected/ included in the mission? *
- 11. What went well in the mission implementation and what could have been done better? *
- 12. What were the challenges you encountered while implementing the mission?
- 13. How did you address these challenges? *

SCHOOL COLLABORATION WITH THE COMMUNITY PARTNERS/ STAKEHOLDERS

- 14. How did you collaborate with the community partners in the mission implementation? *
- 15. How many partners did you collaborate with?
- 16. What type of community partners did you collaborate with? *
- 17. What was the role of the community partners in the mission? *
- 18. How often do you collaborate with community partners (besides the SaDoC project)? *

19. What was the community partner(s)' contribution to the development of the students' agentic skills and their agent of change attitudes?
20. What were the challenges in the collaboration with the community stakeholders?
21. What went well and what could have been done better in the school's collaboration with the community stakeholders?
22. In what way(s) did the mission's implementation support the development of the students' agentic skills and the development of the agent of change attitudes?
23. What were the key agentic skills the mission helped to develop? Name at least three.
24. How can/ does the school support the development of the students' agentic skills and the agent of change attitudes besides the implementation of the SaDoC project? Give at least two examples.
25. How can/does the school support the teachers in their task to develop the students' agentic skills and the agent of change attitudes besides the implementation of the SaDoC project? Give at least two examples.
26. How can/ do the teachers support the development of students' agentic skills and shape their change agent's attitudes besides the SaDoC project? Give at least two examples?
27. What does it mean to you that a school is a driver/agent of change?
28. Give at least three main characteristic of a school that is a driver of change.
29. To what extent your school is already a driver of change? Rate from 1 to 5, where 1 means the school is not at all a driver of change and 5 means the school is already a driver of change.
30. What can/ should your school do to develop its capacity as a driver of change in the community?
31. How do you evaluate the community partner(s)' role in supporting the school and the teachers in becoming drivers of change?
32. How can the school use the collaboration with the community partners to strengthen its (the school's) capacity as a driver of change in the community? Give at least two examples



SCHOOLS AS DRIVERS OF CHANGE

Building Young Students' 21st Century Capacity through School-driven
Community Change Actions

Knowledge and Quality Assurance Partners



Practice Partners (Schools)



Pasvalio Levens School



Platon School



Don Orione School



UNIVERSITY OF
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