

FINAL REPORT - *version 2023-10-16*

FINAL REPORT - version 2023-10-16	1
2. Project Summary	4
Background: Why did you apply for this project?	4
Objectives: What did you want to achieve by implementing the project?	4
Implementation: What activities did you implement?	5
Results: What concrete outputs and other results did your project produce?	5
2.2. Associated Partners	6
3. Description of the Project	8
Please provide a summary of your project's concrete results and achievements. Were all original objectives of the project met? Please comment on any objectives initially pursued but not achieved and describe any achievements exceeding the initial expectations.	8
In what way was the project innovative and/or complementary to other projects already carried out?	9
What was the most relevant horizontal or sectoral priority addressed by your project?	10
What were the other relevant horizontal or sectoral priorities addressed by your project? (Multiple selection possible)	11
In case the above selected priorities are different from the ones in the application, please explain why.	11
3.1. Participants	12
Participants with fewer opportunities: did your project involve participants facing situations that make their participation more difficult?	13
Approximately, how many persons not receiving a specific grant benefited from or were targeted by the activities organised by the project (e.g. members of the local community, young people, experts, policy makers, and other relevant stakeholders)? Please enter the number of persons here:	14
Please describe briefly how and in which activities these persons were involved	14
4. Project Management	16
How did you ensure proper budget control and time management in your project?	16
Monitoring: How were the progress, quality and achievement of project activities monitored? Please describe the qualitative and quantitative indicators you used. Please give information about the involved staff, as well as the timing and frequency of the monitoring activities.	16
Evaluation: How did you evaluate to which extent the project reached its results and objectives? What indicators did you use to measure the quality of the project's results? 17	
If relevant, please describe any difficulties you have encountered in managing the implementation of the project and how you and your partners handled them. How did you handle project risks (e.g. conflict resolution processes, unforeseen events, etc.)?	19
5. Implementation	21
Please describe the methodology you applied in your project.	23
How did the project partners contribute to the project? Please detail specific contributions made by the partner organisations.	24
How did you communicate and cooperate with your partners? What are the positive and negative elements of the cooperation process? What would you improve if you were to carry out a similar project in the future?	26

What target groups were addressed in your activities plan? Were the target groups changed in comparison to the ones identified in the application form?	27
5.1. Transnational Project Meetings	27
Transnational project meeting 1	27
Transnational project meeting 2	30
Transnational project meeting 3	31
Transnational Project Meeting 4	33
Transnational Project Meeting 5	34
Transnational Project Meeting 6	35
5.2. Intellectual Outputs	36
Output Identification O1	36
Video film teaching and learning with storyline	36
Output Identification O2	38
Four academic articles	38
Output Identification O3	40
Website educational resource bank	40
Output Identification O8	42
Interdisciplinary learning – Evaluation tool	
Output Type Methodologies / guidelines – Evaluation method and tool	42
5.3. Multiplier Events	44
International Storyline Conference	44
A dissemination conference	46
5.4. Learning/Teaching/Training Activities	47
5.5. Participants in Learning/Teaching/Training Activities	52
5.5.1. Participants' Profile	52
5.5.2. Participants' Recognition	53
6. Follow-up	54
6.1. Impact	54
6.1.1 Impact of the project at the local, regional, European and/or international levels? Please provide qualitative and quantitative indicators.	56
6.1.2. How did the project contribute to the achievement of the most relevant priorities as indicated in the description section?	58
6.2. Dissemination and Use of Project Results	60
6.2.3. How have you ensured that the project's results will remain available and be used by others?	64
6.2.4. How did you see the potential to use this project's approach in other projects on a larger scale and/or in a different field or area?	65
6.3. Sustainability	66
What are the activities and results that will be maintained after the end of the EU funding, and how will you ensure the resources needed to sustain them?	66
7. Project Summary - (5000) not in Mobility Tool	67

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Final Report Submission Deadline 29/10/2023



The screenshot shows the top navigation bar of the website, which is blue with white text. It includes the Erasmus+ logo, a 'Start' button, and dropdown menus for 'The Big Picture', 'Resources', 'Storyline', and 'The Project'. A search icon is also present. Below the navigation bar is a large image of four children running happily in a school hallway, with the Erasmus+ logo overlaid on the right. Underneath the image is the title 'Education for resilience and sustainability' in bold. A paragraph of text follows, explaining that the website is a resource bank for teachers. Below this are two smaller images: one of a colorful drawing and one of three people in a meeting. Each image has a caption and a date: 'Documentation of Storyline conference 25 - 27 March 2022' and 'Multiplier event 23 March 2023'. A final paragraph of text is at the bottom, providing a disclaimer from the European Commission.

Co-funded by the Erasmus+ Programme of the European Union

Start The Big Picture Resources Storyline The Project Search



Erasmus+

Education for resilience and sustainability

This website is part of the Erasmus+ project *Education for resilience and sustainability* and will serve as a resource bank for teachers who want to use Storyline to work with resilience and sustainability. On the website we have published results from the project as well as inspirational material and resources that teachers can use.



Documentation of
Storyline conference 25 - 27 March 2022



Multiplier event 23 March 2023

In this project we have had two big multiplier events open for anyone interested in the project. The first multiplier event was an *International Storyline Conference* in Gothenburg the 26-27 of March 2022 and the second one was a one day conference in *Gothenburg* 23 March 2023.

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<https://storyline.education/>

2. Project Summary

Background: Why did you apply for this project?

What were the needs you have addressed?

This project was initiated by Backatorpsskolan, Gothenburg, as a response to the demands of Agenda 2030, goal 4.7: Education for sustainable development and global citizenship, which was regarded as a considerable challenge. A need for both an international exchange of pedagogical perspectives and for research to analyse the developing efforts we wanted to implement were recognised as vital.

One aim was to address today's sustainability challenges and how education can meet the new generations' call for action. The participant partners believe that we need to go from instructing students in predictable directions to developing their agency, by developing new strategies for sustainable education, based on a holistic approach.

We wanted to develop teaching and learning methods that empower students and enhance qualitative pedagogical methods by using the student-active and interdisciplinary Storyline approach as a framework. We sought to create stories that inspire students as well as teachers, to view themselves as agents of change to be better prepared for an uncertain future. The underlying aim was to develop the pedagogical approach of Storyline itself, foremost as a pedagogical tool to increase learning for sustainability.

Objectives: What did you want to achieve by implementing the project?

We expected an enhanced understanding of how to use Storyline in the twenty-first century, in relation to education for sustainable development, thus, to provide new knowledge about the potentials of the approach. We expected that the project would have an impact on students, teachers, teacher educators and the research community, both on a practical classroom level by developing and testing pedagogical tools for teaching and learning about sustainability – and on an intrinsic level while supporting a sense of agency, and developing competency to act towards sustainability, amongst students, student teachers, teachers, and researchers. We also wanted to have an enhanced understanding of the pedagogical approach on a theoretical level amongst scholars in the educational field.

In short, we wanted to reach out to, and forge a partnership between, both practitioners who work in schools and want to implement new pedagogical tools regarding issues of sustainability, and researchers, who want to develop associated theoretical perspectives.

Implementation: What activities did you implement?

To achieve the project aims, we implemented several activities. In addition to our on-line project meetings, we arranged for six physical meetings with teachers and researchers, from outside as well as within the participating organisations. The participating organisations hosted these 3 days long activities, which all integrated various activities, such as school-visits, workshops and panel discussions. They provided a platform for in-depth discussions, for sharing experiences, and exchanging best practices related to the implementation of the Storyline approach and its potential to address sustainability topics. Hence, opportunities and constraints could be identified and discussed. It was also a way to build networks and to connect with peers internationally.

We hosted two international conferences, when the involved schools presented their work and outcomes, and the researchers disseminated the research results. Participants were invited to workshops and school visits.

Due to the withdrawal of Iceland, and thus financial changes, the project plan was revised, and activities rearranged. Changes were also made due to Covid19, and in relation to the initial comments of the project description in the application.

Results: What concrete outputs and other results did your project produce?

We followed the plan but created more material than first planned. We have produced seven films about the Storyline work in the participating schools, in teacher education, and about research results. Three academic papers and nine short articles are published, and two academic articles are under review. Lectures from the Multiplier Events are published. A tool for planning and evaluation, based on GreenComp from EU, is under construction, and available on the website. All concrete outputs are published in the Educational Resource Bank.

Other results are the emotional work evoked by a project that deals with difficult topics such as resilience and sustainability. We have seen the importance of visualising worries, anxiety, and emotions and found that teachers need to start with their own uncertainties to be better equipped to integrate emotions in teaching. Then, we deliberately worked with emotions when implementing the Storyline when the pupils, through the characters, discussed anxiety, worries, and personal emotions. In this work, we have focused on strengthening the students' sense of agency. The ability to act in a fictive situation may make them see that they can act in similar situations in real life.

2.2. Associated Partners

In addition to the above formally participating organisations, did you involve associated partners in your project?

Yes

No

Please explain the involvement of those organisations and how they contributed to the achievement of the project objectives.

The associated partners of the International Storyline Leadership team contributed to the achievement of the project objectives in many ways. For example their expertise has been used for quality assessment when developing the success criteria for the intellectual output, specifically the web page and the Storyline templates. They have also been very helpful in disseminating the project information to their international partners, both inside and outside the European union.

Carol Omand and Sallie Harkness, both Storyline Scotland, together with Jeff Creswell from Portland, have all taken an active role in the planning of the ME 2022 event and the promotion of it. All three have been speakers at the conference, for example Carol Omand talked about *Storyline, Sustainability, Resilience and Hope* and Sallie Harkness talked about *Storyline, Past, Present, Future*.

Hjortsberg school is a Norwegian elementary school with 25 classes. The school has an active partnership with the teaching college at Østfold College University. Their focus areas complement the aims of this project. For example, the school uses alternative teaching areas such as the forest and stream that surround the school; the school is interested in developing alternative teaching practices that incorporate an interdisciplinary approach to subject research and development; the school has supported teachers participating in Storyline workshops at the university college; the school focuses on creating learning environments that focus on the well-being of the students, reflecting a holistic approach to teaching and learning.

The principal of Hjortsberg school and three teachers actively participated in two key activities of the project. First, there was a meeting between the leadership teams of Hjortsberg and Backatorpsskolan, where the principal shared challenges related to interdisciplinary working in teaching sustainability. This meeting provided an opportunity for collaborative discussions and the exchange of experiences between the two schools.

Secondly, the principal and teachers made a school visit to Backatorpsskolan and joined the final event of the project. During this event, they further deepened their understanding of teaching sustainability and the Storyline approach through workshops and discussions. Their active participation contributed to the collective knowledge and enriched the overall learning experience.

Through their involvement in these activities, the principal and teachers demonstrated their commitment to enhancing their pedagogical practices in teaching sustainability and their willingness to embrace innovative approaches. Their engagement in the project provided valuable insights into the challenges faced when integrating interdisciplinary methods and highlighted their dedication to preparing students for a sustainable future.

Sharon Ahlquist, senior lecturer in TESOL and Applied Linguistics at Kristianstad University in Sweden, should have been an active associate partner, according to our plan, but for several reasons, she didn't take part at all. She will, though, spread the project's results in her networks going forward. Sharon is a regular presenter at national and international conferences on the teaching of English as a foreign language using the Storyline approach. Over the last six years, Sharon has conducted Erasmus workshops with student teachers at the University of Zagreb and in-service training for language teachers in connection with the changes in the Croatian national curriculum.

Sallie Harkness joined the Jordanhill Staff Tutor Team in Scotland in 1970 and took part in the early development of Storyline. She has among other things been a Trainer and Author of books about Storyline. She is a founding member of the International Storyline leadership team and following early retirement from Jordanhill College of Education has continued as an active member of Storyline International.

Carol Omand is an International Storyline Consultant, Trainer, Author of two books about Storyline and Chair of Storyline International. She has over 40 years' experience in education from nursery to upper primary school and lecturing for Teacher Education. During the course of the project Carol has worked with Østfold University College, Norway, Backatorpsskolan, Sweden. Carol has also contributed materials.

Jeff Creswell is an experienced classroom teacher and staff developer working with the Storyline approach in the US and Europe since 1989. He is an author of a Storyline book and until 2022 Chair of Storyline International.

3. Description of the Project

Please provide a summary of your project's concrete results and achievements. Were all original objectives of the project met? Please comment on any objectives initially pursued but not achieved and describe any achievements exceeding the initial expectations.

The project aimed at addressing the challenges we face today, in relation to various issues of sustainability and the challenges of how education can meet the new generations' call for action as demonstrated by the massive school walkouts in 2019-2020. This has been done in several ways during our meetings, conferences, publications, and different activities.

One objective for the initiative was to find collaborating partners, nationally as well as internationally. Another was grounded in a need for classroom-based research, regarding education for sustainable development and teachers' pedagogical approaches. Both these objectives have been fulfilled by the project.

Another objective has been to use the student-active Storyline approach as a framework for learning and teaching, and thereby to enhance qualitative learning opportunities regarding sustainability. Hence, one underlying aim has been to develop the pedagogical approach of Storyline itself, as a pedagogical tool to increase learning for sustainability. The latter has been implemented and developed in the three participating schools in Sweden, Finland, and Slovenia, and at the teacher education programmes at Østfold University College in Norway, and at the University of Gothenburg, Sweden. This has been refined over time during the project and through the new knowledge produced through the work, which has been shared and discussed at our different meetings. These meetings have been crucial for exchanging experiences, possibilities and obstacles. Both practitioners and researchers have been active in exchanging new understandings of what, how and why to integrate issues of sustainability in a Storyline-setting. The objective to find collaborative and proactive approaches has been achieved.

During the project we increasingly realised that a crucial element to engage participants is to include and work with emotions. We ourselves became quite emotional during our learning and teaching events, when we discussed the state of the world. In a Storyline the students create characters, through which they may encounter and handle even the most difficult emotions.

We find it fruitful to have included both schools and teacher education, which allowed for examining practices in different contexts and levels, which has enriched our discussions and perspectives. We have learnt from each other, which was one of our main purposes. We have tried to focus not only on doing things but also on learning things ourselves and not only teaching our students.

As our work, results and findings have been shared and discussed during the conferences and project meetings continuously, with other practitioners, researchers in pedagogy and education for sustainable development, and experts on Storyline, we have had great opportunities to develop and refine our work as it has been conducted. We are convinced that our experiences from classroom work and research results can be used in didactical discussions on all pedagogical levels and can be useful in developing future-oriented curricula.

One unique thing with this project has been the close collaboration between researchers and teachers in which both parties have gained knowledge and developed new ideas and findings. Student teachers have been involved in research together with researchers and teachers at school and this close collaboration has given new perspectives that would have been difficult to achieve if the different roles had not been working so closely together. It has also resulted in Backatorpsskolan employing one of the researchers as leader of studies in the school one day a week.

In order to find out in what ways we can give students, student teachers, and teachers competence to become agents of change that address sustainability and resilience, the project included transnational meetings for exchange of experience between different sectors and different nations. There has been a different focus linked to the project goals in every meeting. Everything from deeper discussions about challenges of sustainability and the development of a resilient society, educational shifts regarding issues, aesthetic and experiential learning, and the challenges and positive outcomes of interdisciplinary teaching and learning would be discussed while keeping the student as an active partner in the learning processes. The students at the Backatorpsskolan and student teachers at the university in the project were able to practise as active agents for change in their society. Every time we gather the participants of the project, the students have been involved and played an active part. These short-term effects have given the organisations of the project participants competence to become agents of change during the project timescale. Their experiences and reflections during the project have been shared in the project to collect experience for the development of best practices that address sustainability and resilience.

In what way was the project innovative and/or complementary to other projects already carried out?

The project has developed and disseminated innovative methods and promotes collaboration, mutual learning and exchange of experience in education and youth activities. To achieve our goals, we ensured a transnational and diverse perspective on sustainability issues. The project has resulted in educational changes and developments, both within the project, between our organisations and within the individual organisations. We have dealt with difficult issues that have challenged both the participating organisations and ourselves on a personal level. Throughout the project, we focused on strengthening collaborations and networks of participation locally and internationally. The research results elicited didactical discussions and contributed to the development of future-oriented curricula. The innovative practices developed in the project, aimed at awareness-raising regarding sustainability.

As this project has involved both practitioners and academics we have been able to bridge the gap between research and practice, which we consider as the strength of this project. The project's peer-productive activities are maybe not unique, but the outcomes show some new and innovative ideas. For example, theories and practice have been intertwined during the project. Theories have been challenged by results from classroom work, and classroom work has been questioned through theoretical perspectives. A revision of the tried, tested and researched method, that is open to different learning environments, challenges the classroom as the sole arena for learning in school and challenges the traditional role of the teacher and student, has been carried out in this project

All educators around the world have access to resources in a way that lets education reach out to global society, makes interdisciplinary working possible and, most of all, sees the

student as an active partner in the learning process with the goal of boosting their sense of being competent, active agents for change in our society.

We have implemented theories of relational pedagogy to the Storyline approach, which we have not met before in previous research. Relational pedagogy has been developed through the analyses made by the researchers, and linked to learning theories and education for sustainable development in new innovative ways. This had not been possible without observing teachers in action and the teacher-student relation, and the outcome of the storylines conducted in the participating schools and universities. As a result, school staff at Backatorpsskolan have published an anthology, *Att undervisa i hållbar utveckling : relationellt perspektiv*, published by Studentlitteratur, together with the researcher at the University of Gothenburg. We brought together two realities and learnt much during that collaboration, for example finding a common language, making each other consider phenomena from different angles.

One researcher from Norway has used the knowledge and experiences from this project to supplement a different school development project called DEKOMP. The outcome resulted in the elementary school preparing and implementing a school-wide storyline project with sustainability as the theme. They will continue this work in the coming school year. Data has been collected and will be used for a future research article.

The assessment tool for changed action readiness, social skills and changed values that has been developed during the project can be used and developed by teachers anywhere. The assessment tool was developed during work with GreenComp, (the European sustainability competence framework), within the project. The tool can be used when working with the 12 competencies in Green Comp and is published at the resource bank. GreenComp provides a common ground to learners and guidance to educators, advancing a consensual definition of what sustainability as a competence entails. The project group, consider applying for other key Action in Erasmus + for further development.

The project has also been innovative in the way we addressed the difficulties in meeting during covid. We were forced to think outside the box and developed a “on-site with hubs and on-line attendance” that we think is quite unique. But it will definitely be a way that we want to attend conferences in future. If you can't all go to a conference you can set up a hub at home and attend the conference together even if you are not on-site. In this way you will still meet people in person, you can have discussions and workshops and still get access to the main key-note speakers and discuss with people from other countries without leaving your country. This way a whole school can attend a conference which otherwise would be too expensive. We all know that change is easier if more staff from the same school attend together with the headteacher. Since we are working with sustainability this way of thinking also made a lot of sense since less air-tickets will be bought.

What was the most relevant horizontal or sectoral priority addressed by your project?

NO TEXT ONLY LIST ALTERNATIVE

HORIZONTAL: Enviromental and climate goals

What were the other relevant horizontal or sectoral priorities addressed by your project? (Multiple selection possible)

NO TEXT ONLY LIST ALTERNATIVE

HORIZONTAL: Enviromental and climate goals

In case the above selected priorities are different from the ones in the application, please explain why.

In application we also had these two topics addressed by our project, and we have worked with them. We can't find them in the list above.

1. New innovative curricula/educational methods/development of training courses
2. Pedagogy and didactics

3.1. Participants

Please briefly describe how you selected and involved participants in the different activities of your project.

The selection and involvement of participants in the different activities was based on their interest or competence regarding the project's objectives and needs for education for resilience and sustainability. Some participants had special knowledge about sustainability, others had more experiences in cross-curricular teaching, learning approaches, and/or knowledge about the Storyline approach. The participants were chosen to ensure both similarities and differences, promoting effective actions and bringing together diverse perspectives.

For example, at the first learning, teaching, and training event C1, that had a focus on educational and social futures, climate change leadership we involved the following participants as speakers:

- Panu Pihkala, Ph.D. Adjunct Professor of Environmental Theology (Title of Docent), University of Helsinki, Finland, who talked about Eco-Anxiety and Environmental Education.
- Anne-Kathrin Peters, Associate Professor in technology education, with a focus on sustainability, KTH Sweden, talked about Educational and social futures, climate change leadership.
- Pella Thiel, from the Transition movement and End-ecocide Sweden talked about "On pain and participation, transformation and resilience in a living world".

We made these choices to shake us up a bit so we had a common understanding of the eagerness in dealing with these issues. We wanted people from outside to give us the bigger picture and research background but also the activist perspective and action-competence. During this first event we used these lectures as a starting point for discussions and Storyline workshops which proved to be very powerful. There were a lot of feelings and even tears in the room. We all came a lot closer to each other and were formed as a group that dared to rely on each other during the rest of the project by this event.

We also wanted to gather people with different backgrounds to share and discuss how we could develop Storyline so it really engaged our students. What is it in this approach that makes students engage? How can we strengthen these elements and develop them to engage even more students? If we succeed in this, how can we then spread and develop our ideas further?

Speakers at the multiplier event were therefore for example:

- Keri Facer, Professor of Education, Manchester Metropolitan University. She talked about Learning Futures.
- Leif Östman, Professor of Didactics at Uppsala University, Sweden., He talked about Education for sustainable development.
- Björg Eiríksdóttir, a teacher and leader of the Storyline Team at Karsnesskoli Iceland talked about Children in our world.
- Jan Zuckerman, educator in Portland, talked about Connecting Children to Forest Ecology

The target group to participate at all events were all educational professionals and all those interested in the field of learning and teaching (researchers, university students, teachers, head teachers).

Overall, the project brought together a diverse group of participants who contributed their unique perspectives, knowledge, and experiences to achieve the project's objectives in promoting sustainability education through the Storyline approach.

Participants with fewer opportunities: did your project involve participants facing situations that make their participation more difficult?

How many participants (out of the total number) would fall into this category? 10

The selected type of situations these participants faced were regulations due to Covid not health problems.

The Covid-19 pandemic had a significant impact on international travel. Travel restrictions, lockdown measures, and health concerns made it challenging to conduct physical meetings and attend international events.

The Slovenian partners could take part on-site twice and the rest of the meetings we solved with them attending on-line. There have also been fewer participants in the project from Slovenia due to change in personnel.

Furthermore, the pandemic prompted project participants to reflect on the importance of travel and sustainability. Recognising the environmental impact of frequent international travel, the project team made the decision during the project to minimise physical meetings and adapt to virtual communication whenever possible. This strategic approach aligned with the project's focus on sustainability and served as a practical demonstration of the principles being promoted. This was possible because we all had met. If during the whole project we had only met on-line it would not have worked as well as it did. But we all met in person and worked deliberately to get to know each other so we could then meet and work on-line.

By using online platforms for meetings and conferences, the project participants were able to reduce their carbon footprint and contribute to a more sustainable approach to international collaboration. This decision showcased the project's commitment to environmental responsibility and provided an opportunity for participants to explore alternative ways of working that prioritise sustainability.

At Østfold University College, Covid lockdown made it difficult for the project participants to implement and collect the data for the project as planned. To meet this challenge, the researchers created an online version of the Storyline that included over 60 student teachers and 9 teacher educators. The online version opened for several "drop-in" participants outside of what was planned. The project received visits from the head of the faculty, several institute leaders, and outside teachers from the local areas. Data from this implementation has been gathered for future research.

Approximately, how many persons not receiving a specific grant benefited from or were targeted by the activities organised by the project (e.g. members of the local community, young people, experts, policy makers, and other relevant stakeholders)? Please enter the number of persons here:

1000

Please describe briefly how and in which activities these persons were involved

Approximately up to a thousand people distributed on:

75 - Østfold University College, Norway

600 - The University of Gothenburg, Sweden

40 - Vittra Rösjötorp International School, Sweden

10 - The University of Thessaly, Greece

Students and their parents in the classes in Sweden, Finland and Slovenia

Norway

Additional Storyline workshops were held with two high schools, one junior high, and one grade school - all focusing on Sustainability (approximately 50 teachers all together). In addition, a project participant has used the knowledge and experience from the project to support a school development at a nearby elementary school. These participants have been involved with discussions on Storyline as an approach and Sustainability as the content framework. Interested participants outside of the project were invited to the teaching and learning event in Halden, with a total of 3 teacher educators and 2 teachers participating in the workshops. Finally, the Storyline approach and the topic of Sustainability were practised at the University with 58 student teachers. The student teachers who participated in the teacher education Storyline also participated in the films produced on campus.

Sweden

The project also meant that ordinary teaching routines have changed and developed. For example, student teachers at the University of Gothenburg meet the Storyline approach during their first semester. When our project started, the content of this Storyline now includes issues of sustainability. That means that about 100-120 new students each semester since 2021 have been working with this developed Storyline and are presented with what sustainable development means much earlier than before. It means that they are more prepared when they meet education for sustainable development later in their training. It also means that the university teachers, who conduct this Storyline, have had to enhance their knowledge about the subject and how to instruct students.

The researchers have been invited to talk about the work outside their own universities, which in turn means that other students learn from the project. For example, the researcher at the University of Gothenburg was invited by Globala Skolan, to hold a lecture at Högskolan Väst, with approximately 50 students.

Vittra Rösjötorp International School have participated in many activities during the project. For example principal Lea Colner attended online at the first LLT event and together with nine teachers she visited Backatorpsskolan and attended on site with more teachers at the Multiplier Event in March 2022. They also held a lecture at the Multiplier Event

Greece

The University of Thessaly in Greece participated in several activities such as the school visit at Backatorpsskolan and the ME event in March 2022 where seven participants participated.

All students at Backatorpsskolan in Sweden and their parents as well as the students in the classes in Finland and Slovenia have also been involved in the project. They have all met and been involved in the Storyline work.

4. Project Management

How did you ensure proper budget control and time management in your project?

The budget control has been administered by a budget officer at the coordinating partner organisation. The budget officer has been responsible for the cash flow between the national agency, coordinating organisation, and partner organisations. All partners in the project have ensured their own budget control.

All partner organisations have ensured that the agreed deadlines for reports were met, they kept a good record of their financial flow, attended all meetings and did their best for the project to be successful.

Initially, the members of the project agreed in detail administrative and managerial issues and project plan, time-schedule, communication plan, implementation and dissemination plan. The evaluation strategy also helped the project to ensure proper budget control and time management.

Monitoring: How were the progress, quality and achievement of project activities monitored? Please describe the qualitative and quantitative indicators you used. Please give information about the involved staff, as well as the timing and frequency of the monitoring activities.

The project group decided to share different tasks during the various events, which means that all participants have cooperated and been responsible to ensure good quality, dovetailing between the participants' abilities, and to link the events together. This was not clear from the beginning. As the project was proceeding, adjustments were made to improve the outcome, and to develop the project in this way. This is natural in any process, and we went through different social and learning phases, which meant that we had to make adjustments during the process.

The evaluation strategy was discussed during the first transnational meeting. It was approved by all partners and updated regularly. All project partners were well aware of the crucial importance of quality management since they all have experience of other projects.

The project group identified procedures, outputs, criteria and tools for evaluation of project processes and products. We also managed risk, issue, and change management. The actions ensured that the project adhered to the scheduled workplan and budget. Internal evaluation was ongoing throughout project lifespan, both internally and externally.

Project processes (including management, communication, cooperation among partners, methodology and learning materials) was for example evaluated in connection with the work by interim reports.

The evaluation processes were both formative and summative. Formative evaluation was ongoing throughout the project duration to ensure that necessary revisions or improvements to the project's methodologies, products, and outcomes were identified in good time. Summative evaluation was used at the end of every semester and end of the project. It has been the basis for the project continuation and sustainability.

To evaluate the quality of working dynamics among partners, thus also offering an ongoing stimulus for quality teamwork and cooperation, the coordinator:

- Issued and distributed a meeting evaluation questionnaire asking each participant to assess the quality of the work done during transnational project meetings.
- Issued and distributed to partners a working phase evaluation questionnaire to assess the quality of the consortium dynamics during at a distance working phases.
- Produced 2 interim evaluation reports including findings from both evaluation and activities.
- Produced this final evaluation report upon project conclusion.

The ongoing research in the project had a function as an objective and summative assessment of the impact on different aspects. The research results have been reviewed in a peer review process in order to be published as academic [JM5] [EM6] [EM7] articles. During the Multiplier events the results have been presented to a large international public of researchers, teachers and teacher educators.

Parallel to all this qualitative assessment, quantitative data is collected throughout the project. We follow up e.g.

- participants in all events (number of participants, their working background.)
- number of students and school classes engaged
- visitors to the website educational resource bank
- video-films viewed

A variety of both qualitative and quantitative data collection techniques was employed to gather information. The analysis of these data informed the revision of the project's methodological frameworks, instructional and curricular materials, and other intellectual outputs. The evaluation strategy was based on the set of indicators described in the following section.

Evaluation: How did you evaluate to which extent the project reached its results and objectives? What indicators did you use to measure the quality of the project's results?

We made sure that the evaluation 1) involved all project participants, 2) became a continuous process along the project, and 3) was built on the participants' defined questions.

The aim here was to learn both from what has worked well and things that have not. This continuous work helped us to check the progress of the project, to identify strengths and weaknesses and to establish the basis for future planning. The project evaluation took a series of steps to identify and measure outcomes and impacts resulting from the project.

Indicators of outcomes were, for example, improved knowledge of how to teach issues of sustainability, increased understanding of how young students learn about sustainability issues and become active agents, proactive participation in decision making (both teachers and students) and new competencies obtained by teachers and students. Indicators of impacts were, for example, enhanced subject goal compliance, decreased student failure, higher number of students, student teachers, teachers and researchers taking part in issues of sustainability in society.

We have used a four-step evaluation approach:

Step 1. Reviewing the situation - Starts with questioning our aims:

What problems/issues are we trying to solve? What needs to be changed if the problem is to be solved? What can be done through the project to solve the problem? What actions do we need to take? How can we know if we have achieved the short- or long-term goals? What indicators do we have to be looking for to know if we are on the right track?

Step 2. Gathering of evidence - Here, we aimed to look for evidence that shows whether or not we are reaching our short- or long-term goals.

Who has benefited or not from the project actions?

We collected participants' experiences, opinions, and views on the progress of the project and on different actions. This was conducted through questionnaires, in-depth interviews and focus groups.

Step 3. Analysing the evidence - The information gathered from step 2 needed to be analysed. Useful questions were:

In what way did the information tell us that we reached our goals or not? What was highlighted? Were there any unexpected outcomes?

Step 4. Using and sharing our knowledge - Did the information shed light on objectives that we might have missed or goals that we have not achieved? Which explanations could help us to understand our shortcomings? Examples could be due to resources, external circumstances, changes in the planning etcetera. Sharing the evaluation with critical friends helped us to recognise aspects that we miss, to learn from our mistakes or to pick up ideas. Writing a report on the evaluation exercise was one way of sharing.

The project was responsible for continuous monitoring of the work on the assignment. An evaluation was conducted in April each year. The follow-up results and the evaluation results form the basis for the final reporting.

The tools for the assessment have varied during the project, depending on e.g. the situational target group, the time in the project process, the focus area e.g. practical issues and theoretical reflections. Ongoing assessment with mixed methods has been implemented through the whole project period. For example, oral evaluations in groups, individually written evaluations and interviews with students and teachers. Using video and audio recording, we have captured students' experiences, thoughts, and opinions about Storyline and its

components, and about sustainability issues. Observation notes have been analysed through theoretical lenses. Formative assessment has been conducted before, during and after Storyline projects in the schools and after every learning and teaching event, in relation to the event's goal. In line with the goals for the project we have assessed the implications of 1.) Storyline as a teaching and learning approach in the 21st century and 2.) Storyline in relation to sustainability and resilience.

This project has given us opportunities to assess students', student teachers', and teachers' perceptions about the key elements in the approach, and to observe the activities of the different Storylines included in the project. Special focus has been on participants' perceptions about the Storyline's impact on and adaptation to collaborative learning, digitalisation, multimodal aspects, and evaluation of interdisciplinary projects, not the least the implementation of sustainability issues. Concrete assessment tools used during the project were:

- Mind maps and concept maps
- Exit tickets
- Digital questionnaires
- Group interviews and individual interviews
- Video recordings
- Audio recordings
- Observations
- Diaries and project logs

If relevant, please describe any difficulties you have encountered in managing the implementation of the project and how you and your partners handled them. How did you handle project risks (e.g. conflict resolution processes, unforeseen events, etc.)?

In the beginning the project group took time for discussion about expectations and fears. We especially communicated the content of the project plan once it was created. This gave the group opportunities to review and approve the project plan and to execute and control the project plan and different roles/responsibilities in the upcoming phases. The regular online meetings and the project helped all members in the project partners/group to understand the cost, scope, and timeframe of the project. The project manager at the coordinator organisation, has taken on the task to regularly meet with every partner organisation to follow up the work and see if more or less time is needed. This has been a transparent process with the budget shared for everyone to see. We have managed to put the interests of the project ahead of personal interests. Regular meetings with everyone together with individual meetings with the coordinator have helped us all to manage the project with probity.

The partnership agreement which is stipulated by the coordinator and each partner defined the procedures for conflict resolution and was good to have during the process. The main action to avoid misunderstandings, stress, and conflicts is the transparent sharing of information which has been achieved according to plan.

All partners have had the possibility to influence decision-making. The main decisions have been made during project meetings. Minutes have been circulated and made available in the project communication platform along with the rest of the project documentation. A clear

agreement on sharing workload and responsibilities by contract, activity plan, and time-schedule have been other methods that have minimised potential conflict risks. A proactive approach was planned to be adopted in case of conflict which anticipated the activation of a conflict resolution process structured in several stages: identification of the conflict source, initiation of a collective discussion paying attention to different perspectives and viewpoints, identification of a shared solution and the achievement of an agreement for its application. We did not, however, make use of this conflict plan since no conflict occurred to that degree.

Here are some of the challenges we faced and the strategies we employed to address them:

- Minor adjustments regarding the distribution of tasks have been made since the application stage. The late start of the project, in December 2020, was a reason for the Icelandic school not to attend the project. The Icelandic school was scheduled to host a learning and teaching activity and be a part in filmmaking. Some of the planned content in the meeting in Iceland had to be moved to the meeting in Norway. The film from Iceland couldn't be produced. Instead, the project made another film with researchers included.

- Shift in leadership for the Østfold University College researchers. The new coordinator in Norway was new to project management and required time and experience to understand her role effectively. To address this, we provided support and guidance to the new coordinator. We also encouraged collaboration and knowledge sharing among the team members to ensure a smooth transition and continuity of the project.

- Health issues of participants from Østfold University College. The health of the participants posed a significant risk to the project, particularly with the outbreak of Covid-19. Six participants contracted the virus, and some even experienced multiple infections. Additionally, three of the four Norwegian researchers were on sick leave during the final year of the project. We facilitated open communication channels to discuss resource availability and re-distributed hours among the remaining team members.

- Covid made a lot of things more difficult. It never led to a conflict within the project but meant that we had to meet on-line more and on-site less. This has affected the outcome of the project as to data gathered and topics of the research needed to be modified to meet the challenges. We have been able to meet in person and when in person was not possible, we met online.

Overall, we handled these difficulties and project risks through effective communication, flexibility, and resource management. By maintaining open and transparent communication channels, providing support and training where needed, and adapting our plans to the evolving circumstances, we successfully navigated the challenges and ensured the project's continued progress and completion.

5. Implementation

This section asks for information about all the stages of the project: implementation of main activities including practical arrangements, participants' profile, impact, dissemination of the results and future plans; Please describe the project activities and expenses covered with the Project Management and Implementation grant. If the requested amount is different from the automatically calculated one based on the project duration, please explain why.

With the support of the grant requested for management and implementation, all partner organisations assured that the agreed deadlines for reports were met, they attended the online meetings and took part in the organisation of one transnational meeting and the local learning activities.

All partners have also delivered material to the final outcome, the educational resource bank, produced smaller products in the form of teaching and training materials, methods and dissemination materials (web information, brochures, etc.) according to the agreed deadlines.

The project has regular project meetings online, led by the coordinator.

Over 30 international online meetings have been completed, and several meetings in different planning teams. The project group had to deal with many practical changes; the majority due to Covid19. All organisations had to make some changes regarding the situation which then had to be discussed and decided on in the larger project group, which involved several national meetings and organisation meetings. However, NAV and Åbo Akademi made a detailed plan for an on site meeting in Turku, which had to be changed into a hybrid version. Storyline Sweden, University of Gothenburg and Backatorpsskolan made a detailed plan and invitation for the first on-site Multiplier Event in Gothenburg, which had to be changed into a hybrid version.

Schedule changes and moved activities are briefly outlined in the following.

- The first Learning and teaching activity, C1 Finland, was postponed to Autumn 2021, and then changed to a hybrid version, both in October and December.
- The first transnational project meeting on site was postponed to Autumn 2021. The place for the meeting then had to be changed to Stockholm.
- The second transnational project meeting on site in Sweden had to be changed to a hybrid version.
- The third transnational project meeting on site in Slovenia was postponed to Autumn 2022 and held as a hybrid in Finland.
- The three project meetings during 2023 became all hybrid. Some partners participated online and some on site at the meeting in Norway in January, Sweden in March, and finally in Sweden in May.

Some work with the Intellectual outputs has been postponed, due to Covid 19 restrictions. The consequence of that was that some work with the Intellectual outputs was changed between the partners depending on who had the time and opportunity to work with the output. The school in Finland gave days to Sweden and since their payment for working days is lower, the budget for outputs has increased. The coordinator agreed all changes with the Swedish Council for Higher Education before action was taken.

Østfold University College, has supported the project with a team platform, where all project participants have shared materials, protocols and held discussions about the project's activities. Østfold University College has also during the project reviewed the language on the resource bank. Backatorpsskolan has made and published the project plan, communication plan, dissemination plan and the plan for monitoring and evaluation on the project's team platform. All documents were fleshed out at the first physical project meeting autumn 2021. The project manager at the coordinator organisation, has presented the background and aims of the project and Erasmus and Strategic Partnership at every Event, and at different and in various contexts where interested parties from the target group have been represented. To get participants to all events all partners have promoted the activities via social media and email. For example the coordinator sent over 400 personal emails to school leaders and school developers in Sweden.

The projects have had different planning teams for the activities. For example:

- The University of Gothenburg, Storyline Sweden and Backatorpsskolan have planned and organised the two multiplier events in 2022 and 2023.
- Nav and Åbo Akademi, have planned and organised the hybrid- transnational project meeting and the learning and teaching activity 2021.
- Osnovna šola Ob Rinži and Backatorpsskolan have planned and organised the learning and teaching activity 2022.
- Åbo Akademi and Backatorpsskolan have planned and organised the transnational project meeting 2022.
- Østfold University College and Backatorpsskolan have planned and organised the learning and teaching activity 2023
- The University of Gothenburg, Storyline Sweden and Backatorpsskolan have planned and organised the two final transnational project meetings in 2023.
- The University of Gothenburg, Storyline Sweden and Backatorpsskolan have taken responsibility for the distribution of tasks connected to the final report.

Evaluation processes have been conducted both internally and externally in connection with the event. Internal evaluation has been ongoing throughout project lifespan. The project group has also discussed and decided how the payment should be distributed.

Please describe the methodology you applied in your project.

The project activities were based on meetings that strengthened the subsequent collaborative working. During the project meetings we gave information and updated each other on the proceedings. Then we planned for the next phase.

The sum total of the group's knowledge is the foundation for the developing work in the schools. In order to develop the Storyline approach, we created the basis for that together. Also, we met and planned how to disseminate the results, and decided how, when, who will do what, and so on.

During the whole project it has been important for the group to discuss the project's goals and the way to achieve them. Dialogue about the intellectual outputs, the aims and programme for the events, has given the group a common picture of how our different project activities and objectives might lead to the project's goals.

Many discussions have been held, in order to understand our different perspectives of sustainability and resilience. An important group discussion we had in 2021 was about the question, "What does a person need to do to become more resilient?" We define resilience as a system's possibility to deal with crisis and sudden events without going into a worse state.

We continued the work with identifying the factors we can influence that affect results, and the perception of quality of the process and of the results, during the whole process.

In between project meetings, all participants continued to develop their own organisations' experiences about education for sustainability and resilience. Continuous development has been undertaken according to the needs of the organisation. Interesting texts and lectures have been shared in the project group to promote joint learning. As an example, everyone has read *Eco-Anxiety and Environmental Education* by Panu Pihkala and GreenComp, The European sustainability competence framework.

The participants in the multiplier events were the organisations and school boards interested in the project's findings. The intention was to spread the results from the project, and we did. In the final year of the project we decided that the coordinator, Backatorpsskolan will continue to develop the resource bank. A long-term outcome is to further strengthen organisations' collaboration and networks both locally and internationally.

The aim was to find new ways of developing the Storyline approach to teach learning for sustainable development. The project included researchers from three different universities and countries, studying school-classes, who worked with the new Storyline templates, to examine the activities and the teaching and learning outcomes, which gave the researchers the opportunity to discuss their findings with students, teachers and amongst themselves. This was a good way to produce new knowledge of educational processes.

The process, findings and results were published and shared during the dissemination conference in Gothenburg, through workshops and seminars. The dissemination conference was planned to be in Stockholm but was changed to Gothenburg because Backatorpsskolan together with the University of Gothenburg had more time and the wherewithal to arrange it.

The results of the internship-related research have been used in didactical discussions at all pedagogical levels and has been a recurring content in all meetings.

The project members have worked interdisciplinarily and experience-based and like a learning organisation, we have learned along the way and made changes in our way of thinking or doing. It is like an iterative development process where we have created, evaluated, and revised until we were satisfied with the result. It still is a process in that terms that our outputs would be developed further on without the Erasmus support. [JM1]

The project members' active involvement in various activities, including research, conferences, and workshops, demonstrated their commitment to advancing the field and supporting the project's goals. The methodology we applied in the work with the outputs is described further in this report in section 5.2 Intellectual Outputs and the way we organised the events in section 5.3 Multiplier Events.

How did the project partners contribute to the project? Please detail specific contributions made by the partner organisations.

In addition to what we have previously reported regarding the contributions of various organisations to the project's events, here is an account per organisation.

Katarinaskolan contributed with their knowledge of positive pedagogy, student participation and ecological sustainability. The teachers developed the Storyline work and participated in the research with Åbo Akademi dealing with change in children's attitudes concerning environmental awareness. A larger Storyline project was a part of the whole school's integrated teaching and multidisciplinary learning areas called "Climate-smart future". Katarinaskolan also took part in the video film, the assessment tool, and wrote an article for the resource bank.

OS Ob Rinzi Kocevje have as part of Kočevje cooperation, explored various areas: collaborative learning, outdoor learning, development of entrepreneurship in young people, formative monitoring, and innovative teaching approaches such as Storyline. The common objective of all activities has been to encourage learners to use their wider abilities to think critically about global change, and to develop the sense that, as individuals with a sustainable way of working, they are important and capable of major change first in the local environment and beyond in the world. They developed their teaching with Storyline, the video film, the assessment tool, and wrote an article for the website.

Åbo Akademi University, represented by Henriksson has supported teachers at Katarinaskolan during the planning and implementation of their Storyline-work and has led the work apropos of the creation of the digital assessment toolbox for the evaluation tool. As a part of the team of researchers Henriksson has participated in several of the films and presented the outcomes from the project on several occasions for international and national audiences. Henriksson has written one academic article and been one of the writers of the short articles published on the project website.

University of Gothenburg (GU), represented by Häggström, has led the project's action research group. As a result of the action research, she initiated and edited a common anthology, based on the action research. In addition, Häggström has published two academic articles and submitted another. Some of the results from this research will also be published in three Norwegian articles. Within teacher education at GU, the project has led to the implementation of sustainability as a new content in the Storyline, which is carried out twice a year. The University of Gothenburg was involved in the multiplier events in Sweden.

The Østfold University College, has conducted workshops on different aspects of Storyline, including drama and Storyline, utilising sound in storytelling, and working interdisciplinarily. They took the lead in conducting online workshops that focused on digital Storylines. Through these workshops, they shared practical knowledge and insights on utilising digital tools and technologies to enhance the Storyline approach in teaching sustainability.

Nav Sweden brought expertise in entrepreneurial learning, IT, and student engagement in real-world partnerships. Their input helped align the Storyline method with modern educational needs. NAV has been responsible for documenting the events of 2021 for the project website. NAV has also coordinated zoom conferences and meetings and helped national and international participants with technical support. They have also been active in finding the right lectures, to make the project move forward on the learning and teaching events.

Storyline Sweden has extensive experience in spreading and developing Storyline since 2006. They brought a wealth of knowledge, resources, and networking opportunities to the project. Their expertise in writing, filmmaking, and global connections added significant value. Storyline Sweden has been responsible for communicating with the international partners for Storyline and has been responsible for planning and running some of the activities at the project meetings and events. They have also been responsible for documenting all events in text, film, and photos. Storyline Sweden has been responsible for developing the resource-bank.

Backatorpsskolan had a long-standing tradition of working with Storyline and had tried to use it for sustainable studies. All teachers at the school regularly used the Storyline approach, bringing practical knowledge and experience to the project. They developed their teaching with Storyline, the video film, the assessment tool, and wrote an article for the website. Backatorpsskolan welcomed study-visits during the multiplier event in Gothenburg in 2022. The teachers at Backatorpsskolan have developed the material "My sustainable competence" during the project. Teachers from the school have contributed as lecturers at the multiplier events and in writing articles for the anthology published by Studentlitteratur.

How did you communicate and cooperate with your partners? What are the positive and negative elements of the cooperation process? What would you improve if you were to carry out a similar project in the future?

The project participants shared a common interest and various expertise in education development, resilience, and sustainability. Their diverse backgrounds, including expertise in technology, art, and blended learning methodologies, provided a robust foundation for successful collaboration. Additionally, the organisations had previous experience in international cooperation and educational development.

The organisations have had contact continuously and met regularly online, onsite, and have had email contact. The pandemic meant that the project had to take a different direction and take on a clearer digital and hybrid form. We are happy to have managed to overcome the distance with many online meetings without travelling.

The formation of networks among the participants has enhanced collaboration and exchange of ideas. For example, when the Storyline work at the participating universities had to be online, a collaboration between Sweden and Norway started to exchange experiences. It was good to have colleagues to discuss approach and framework, and how to do certain things online. This collaboration also resulted in common conference presentations, and common articles, which are submitted for three different Norwegian anthologies. Häggström, University of Gothenburg, has also continued the collaboration with Backatorpsskolan as a scientific and aesthetic leader.

The cooperation process fostered collaboration among the participants from different organisations and countries, allowing for the sharing of knowledge, experiences, and best practices related to the Storyline approach and sustainability in education.

Østfold College University presented their research findings and practical experiences related to Storyline and sustainability at various international conferences. These presentations not only disseminated valuable knowledge but also sparked further discussions and collaborations with educators and researchers from around the world.

The project benefited from the diverse perspectives brought by participants. The schools in the project such as Katarinaskolan found the collaboration with the researchers as a very good concept. The cooperation process resulted in concrete outputs, such as research articles, films showcasing Storyline in practice, and a web page with conference resources, providing valuable resources and tools for educators and researchers globally.

“What was also positive was that the project could be initiated despite the pandemic, thanks to video meetings. It was great to create new contacts, especially with other schools such as Backatorpsskolan and OS Ob Rinzi Kocevje. The visits to both schools were memorable and educational. What could be perceived as slightly challenging was the situation in the school both during and after the pandemic. One strength in similar projects is having enough colleagues from the school involved. I believe it would have been more successful if the pandemic hadn't affected the project's start.” *Katarinaskolan, June 2023*

During the cooperation process, communication and collaboration were facilitated through various platforms such as Zoom, email, and Google. Østfold College University acted as a relay for information since not all participants on campus attended every meeting. Internal

meetings were held after ERASMUS+, which posed a weakness in achieving a common understanding but proved advantageous in terms of saving time and money.

Language barriers were encountered during some meetings. Written communication made it easier to translate. There were two departments in Halden with separate financial divisions at the beginning of the project, due to reorganisation and new structures, some communication of expectations was difficult. In terms of improvements, it was suggested to make sure there is a joint start involving everyone to establish clearer expectations of the participation and outcomes. This would help align the project more closely with the others in the project and enhance overall coordination and cohesion.

Exploring and utilising virtual collaboration tools can enhance remote communication and facilitate smoother interactions, allowing for effective collaboration even when face-to-face meetings are not possible. It could be a good idea to develop more permanent forms of cooperation that are not only based on short projects but develop meeting places where schools and community actors work daily in joint learning environments.

**What target groups were addressed in your activities plan?
Were the target groups changed in comparison to the ones identified in the application form?**

The target groups addressed in the activities plan of the project included practicing teachers, researchers, teacher educators, and student teachers. These target groups remained consistent with those identified in the application form. However, at the end of the project, the need to include school leadership as a target group was evident. To address this need, a meeting was organised for school principals during the transnational meeting in Halden, Norway.

According to the original plan, students from the partners should have attended this meeting, but due to the Covid- situation we had to cancel that.

5.1. Transnational Project Meetings

Description of the meeting: please include information on the purpose of the meeting, main agenda items, the outcome and the participants involved. In case there is special circumstance (such as a difference between what was planned and what was implemented, or a difference between the location of the hosting organisation and the venue of the meeting), please provide appropriate explanation and justification.

Transnational project meeting 1

The coordinator prepared the first project meeting and involved all partner organisations in the planning process. It was planned to take place at Åbo Akademi University in March

2021, but due to Covid 19 restrictions we had to postpone it to October 2021 and then relocate it to Stockholm.

The purpose of the first meeting was mainly to set up the administrative matters. For example, the project partners agreed in detail on administrative and managerial issues, i.e. revised project plan, time-schedule, communication plan, implementation, and dissemination plan. The project members discussed monitoring and evaluation and planned for the work.

Another purpose was to create a common view of the project's goals and to understand on a deeper level why education in sustainability and resilience is so important.

The main agenda items for the meeting were,

- Practical matters such as discussion of the project plan. A Monitoring & Evaluation (M&E) strategy will also be presented.
- Sustainability and resilience presentation and workshop.
- Presentation of the action research project.
- Reflection on how we in this project can improve the commitment of the children through their characters, and through their understanding the complexity of sustainable development – conflicts of interest, emotions, fears, etc.
- Social togetherness, get together.
- Planning in groups – Parallel sessions
 - Meeting for the group of researchers.
 - Meeting for all others.
 - Entrepreneurial learning – possibilities and challenges. Examples from different national curriculums. Teachers' role and students' role. 21st century skills.
 - Plan and production for the Event in December.
- Plan and production for the Event in December.
- Transformative learning – scientific background and implications for education on different levels. Teachers' role and students' role.
- Reflection
- Summary of the dialogue day 1. How we can in this project improve the commitment of the children through their characters, and through their understanding the complexity of sustainable development – conflicts of interest, emotions, fears, etc.
- Seminar around the article Eco-Anxiety and Environmental Education by Dr. Panu Pihkala, to be read before the meeting. Preparation of questions to Dr. Panu Pihkala.
- Short presentation by Dr. Panu Pihkala. Eco-Anxiety and Environmental Education The group has time to ask questions to Dr. Panu Pihkala after the presentation.
- Time to plan for record, make production or reflections.
- Evaluation

Outcomes of the meeting.

The outcomes of the meeting demonstrated progress towards the project's goals of integrating sustainability into education. The discussions about practical matters and project planning ensured that the project's activities and objectives were well-coordinated and aligned with the project's overall vision. The ongoing study will result in a short article, contributing to the project's research outcomes.

The discussions on improving children's commitment and understanding gave many reflections on how the project can enhance children's commitment to sustainability and their understanding of its complexities, including conflicts of interest, emotions, and fears. This discussion helped identify strategies to improve children's engagement and learning outcomes within the project. The meeting together with the C1 event provided valuable insights, research findings, and discussions that informed future activities and fostered collaboration among the project partners.

The number of participants involved was 11 people.

Transnational project meeting 2

The second project meeting was held in connection with the first Multiplier event. The purpose of the meeting was to exchange experiences, plan for the next steps in the project and summarise the first Multiplier event.

The main agenda items for the meeting were,

Visit to Backatorpsskolan.

- o Welcome session and introduction to Backatorpsskolan.
- o Visit to classes in groups
- o Walk around in the schoolyard. QR-codes and outdoor classrooms
- o Reflection, evaluation, and coffee

Planning in groups – Parallel sessions

- o Meeting for the group of researchers in the project.
- o Meeting for all others with plan and production for the Event in June

Ongoing work with our intellectual outputs (Possibility of short presentations or just time for questions or reflections).

- o O1 Video film teaching and learning with Storyline.
- o O2 Four academic articles.
- o O3 Website educational resource bank.
- o O8 Interdisciplinary learning – Evaluation tool

Social togetherness.

Evaluation of the Multiplier event

Reflection

Summary of the dialogue in the parallel sessions.

Reflection on the achievement of the project with the support from monitoring & evaluation (M&E) strategy.

Practical matters with the support from the project plan, communication plan and dissemination plan.

Outcomes of the meeting.

The meeting provided valuable opportunities for participants not only to visit classrooms and exchange knowledge but also to observe Storyline and sustainability in action, receiving and exchanging practical ideas. The engagement and collaboration among the partner organisations not only supported the project's goals of promoting education for sustainability and resilience but also fostered the aim of further developing Storyline as a method and enhancing participants' understanding of how sustainable education can be effectively implemented in the classroom.

The number of participants, representing the partners in Erasmus+ Strategic Partnerships for school education included: On site 9 persons and online 5 persons.

At the school visit there were more participants on site from outside the project partner organisations, in total 28 participants from Greece, USA, Germany, Norway and Sweden.

On site: Åbo Akademi, 1 person, Ann-Catherine Henriksson

Finland, Katarinaskolan, 1 person, Krista Kaihovirta

Norway, Østfold University College, 1 person, Virginia Lockhart-Pedersen

Sweden, Göteborgs Universitet, 1 person, Margaretha Häggström

Sweden, Storyline Sweden, 3 persons, Ylva Lundin, Mait Adegård and Håkan Källqvist

Sweden, Backatorpsskolan, 2 persons, Eva Mars and Anna Johansson

Online: Slovenia, Primary School Ob Rinži, 3 persons, Katja Ilc Virant, Janja Murn and Mateja Vidrih

Sweden, Nav Sweden, 2 persons, Johanna Gagner and Daniel Lundqvist

Transnational project meeting 3

The transnational project meeting 3, was postponed to Turku in October 2022.

Initially, the meeting was to be held in connection with the event in Slovenia, but the programme for the event did not give space for the project meeting and the group thought it would be good to meet soon again. After consulting the Swedish Council for Higher Education, the meeting was postponed and moved to Finland.

The purpose of the meeting was, apart from managing project matters and to meet the needs that the group expressed in Slovenia, to focus more on assessment and the teacher's view of the student's learning. Exchange experiences and visiting a school was also an important item of the meeting.

The main agenda items for the meeting were,

- Assessment and the teacher's view of the student's learning
 - Collaborative warm-up tasks.
 - Group work around some selected Storyline projects
 - Review of the groups' thoughts in mixed groups
 - New meeting in the original groups for development of the work
- Summary.
- Social togetherness.
- Jessica Gillberg, principal at Sannäs school talks about their work at the school around multidisciplinary learning areas and teachers' experiences with the assessment.
- Discussions about the layout for the assessment tool on the web page.
- Evaluate and look forward to the meeting in Halden.
- Work with project plan, communication plan, dissemination plan and the plan for monitoring and evaluation on the project's team platform.

We had a discussion of the different perspectives on teaching for sustainable development using Øjman (2006) as the starting point, reflecting on where and how these perspectives appear in the curriculum and the schools. Finally, we discussed the opportunities between the pluralistic approach and Storyline.

According to evaluation done after the meeting, teachers point out that they have developed an awareness about the different traditions in teaching for sustainable development and that they are more comfortable using the terms fact-based, normative, and pluralistic approaches to sustainable development. They sense that it is good if we can develop further the pluralistic way of teaching. They believe that this is something made easier when we use Storyline as an approach. The open key-questions in Storyline help a lot in this regard. We

have also become more aware of the differences and similarities in the curriculums in our different countries. That also gives perspective on our own curriculum.

One goal for days was to move beyond discussions towards more concrete tools that can help teachers to assess formatively the competences that appear in GreenComp and our national curriculums. We began by using a tool called "In the Middle". Using this tool, we brainstormed the elements of Storyline and how these elements reflect competences in line with GreenComp. The tool was used to make the competences more manageable and reflect different levels at school. This tool was also used to connect a more pluralistic approach to Sustainability. Finally, we worked at making a rubric or a matrix to help with assessment. Two concrete assessment tools were presented: "The Issue Tree" and "Why-Why approach".

According to evaluation, participants developed a better understanding of interdisciplinary work at the school level, in addition to assessment of interdisciplinary work. We now have more knowledge about how we can assess Storyline work and other cross-curricular work with the help of GreenComp. We want to stop asking our students "What have you learned today?" and instead ask them "What have you practised today?"

Gillberg from Sannäs school talked about their work with multidisciplinary teaching areas and about their work with assessment. In Finland they assess not only the knowledge but also work skills and enterprise and initiative skills. According to evaluation, the participants got a deepened understanding for the multidisciplinary work and how it is created and developed.

The research group met and discussed how to make transparent the process and products of the research that has developed through the projects. The group will present the research in two ways. One presentation will be for the webpage and the other will be for the final report.

A padlet was presented for the group that will help gather ideas for IO8.

We also discussed the webpage for the project.

The number of participants, representing the partners in Erasmus+ Strategic Partnerships for school education involved: On site 9 persons and online 7 persons.

On site

Åbo Akademi, Ann-Catherine Henriksson

Østfold College University, Virginia Lockhart-Pedersen, Gitte Cecilie Motzfeldt and Hanne Eik Pilskog

Göteborgs universitet, Margaretha Häggström

Backatorpsskolan, Anna Johansson, Jenny Ekberg, Linn Boklund Frick, Nea Eliasson

These participants who attended online are not reported in the list.

Storyline Sweden, Ylva Lundin

Primary School Ob Rinži, Katja Ilc Virant, and Mateja Vidrih

Nav Sweden, Johanna Gagner

Backatorpsskolan, Eva Marsh

Katarinaskolan, Krista Kaihovirta

Transnational Project Meeting 4

The meeting was held in connection with the Learning and Teaching event, Halden. The purpose of the meeting was to have a specific focus on the intellectual outputs of the project, including a video film on Teaching and Learning with Storyline, four academic articles, an educational resource bank website, and an interdisciplinary learning evaluation tool. The meeting provided an opportunity for ongoing work on these outputs, allowing for short presentations, questions, and reflections.

The main agenda items for the meeting were ongoing work with our intellectual outputs short presentations and time for questions and reflections.

- O1 Video film Teaching and Learning with Storyline.
- O2 Four academic articles.
- O3 Website educational resource bank.
- O8 Interdisciplinary learning – Evaluation tool

The outcomes of the meeting aligned with the project's aims, particularly in relation to the aesthetic approaches used in Storyline as a support for teaching about sustainable development. Participants in the C4 event, actively engaged in hands-on workshops that demonstrated and explored these approaches. The meeting facilitated the development of concrete tools and resources, such as the video film and the educational resource bank, which would enhance the implementation of Storyline and promote sustainable development in the classroom.

The meeting shed light on the status of evaluation tools, allowing the participants to gain valuable insights into assessing the effectiveness of their interdisciplinary approaches. The experience sharing session from Backatorpsskolan further enriched the discussions and provided real-world examples of implementing the project's ideas.

Additionally, the meeting introduced a new focus on creating a network for leadership in schools. As the project progressed, the need for such a network became evident. This network aimed to connect and support school leaders in implementing Storyline and integrating sustainable development into their educational practices. By fostering collaboration and knowledge sharing among school leaders, the project aimed to strengthen the impact of Storyline and sustainable education at a systemic level.

The number of participants, representing the partners in Erasmus+ Strategic Partnerships for school education involved: On site 10 persons and online 1 person,

On site: Finland, Åbo Akademi, 1 person Ann-Catherine Henriksson

Norway, Østfold University College, 2 persons, Virginia Lockhart-Pedersen and Gitte Cecilie Motzfeldt

Sweden, Göteborgs universitet, 1 person, Margaretha Häggström

Sweden, Storyline Sweden, 2 persons, Ylva Lundin, Håkan Källqvist

Sweden, Backatorpsskolan, 2 persons, Eva Mars and Anna Johansson

Slovenia, Primary School Ob Rinži, 2 persons, Katja Ilc Virant, and Mateja Vidrih

Online: Sweden, Nav Sweden, 1 person, Johanna Gagner

Transnational Project Meeting 5

The meeting was held in connection with the final Multiplier event. The purpose of the meeting was to exchange experiences, plan for the next step in the project and summarise the Multiplier event.

The main agenda items for the meeting were,

- Planning in groups – Parallel sessions
- Meeting for the group of researchers in the project.
Meeting with all others with plans and production for the website.
- Ongoing work with our intellectual outputs, short presentations, and time for questions and reflection.
 - O1 Video film Teaching and Learning with Storyline.
 - O2 Four academic articles.
 - O3 Website educational resource bank.
 - O8 Interdisciplinary learning – Evaluation tool
- Evaluation of the Multiplier event
- Reflection
- Summary of the dialogue in the parallel sessions.
- Reflection on the achievement of the project with the support from monitoring & evaluation (M&E) strategy.
- Practical matters with the support from the project plan, communication plan and dissemination plan.

The outcome of the meeting was consensus and distribution of the remaining work in the project and exchange of experience. Decisions on the distribution of days and payment were also made.

The number of participants, representing the partners in Erasmus+ Strategic Partnerships for school education involved: On site 8 persons and online 3 persons.

On site: Finland, Åbo Akademi, 1 person Ann-Catherine Henriksson

Norway, Østfold University College, 2 persons, Virginia Lockhart-Pedersen and Gitte Cecilie Motzfeldt

Sweden, Göteborgs universitet, 1 person, Margaretha Häggström

Sweden, Storyline Sweden, 2 persons, Ylva Lundin, Håkan Källqvist

Sweden, Backatorpsskolan, 2 persons, Eva Mars and Anna Johansson

Online: Slovenia, Primary School Ob Rinži, 2 persons, Katja Ilc Virant, and Mateja Vidrih

Sweden, Nav Sweden, 1 person, Johanna Gagner

Transnational Project Meeting 6

The purpose of the final project meeting was to evaluate and work on the final report.

The main agenda items for the meeting were,

- Welcome and check in. Host Eva Mars and Anna Johansson Backatorpsskolan, coordinator of the Project.
- Planning in groups – Evaluation and report
- Summary intellectual outputs, short presentations, and time for questions and reflection.
 - O1 Video film *Teaching and Learning with Storyline*.
 - O2 Four academic articles.
 - O3 Website educational resource bank.
 - O8 Interdisciplinary learning – Evaluation tool
- Evaluation of the project
- Reflection
- Summary of the dialogue in the parallel sessions.
- Reflection on the achievement of the project with the support from monitoring & evaluation (M&E) strategy.
- Practical matters with the support from the project plan, communication plan and dissemination plan.

The outcome of the meeting was mainly a shared view of the project's progress, planning, and starting to write the final report. The final reporting meeting with the Swedish Council for Higher Education gave us many practical issues to deal with. For example we got valuable information about content and quality of the final report and new directions regarding the specific logo to be downloaded for all our products.

The number of participants, representing the partners in Erasmus+ Strategic Partnerships for school education involved: On site 5 persons and online 5 persons

On site

Sweden, Göteborgs Universitet, 1 person, Margaretha Häggström

Sweden, Storyline Sweden, 2 persons, Ylva Lundin and Håkan Källqvist

Sweden, Backatorpsskolan, 2 persons, Eva Mars and Anna Johansson

Online

Slovenia, Primary School Ob Rinži, 2 persons, Katja Ilc Virant, and Mateja Vidrih

Sweden, Nav Sweden, 1 person, Johanna Gagner

Finland, Åbo Akademi, 1 person Ann-Catherine Henriksson

Norway, Østfold University College, 1 person, Virginia Lockhart-Pedersen

5.2. Intellectual Outputs

Output Identification O1

Video film teaching and learning with storyline

Output Type Learning / teaching / training material – Audiovisual material

The goal was to produce five films but we produced seven. One of the films should have been produced in Iceland but since they withdrew from the project we made one with the project researchers instead.

Three films were produced showing the Storyline Approach at schools with students from grade 1-7, one with the researchers in the project and one at the university level with student teachers and teacher educators. In addition we made two interview films with teachers who had carried out the work that was filmed in the films from Sweden and Slovenia.

The goal for this intellectual output was, not only to captivate the audience, but to inform and spread the work done in the schools, by sharing students' and teachers' reflections on Storyline work that includes resilience and sustainability. The films we have made exemplify and explain the Storyline Approach to make the approach more accessible to teachers, teacher educators, and administrators. The main purpose of the project is to enhance qualitative learning opportunities regarding sustainable development. The films in this output illustrate the different characteristics of the Storyline cross-curricular teaching approach. The films from Sweden and Finland elucidate both what the classes have been working on for 5-6 weeks, and what they think of the content and the methodology. The students' creative work is presented and shown to the viewer. One main feature of the Storyline approach is key questions. In one of the films from Sweden we can see how the teacher uses a key question and follow-up questions with the students, and how the students respond. In one of the other films, from Finland, students' use of digital technology to develop the narrative is shown together with students' and the teacher's reflections of the work is presented.

In the film from Slovenia, two teachers are discussing the work when it is completed. They describe the opportunities as well as the limitations and difficulties and how to overcome these. They conclude their reflections by highlighting the learning opportunities for themselves, and that the students have given them hope for the future.

The university level film is with student teachers and teacher educators working with Storyline in teacher education. One of the student teachers describes the Storyline work that they have carried out during one week at Østfold College University (Norway). It shows the work done with student teachers that are training to work with Storyline and sustainability issues. This film offers insights into the work conducted by student teachers as they prepare to integrate Storyline and sustainability into their future teaching practices. The content of the films aligns with the three pillars of sustainability: ecological, social, and economic issues.

The films have been discussed during project meetings and been used by the project partners to discuss the advantages and disadvantages of working with Storyline and

sustainable development. Conclusions drawn from the two first films from Sweden have formed the starting points for implementation in the schools in Finland and Slovenia. So the films have been an important input in the work that have then been filmed in the next film. Lessons learned will thus be a critical point to discuss.

In particular, the constraints and obstacles are of importance to debate for future projects. The film from Finland has been made in close cooperation with the teachers at Katarinaskolan, Backatorpsskolan and Storyline Sweden. The film from Østfold College University is also produced as a collaborative product with Backatorpsskolan, Storyline Sweden and Østfold College University. All films are translated into English and published on the educational resource bank so that anyone can access them.

The films from Norway, Sweden and Finland have also been shown at the Multiplier Event 2022 as a springboard for discussions around the competencies students can develop through the Storyline Approach. The films from Slovenia and the films with the researchers were shown at the Multiplier Event 2023.

The budget changes have been done since the work needed have been undertaken by Storyline Sweden instead of NAV. Due to changes in the organisations there was no scope for traveling to Slovenia and Finland for the representatives from NAV so Storyline Sweden did the work. The filming took more resources than we anticipated, so some days were given from the partner organisations to Storyline Sweden and the work done by the teachers at the schools was done in their own time.

Budget change:

Storyline Sweden got 20 days from Backatorpsskolan, 2 days from The University of Gothenburg, 9 days from NAV Sweden, 2 days from Katarinaskolan, Finland, 2 days from OS Ob Rinzi Kocevje, 1 day from Åbo Akademi University.

Østfold University College got 1 day from NAV Sweden

Output Identification O2

Four academic articles

Output Type Studies / analysis – Research study / report

Within the project, three different research projects have been conducted separately: the first in Sweden, the second in Finland, and the third in Norway. Each of the projects contains several studies, which have resulted in several publications. The overall aim of the research has been to examine teachers' Storyline work that includes sustainable development. The studies were guided by the questions of what, how, why so, who will do what, for whom are the activities planned, which are the underlying ideas/pedagogical theories, and what are the driving forces. The studies have examined how the Storyline work was implemented in two schools in Sweden and Finland, and at teacher education in Norway. The aims and research questions expressed in the application form have been followed. Focus has been on contexts, interaction, and integration, to provide in-depth understanding of the didactic principles. Most of the studies are interactive research studies, which means that the teacher and the researcher work in cooperation. Interactive research studies integrate aspects of research, knowledge development, educational settings, and learning outcomes. It has a reformative and transformative approach, and includes principles of participation and collaboration, democratic ideals and close connections between theory and practice.

Three international academic articles are already published (Häggström, 2022b, 2022c), and (Henriksson, 2023). These are all double blind peer-reviewed. One quantitative research article is in progress (Eik Pilskog). The research studies have also resulted in two practice-based chapters for a Norwegian anthology and four research-based peer-reviewed chapters for another anthology. Both anthologies will be published in the autumn 2023 by Universitetsforlaget in Norway. In spring 2024 a third anthology will be published, including four chapters written by Motzfeldt, Häggström and Lockhart Pedersen.

The publications are based on empirical materials from classroom observations and from interviews with both teachers and pupils, individually and in pairs and groups, and from one survey study.

A Swedish anthology was published in 2022, edited by Häggström, and written by teachers at Backatorpsskolan and six student teachers from the University of Gothenburg. In addition, six student studies were completed, which resulted in six academic theses.

The empirical material has resulted in 9 short articles, published in the educational resource bank.

In short, the results show that Storyline and Education for Sustainable Development are well suited. The teacher's role is crucial and more profound in the Storyline work, than has been brought out earlier, and it depends on a skilled, compassionate, and caring teacher, who creates an open climate in the class. The approach is challenging for teachers and needs much preparation to include the narrative features. It seems to be hard to balance the different features of Storyline. To create a good story, it is important that the teacher understands the function of the dramaturgy. We have seen that the role-playing events brought action to the story, and evoked strong emotions, and facilitated engagement on a personal level, which was crucial for developing the story. When students encountered disorienting dilemmas, as a character, they felt that the learning situation was more authentic. They were given the opportunity to discuss, critically, with peers, and share their learning processes, and act in accordance with their new knowledge and perspectives. The democratic processes during a Storyline are profound. The results show that Storylines that include issues of sustainability enhance students' ability to envision a different and sustainable future.

The publications will be brought into teacher education in Sweden, Finland, and Norway, and can be used by practitioners interested in the topics.

Results have been presented at the event in Stockholm (2021), at the event and Storyline conference in Gothenburg (2022), and at the last dissemination conference in Gothenburg (2023). The results have been presented at several conferences and events outside the project, too. For example Lockhart Pedersen and Häggström had two presentations in TAL, a conference held in Copenhagen (2021), Henriksson presented at the conference NERA, in Reykjavik (2022) and at a conference on subject didactics (Ainedidaktiikan symposiumi 2022) in Finland. The results were discussed at The Gothenburg Book Fair (Häggström, 2022), in an UNDP event at Natural History Museum, (Häggström, 2022). Häggström will present the project at a Swedish conference *Pedagogiskt arbete*, in August 2023, Motzfeldt and Häggström presented at the ECER-conference in Glasgow, 2023.

Budget change : The University of Gothenburg got 8 days from Østfold University, since Häggström, as the research leader, needed more time to create and edit an issue for short articles, and to write articles.

Output Identification O3

Website educational resource bank

One outcome of the project is an open Educational Resource Bank that distributes qualitative learning opportunities regarding sustainability using the student-active Storyline approach. We have, throughout the project, published films, articles, lectures and other resources that can be useful for others. We have also within the project used the resources ourselves as we have worked in our own organisations.

We have updated and presented the processes experienced and learned from in this project. We wanted to reach out to those who cannot attend the workshops and conferences. At the conference in Gothenburg in 2022 there was a possibility to choose which seminars you wanted to attend. But since nearly all seminars were filmed and published, participants could listen to the ones that they had missed after the conference. This website resource bank will be an important part in dissemination.

The content of the Educational Resource Bank responds to the project goals and is a place where the developed pedagogical tools for teaching and learning about sustainability are available to teachers and researchers globally. The resource bank contains other approaches that can be combined with Storyline to meet the aims of our project. It can therefore be used in didactical discussions at all pedagogical levels and be useful in all developing future-oriented curricula. It is available to support and develop competence amongst students, student teachers, and teachers with the main goal of becoming agents of change and supporting sustainability.

The resource bank includes research articles, practical articles, filmed lectures, teachers' planners, topic outlines, pedagogical and informative inspirational films, evaluating tools, and net-based learning paths to guide the teachers through creating, implementing, and assessing the use of the Storyline Approach when addressing issues of sustainability.

We have published animated films explaining active working methods often used in Storyline work. They are accompanied by pdf-documents with step-by-step instructions both in Swedish and in English. There are also summaries of all events during the project including filmed lectures.

We have had two big Multiplier Events. The first one was in Gothenburg 2022 – the International Storyline Conference. The website contains a lot of resources from the event. All six keynotes were filmed and published together with one filmed panel discussion with the researchers in the project and 23 filmed presentations with researchers, teachers and headteachers who have been working with Storyline and sustainability and resilience. The second Multiplier Event was held in Gothenburg in 2023 and all those sessions were filmed and published.

All participants in the project have contributed to the content on the website. It has been a shared common responsibility. The planning for what to put up on the website has been done together in the project but the work has been carried out by Storyline Sweden. Interview questions and editing of the films have been done in collaboration between

Storyline Sweden, the participants in each film, together with the project coordinator. The website has become a resource for us in the project as a group and for work carried out in each organisation. It has given us a sense of community and pride within the project since we know it is useful when you want to work with these hard questions in your organisation.

There is a strong Storyline community all over the world with teachers and educators who have been struggling in each country and have been doing so since 1965 since the approach was developed in Scotland. There have been national websites run by engaged individuals but never a resource bank with this quantity of useful films, articles, and other resources. What we have done in the project is to develop the Storyline approach with a strong focus on sustainable development and we have identified the key elements of the approach for those who want to work in this field. The website has now become a resource for all people all around the world that work with Storyline but also for all teachers that want to find a way of working with sustainable development.

The website is now known to all teachers that took part in the Multiplier Events and they will be able to spread it to colleagues and friends in their own countries. We have had participants from 25 different countries.

The resource bank is available at <https://www.storyline.education/>

The work with the webpage took more time than we had planned for, since we all thought that it was important, we used our own time on top of the time reported here.

Budget change: Storyline Sweden got total 88 days from other partners: 14 days from NAV Sweden, 18 days from Åbo Akademi University, 15 days from The University of Gothenburg, 15 days from Backatorpsskolan, 5 days from OS Ob Rinzi, 10 days from Katarinaskolan, 11 days from Østfold University.

Output Identification O8

Interdisciplinary learning – Evaluation tool

Output Type Methodologies / guidelines – Evaluation method and tool

In addition to traditional instruments measuring knowledge and skills, teaching and learning about climate change /sustainability/ sustainable development requires a change in values, opinions, and feelings; changes which are much more difficult to measure in students and adults. These aspects cannot be measured by traditional quantitative test methods. All national curricula within the project describe various forms of interdisciplinary learning under terms such as phenomenon-based learning, subject-integrated learning, and project learning. Teachers in the participating countries are looking for concrete tools for how objectives that affect values and different competences can be followed up, communicated, and assessed.

Within the project the work with the evaluation tool proceeded in the following steps

- Initial analysis of the four different national curricula, international reports and policy documents, and available research in the area.
- Assessing and piloting Concept Cartoons (CC) as a possible tool in the assessment toolbox. During their work with the Storyline-project “The future village” Katarinaskolan tried out concept cartoons as a tool for formative assessment. According to the teacher the CC fulfilled the purpose to function as a formative tool – for the pupil to reflect on his/her own thinking before and after, as a ground for further discussion and for the teacher to get a view on the pupils’ thinking.
- The teachers at Backatorpsskolan have discussed and reflected on different values, central competences, and social skills, and how these are visualised and assessed in their teaching. In April 2022 Ann-Catherine Henriksson, Åbo Akademi, attended one of the planning afternoons at the school. We discussed formative assessment overall and assessment of knowledge versus assessment of skills, attitudes, values, and feelings.
- During the event in Slovenia the participants had the opportunity to reflect on and discuss the challenge of assessment overall and the assessment of values, attitudes, and feelings in particular. The session started with the presentation “To make the immeasurable visible” and this presentation was filmed to be available for teachers on the project website. The participants became acquainted with the GreenComp – European sustainability competence framework and tested some formative activities and assessment tools. All participants were asked to analyse one or two Storyline-plans with focus on the assessment overall and the formative assessment of attitudes and values in particular.
- The discussion about assessment overall and assessment of values, attitudes, and competences in particular continued during the third project meeting in Turku in 2022. Visiting guest Jessica Gillberg, principal at Sannäs school in Finland,

talked about their work at the school around multidisciplinary learning areas and about the teachers' experiences with assessment.

- During the learning and teaching event in Halden in 2023 we were able to present a draft of the assessment toolbox and the participants in the event were able to give feedback on it. The toolbox was presented to a bigger audience at the event in Gothenburg in March 2023.

The digital assessment toolbox will be used by teachers while discussing and assessing changed action readiness, social skills and changed values. The toolbox "To visualize the immeasurable" can also be found on the project webpage and contains guidelines for formative assessment of attitudes and values, sample projects, and concrete activities and models to support the assessment work.

The teachers at Backatorpsskolan have created and piloted an assessment tool based on the Green Comp (EU) report to be presented and shared as an important tool in the toolbox. The four main areas and the 12 competences of Green Comp are converted into a learning matrix called "My sustainability skills". The matrices and the accompanying tutorial for teachers can serve as support for the teacher in the planning and assessment of a theme unit, and excerpts from the matrices can be used by the students as support for individual reflection and peer response.

Budget changes: Backatorpsskolan got 4 days from OS Ob Rinzi , 14 days from Østfold College University, 3 days from Katarinaskolan

Åbo Akademi University, Finland got 1 day from OS Ob Rinzi and 3 days from Østfold College University.

5.3. Multiplier Events

Description of the multiplier event

-explain how it has contributed to reaching the project's objectives.

International Storyline Conference

The Multiplier Event in the form of a Storyline conference in Gothenburg was planned to be held in spring 2021. Due to Covid19 the event was postponed to March 2022. It was supposed to be an on-site event with participants from all over the world but because of Covid19, the planning team decided to make the conference an on-line event. Since an International Storyline Conference is a great opportunity to make a Multiplier Event that gathers international participants from all over the world, we did not want to postpone it again. Since some participants had booked hotel and travel tickets that could not be refunded, we made the conference a hybrid version that was both on-site and on-line. This turned out to be a huge challenge for the planning team. As we think it's important to try out new ways of meeting, we had to figure out how to continue to meet and collaborate in the future.

The participants in this Multiplier Event were experienced teachers and educators from different parts of the world. We had 60 participants from 5 countries on-site and 286 participants on-line from over 25 different countries. The conference was a way for our ERASMUS+ project to reach out to teachers and teacher-trainers all over the world with the work that we are doing in the project. The Key-note speakers were chosen both to broaden our own views and perspectives as well as reaching out with our own results.

Three keynotes were presented on-site and three via Zoom. In addition we had five different rooms for selectable sessions with a host in each room on site. There were 31 selectable sessions of which seven were presented on-site and the rest via Zoom. 12 out of 31 selectable sessions were held from presenters from within the Erasmus+ project. These were both in the form of teachers talking about how they have used Storyline as a means for teaching sustainable development and in the form of studies carried out in classrooms where Storyline has been used. The rest of the selectable presentations were chosen to broaden our views on how Storyline can be used for learning for sustainable development and resilience.

The presenters were from ten different countries. All presentations were followed by a short discussion. Most of the presentations were recorded and are published on our website. This is done both for us within the project so we can take part in all selectable presentations since we only had time to watch six of them each, during the actual conference, and for participants and other interested teachers and teacher trainers to take part afterwards even if they couldn't join the conference. The scientific findings that we had made so far were presented as a key-note speech called: Teachers Role and Relational Pedagogy by Margaretha Häggström, Senior lecturer at the Faculty of Education at the University of Gothenburg. There was also a joint round-table discussion with researchers from Norway, Finland and Sweden that presented the work done so far as well as a round table discussion with researchers from Norway. Within the project we had produced three films before the

Multiplier Event and all of them were screened at the conference. The aim was to broaden the picture of how Storyline can be developed and used to be successful regarding learning for sustainable development. We presented an update of the findings from the project to get various views from the different participants to develop the project further. Prior to the conference, the teachers in all participating countries included in the project, have worked with Storyline as a method for working with sustainable development and resilience.

These experiences formed a base for participating in the conference, and the teachers from the project presented their work at the conference. By virtue of the opportunity of presenting their own practice, the teachers must focus and reflect in a critical way on their own practice, which we consider as a crucial learning process for this project. The goal of the conference was to provide practising teachers and scholars an opportunity to discuss their own teaching practice together with teachers and scholars from around the globe, in terms of both proven and best practice experiences, and current research. The participants' own practice was discussed and analysed during the conference discussions. These experiences were then analysed and helped us to see how we could move forward in our respective countries to achieve the overall objectives of the project. The event is documented in text, pictures, and film in the Educational Resource Bank.

A dissemination conference

Description of the multiplier event 23 March, 2023

During this last conference, reflections on the project and its results were presented and discussed. Crucial aspects in creating schools, and teaching and learning occasions, for sustainable development were highlighted. The project has involved students, teachers, researchers, to work towards enhancing competences for both students' and teachers' agency.

Professor Arjen Wals and Professor Leif Östman provided the framework for the presentations. A panel, including the project's researchers and the co-ordinator, discussed school development, and teaching and learning about/for/through sustainability. A special moment focused on the work carried out in Slovenia, in which the classroom work was described, and the outcome analysed. First, a video clip from their work, produced by Storyline Sweden, was shown. The participants from Slovenia, Katja Virant and Mateja Vidrih, attended online, to explain more about their work.

The conference aimed at stimulating and facilitating long-lasting communication and collaboration between teachers, teacher educators, researchers, and other organisations, in our effort to further develop education for sustainability. Specifically, our intention was and is to support wider and deeper understanding of how to include sustainability issues, to recognize pitfalls and strengths. By involving the audience in social events and workshops during the conference, and by using a questionnaire, we could not only spread the project's results, but receive some input from others who work with sustainability and from different perspectives, which was a way for us to reach the project's objectives and goals. Through discussions about the project, and by being questioned and obliged to critically examine our work and ideas, we had a chance to take a step back and to distance ourselves from the work. This was important to us, to be able to elucidate certain aspects that we had taken for granted. Thus, we could move our positions yet a bit further, and look at the project afresh.

With the help of the questionnaire after the conference, the audience could communicate if they would like to continue to collaborate with the project members regarding a pedagogical tool for integrating sustainability in schools. Twelve participants replied that they would like to do that. In that sense, the project will continue after the ERASMUS+ project is finished. This is also a way of strengthening collaboration with organisations, networks, and other schools, locally, nationally and internationally, which we were hoping for as a long-term outcome of the project.

5.4. Learning/Teaching/Training Activities

Description of the activity (Please describe the activity and explain how it has contributed to reaching the project's objectives. In case there is a difference between what was planned and what has been implemented so far, please explain why).

C1

The three learning, teaching, and training events were planned to move the project forward step by step, and thereby build a progression.

The first event was planned to take place at Åbo Akademi University. Due to Covid19 restrictions the event was rescheduled and became a split event starting in Stockholm the 18th of October followed by work at home by the participants and then followed by an online event in December 2021.

Both events were broadcasted online, so all project participants and others interested could take part. Despite the changes, we managed to realise a combination of lectures and workshops. The target group for the event was all educational professionals and all who were interested in the learning and teaching area (researchers, university students, teachers, head teachers). However, due to Covid19, we didn't manage to integrate grade school students in this event, as was the plan.

The goals for the C1 event, 2021 were:

- To allow the participants to engage in in-depth discussion about their perceptions of e.g. sustainable development, climate anxiety, resilience, and competence to act.
- To exchange experience to develop Storyline as a pedagogical approach with a special focus on the teacher's and the student's role in the approach.
- To discuss the concept of entrepreneurial learning and to compare how the concept and competence is visualised in the different national curriculums.
- To discuss if and how transformative learning could be used within learning for sustainability.
- To explore the creative use of technology for educational purposes in the different workshops.
- To collect empirical material to use as a ground for further planning and for research within the project.

This event's contribution to the project was to shed light on different perceptions about core elements of sustainability and resilience, which in turn was a starting point for the in-depth discussion about sustainable development, climate anxiety, resilience, and competence to act, which has continued during the rest of the project. This was crucial for the project group as it allowed for exchanging experiences and forming a pedagogical platform for further discussions. Transformative learning in relation to sustainability, teachers', and students' role in a Storyline and how to include issues of sustainability in Storyline activities that are relevant to the future generations are examples of topics that have been crucial to reach the project's objectives.

Taking part in the different activities and associated results from the participating organisations, allowed for bringing new innovative ideas together, renewing the Storyline activities and for further international discussions on how to include issues of sustainability in Storyline activities, that are relevant to the future generations.

Tangible outcomes were also empirical material for further use and five short (1-3 min) films. The films would cover the essence of the meeting from different viewpoints (teacher, researcher, stakeholder, student/pupil etc).

The evaluation was positive and here are some quotes:

- “That was a new experience for me, and it was really nice.”
- “It is working better in real life than on Zoom but still I think we got some value out of it.”
- “It is very useful to hear and discuss different perspectives.”
- “Open space is an effective way for a group to have many discussions at the same time. It is the group itself that addresses the topics that are important, no one from above decides what makes most issues important.
- The number of participants at the first part became 12 from the project and 6 others, instead of 50 that we had hoped for. The second part online, had more participants from the project organisations such as the whole staff of Backatorpsskolan.

The Event is detailed documented in words and film on the educational resource bank, <https://storyline.education/>

C3

The second learning, teaching, and training event took place at the Primary school OS OB RINZI in Slovenia 8 - 10 of June 2022. Total number of participants became 17 instead of 16. This school was chosen as the venue for this event because they have experience with alternative learning approaches both inside and outside of the school classroom. Outdoor pedagogy, entrepreneurial learning, and active learning are used at the school, and we had the opportunity to explore how these can be effectively incorporated with the Storyline approach and used for sustainability.

The school has their own vegetable garden and fruit trees, used in the school kitchen. This alternative arena for teaching and learning was highlighted at this three-day event.

The main goal of each teaching and learning event for this project is to highlight what is unique in the Storyline approach, and how this uniqueness will support teaching and learning about issues of sustainability. In Slovenia, the focus was:

- alternative learning environments
- ecological food production and consumption
- cooperation with the local community.

The event included a combination of lectures and out- and indoor workshops. They focused on how to support innovative teaching and learning and to address the complexity of

sustainable development and climate change. Teachers at this school along with other members of the project group provided the content for the lectures; content that was both practical and theoretical.

All school activities were presented at the international gathering to 14 representatives of the Erasmus+ partner organisations. The participants were impressed by the performance and sustainable pulse of the school. Katja Ilc Virant and Mateja Vidrih and their students presented an alternative outdoor learning environment used by the school. The group discussed the experience with the different learning environments used in the Storyline approach, with an emphasis on self-care and cooperation with the local community.

The goals for the event were visualised and processed in different sessions. Many discussions also took place during the more informal discussions e.g. during lunch breaks and outdoor visits. The participants appreciated the possibility of finally meeting face to face. "It's rewarding to collaborate with such a mixed group of people, particularly teachers that are eager to share their experience. We learn from each other in a different way when spending days together."

Outcomes from the learning and teaching event:

- Outdoor learning methods, and alternative learning environments as a co-teacher
- Organic food production as a way of learning about sustainability
- Cooperative and entrepreneurial learning as a framework for building working teams with local community members
- Students' capacity for action and sense of agency

The work is crucial, for example, to understand the circle of life. Creating a relationship to the nature/world around us is crucial if we want the students to be engaged in supporting sustainability. "We don't help what we don't know or love." According to one of the participants our visit to the forest gave a strong feeling of being a part of something bigger and many other of the participants commented on the calmness and peacefulness in the forest.

We need to be much better in using the school surroundings in the learning process, not only for walking, but for active learning about environmental issues and e.g. food security. It cannot be learned from a textbook.

According to the participants, different Storyline projects can benefit a lot by using alternative learning environments and vice versa.

Storyline can reconnect children with nature in many ways due to its episodes, activities, and key questions. The Storyline about bee hives gave us a good example of that.

To increase the action competence of pupils is important and Storyline has the potential for doing so through a fictive setting and the use of characters creating "as-if" experiences that can strengthen pupils' action competence for future action.

The event included various practical information for schools who wish to work more with the local society, for schools interested in using their outdoor areas as a learning environment, and for teachers needing guidance in using cooperative learning in the Storyline approach. In addition, the event culminated with discussions and reflection that will be made into an informational film. These also gave empirical material for further use in research on the Storyline approach.

There was not enough time to discuss outcomes and empirical material from the project and make plans for the development of the resource bank. Neither was there enough time to discuss Storyline projects and cooperation with different participants in different countries.

The Event is detailed documented in words and film on the educational resource bank, <https://storyline.education/>

C4

The final learning, teaching, and training event took place at Østfold University College, department of teacher education. The event was three days and included a combination of lectures and workshops that focused on crucial elements of the Storyline approach, such as the aesthetic features, e.g. role-play, using characters and interdisciplinary teaching and learning. Some of these elements are unique to Storyline, for example the use of characters and roleplay. These particular elements were highlighted, discussed and elaborated on in two creative workshops. As the department of teacher education at Østfold University College has been working interdisciplinarily using the Storyline approach for over five years, the teacher educators/researchers provided a solid venue of experience for interdisciplinary teaching and learning. The event was based on perspectives of researchers, student teachers, and teacher educators.

The goals for the event in Norway, 2023 were:

- To collaborate and discuss experiences of interdisciplinary work found in the Storyline approach, to further develop the approach to meet the demands of teaching resilience and agency for sustainability.
- To identify and develop specific knowledge and necessary skills regarding interdisciplinarily teaching, including intercultural communication, empathy, and critical thinking.
- To identify and reflect on the challenges of interdisciplinary teaching and learning.
- To create resources for teachers and teacher educators that will enhance the competencies for interdisciplinary teaching and learning.
- To create resources for teachers to address assessment issues while working interdisciplinarily.
- To engage the participants in in-depth discussions about the role of the teachers in facilitating learning processes that encourage and empower students to use their capacity for action.

Outcomes from the event included 1) development of resources for interdisciplinary work, to be published in the resource bank on the project's website, 2) a film highlighting the discussion on teaching and learning among the participating researchers, 3) empirical research material in the form of dialogues, interviews, and surveys, and 4) a plan for future tasks that can document competency development.

To integrate all subjects and to work interdisciplinarily demands good structure and some teachers have difficulties in integrating aesthetic elements in their Storyline in a structured way. One participant wrote: "These tips need to be spread because I think that the topic of music usually has a hard time fitting into a Storyline."

It was very interesting for the other participants to hear what the results of the research have shown so far. The reflection from the teachers after the session shows how important it is for teachers to work together with researchers to develop new and better ways of teaching. Some reflections as examples:

- "It was interesting to hear new perspectives on student teachers' experiences of a Storyline."
- "It was also very informative about sustainable development and democratic values. Sometimes we forget that education for sustainable development should not just be about knowledge developing or fostering the students to act in certain predetermined ways, but to be pluralistic. It was good to hear about this from an expert."
- "I like the fact that we now have a quantitative study that measures students' learning in Storyline mixed with sustainable development."
- "Interesting to hear about Ackes' studies where she has seen that the students develop empathy during Storyline work."

Reflection on the event showed that the participants had gained a deeper understanding of the importance of the aesthetic elements and how they are integrated and used in our Storylines.

- "Aesthetic work is one of the features that other cross-curricular do not always include. I think this is one way to include multimodality for real in a Storyline, and that it is a crucial way to evoke emotions. It is a way to work from an effective pedagogical approach. According to learning theories, aesthetics has an important role to play concerning students' incentives and motivation. Without the aesthetic elements there is no Storyline."
- "The workshops and presentations during this event gave a more professional depth to using aesthetics in Storyline."
- "Aesthetic elements help us to live in the place, events, and characters of the story. Extremely important. Shortcuts to emotions. Make characters more alive."

Total no. of participants onsite became 15 instead of 16.

The Event is detailed documented in words and film on the educational resource bank, <https://storyline.education/>

5.5. Participants in Learning/Teaching/Training Activities

For each activity, please describe the background and profile of the participants involved in the learning, teaching or training activities. How were the participants selected, prepared and supported? If relevant, please describe any practical arrangement set for the participants, including training, teaching or learning agreements.

5.5.1. Participants' Profile

The three learning, teaching, and training activities were open for everyone in the project and others interested in education for resilience and sustainability (researchers, university students, teachers, head teachers). To reach as many as possible, parts of the activities in C1 were broadcasted online. In preparation, the participants were offered the chance to read articles and watch video recordings. Each activity also included special guests, who spoke about their area of expertise and/or research.

During the events, project participants held several sessions, lectures, and workshops, which we will not include in this text.

During the C1 event in ÅBO/Stockholm three speakers were invited: Anne-Kathrin Peters, who is an Associate Professor in Technology Education with a focus on sustainability at KTH in Stockholm, Pella Thiel, from the Transition movement and End-ecocide Sweden, who talked on pain and participation, transformation and resilience in a living world, and Dr. Panu Pihkala, Eco-Anxiety and Environmental Education. The speeches, and these specially chosen speakers, were significant in that they did not offer ready-made proposals or solutions but evoked questions which then became essential for our further work. They were all selected because of their specific knowledge and expertise about resilience and sustainability, and their ability to engage an audience, and even provoke and elicit deeper discussions. Based on the first part of this two-fold event, we moved on to prepare ourselves by reading about transformative learning and about pluralistic perspectives on education for sustainable development.

During the C3 event in Slovenia Darja Delač Felda, Deputy Director, and Janja Murn, Assistant Director, hosted an introduction to Primary school OS OB RINZI – the concept of the school and the projects in which they cooperate with the local community.

There was also a presentation by Katja Ilc Virant and Andrej Mladenović about Entrepreneurial Learning – possibilities and challenges, Teachers' role and students' role, 21st century skills.

Dr. Petra Draškovič Pelc, held an outdoor workshop in Kočevski Rog.

To prepare for the event all participants read GreenComp, (the European sustainability competence framework).

During the C4 event in Halden and Østfold College University, two teacher educators were invited to facilitate a workshop and one lecture: Gunhild Brænne Bjørnstad, Associate Professor in Drama, and Solveig Toft, Associate Professor in Arts and Crafts. They were both chosen because of their expertise in aesthetic learning processes, and knowledge on how to use aesthetics in a Storyline, and in relation to education for sustainable development. They have both worked with Storyline in teacher education, and have written book chapters about drama and aesthetic learning. To prepare for the event all participants navigate on the material to the evaluation tool such as the toolbox "To visualize the immeasurable" and "My sustainability skills". These tools can be used for planning and assessing teaching and learning for sustainable development.

5.5.2. Participants' Recognition

Did your project make use of European instruments like Europass, ECVET, Youthpass, ECTS etc. or any national instruments/certificates for recognition or validation of the learning outcomes of the participants in the learning, teaching or training activities?

No

If you have used other recognition/validation instruments, please describe them:

NO

6. Follow-up

6.1. Impact

What was the project's impact on the participants, participating organisations, target groups and other relevant stakeholders?

The project's aim to develop education for resilience and sustainability has successfully been fulfilled in many ways. The three schools and the teacher education establishments have all developed and introduced new approaches to teaching and learning to match the need to deliver multidisciplinary content.

These changes are not just a pilot study but will continue as part of the education at these organisations. Katarinaskolan and Backatorpsskolan have implemented the results to a whole school approach, which is seen as an achievement. In that sense, the project has had a significant impact on the participants, participating organisations, and the main target groups: pupils and student teachers. Student teachers are crucial in the sense that they may act as intermediaries, and the younger students are potential influencers who can put pressure on local politicians and policymakers.

The universities have involved their heads of departments in the project's different events, which has enlightened them regarding Storyline and/or education for resilience and sustainability, and the aspects that have been highlighted in the project. In that sense, the project has had an impact on the departments' top level as well as on one main target group: student teachers. The project has given the researchers new networks, both with researchers and with teachers, which may advance research careers. A goal for Åbo Akademi is to improve the sustainability handprint, i.e. to improve the positive impact Åbo Akademi can have on sustainability. The project has enhanced this goal.

Through the project, the participants have gained a deeper appreciation for the interdisciplinary nature of sustainability issues, and increased understanding of the complexity of teaching for sustainability, which has enabled them to approach teaching and learning about sustainability in a more holistic and integrated manner.

The project has revealed the participating countries' similarities and differences regarding governance systems and school practices and deepened the collaborations with the universities and schools within the project, which NAV points out.

As a result of the action research, Häggström from University of Gothenburg initiated and edited a common anthology, based on the action research, in which the teachers, principal, and student teachers from Backatorpsskolan participated and wrote together in different clusters. This anthology was presented and debated at the Swedish Book Fair in 2022. In addition, Häggström has published two academic articles and submitted another. Some of the results from this research will also be published in three Norwegian articles. One is co-authored with one of the former student teachers, now a teacher employed at Backatorpsskolan. Several articles are co-authored with researchers from Østfold University.

To reach out to school leaders, teachers, researchers, and teacher educators and other relevant stakeholders, all material produced during the project is published in the Educational Resource Bank. But the website does not promote itself – we need to spread the word.

We will continue to present the results of the project through our various channels. Both teachers at the schools, the project coordinator and the researchers have been accepted to present at several conferences in the autumn (2023). One crucial platform to spread the project's work and results is the next International Storyline Conference, in which teachers from the three participating schools will facilitate workshops, developed through the project, and the researchers will hold paper presentations, based on the research made during the project. Through these workshops and lectures the project's website will become known. The attendees at the conference are usually teachers and school leaders at all levels, teacher educators and researchers from universities and colleges. That way, school pupils and student teachers from different parts of the world will indirectly benefit from the project.

These discussions have helped our reflection and given us objective perspectives on education for sustainability, and on Storyline as a suitable pedagogical approach for teaching issues of sustainability. We have invited other stakeholders, such as The Swedish Society for Nature Conservation, to develop our evaluation tool. This kind of collaboration work will increase after the project as a continuing legacy.

We will also continue to develop the project's work – not only talk about it. The evaluation tool is still in progress, and since it is based on the GreenComp, published by the European Commission, we have thought to contact them, which would be a great way of spreading and enhancing the project's work. Another possibility is to apply for an Erasmus+ Key Action to develop the tool.

The project has also produced many video films, for which we are looking for new international publishing platforms.

6.1.1 Impact of the project at the local, regional, European and/or international levels? Please provide qualitative and quantitative indicators.

The project has had a qualitative impact on the participants by fostering a deeper understanding of a pluralistic approach to sustainability. By engagement in the project's activities, participants have gained a heightened awareness of the interconnectedness and interdependence of various aspects of sustainability. They have come to recognise that sustainability challenges cannot be effectively addressed by isolated actions or narrow disciplinary lenses. Rather, a comprehensive understanding of sustainability requires considering the complex relationships between environmental, social, economic, and cultural factors. This deeper understanding has transformed participants' pedagogical practices and perspectives on teaching for sustainability, which in turn has had a substantial impact at the local level in the participating schools and universities, and implications for participants' teaching practices and the educational experiences of their students.

The project has had an impact at the University of Gothenburg, which now has implemented sustainability as a central content, in a Storyline about multimodal literacy education for primary school learners.

The following quotes show that the project has had an impact on both what and how the teachers create teaching and learning situations, and thus what content their pupils are able to learn, and how they engage in sustainability.

"We hear about sustainability and resilience every day, but how to build these two very important aspects in our daily lives at school is a whole new concept. As a school that is located in the suburbs of a small town, our possibilities are vast. We have lots of property around our school, and this is one of the biggest advantages for developing sustainability and resilience."

"Working these first months on the Erasmus+ project with Covid-19 limitations was not easy. We had to change and adapt many activities. All these limitations and finding new ways of teaching are a great example of resilience. We have found new ways of adapting our lives and teaching in completely new and unknown situations. Finding solutions and doing our best to execute the plans has been a real challenge but also a great experience."

This pluralistic approach to sustainability has the potential to influence participants' engagement with other stakeholders and the wider community, on a regional level. They can now engage in meaningful dialogue with policymakers, community leaders, and other relevant stakeholders to promote sustainable practices and policies that address the diverse needs and aspirations of society. The Slovenian school were invited to the radio station to talk about the project and the changes they have made at their school. They have collaborated with the local community and can thus be a good example for the region of how to collaborate on sustainable food production. The Swedish school has invited school leaders, policy makers and organisations to their school, to show how they work.

The project has had a qualitative and a quantitative impact on teacher education and professional development in the participating countries. This impact can be seen in the incorporation of perspectives on sustainability in courses that were absent before this project began. It is also evident in new literature lists and developed Storyline workshops. The quantitative impact is significant, as it signifies the tangible outcomes and products generated by the project. Most outcomes are in English and produced for an international audience. For example, the educational films supporting the project's aims.

These films act as valuable resources for teachers, providing them with visual materials that may enhance their understanding of sustainability and how to teach it effectively.

Internationally, the project has an impact by contributing to the academic literature through several research articles. They, and the educational films, are also published in the project's website. An international audience of experienced teachers and educators from 25 different parts of the world participated in the conference 2022. All project members spread the on-going work, results and discussed these with teachers, leaders, networks and researchers.

The researchers have all presented the work at several international conferences.

The project has also developed an assessment tool and teachers' guide based on the GreenComp. This will support teachers to assess students' knowledge and skills across different disciplines, facilitating a comprehensive understanding of real-world sustainability issues.

In summary, the production of films, articles and assessment tools further enhances the project's reach and influence in promoting effective teaching for sustainability. These quantitative impacts contribute to the dissemination of knowledge, the enhancement of pedagogical practices, and the provision of valuable resources for educators in the participating countries and beyond.

6.1.2. How did the project contribute to the achievement of the most relevant priorities as indicated in the description section?

Overall, the project successfully contributed to the achievement of its most relevant priorities by enhancing understanding, further developing the Storyline approach, providing practical resources, and establishing a supportive network for the ongoing advancement of teaching for sustainability. One objective was to find collaborating partners, nationally, as well as internationally. Another was grounded in a need for classroom-based research regarding education for sustainable development and teachers' pedagogical approaches. Both these objectives have been fulfilled by the project. Firstly, the project focused on developing a deep understanding of teaching for sustainability among the participants. Through various activities, such as workshops, discussions, and the exploration of interdisciplinary learning, the project enhanced participants' knowledge and awareness of the complexities associated with sustainability. It has been fruitful to have included both schools and teacher education, as it allowed for examining practices in different contexts and on different levels, which has enriched our discussions and perspectives. We have learnt from each other, which was one of our main purposes.

We aimed at addressing the challenges we face today, in relation to various issues of sustainability and the challenges of how education can meet the new generations' call for action, which has been done in several ways during our meetings, conferences, publications and different activities, and through the collaboration between practitioners and researchers. For example, the Storyline approach has been tried out as a pedagogical tool and has been developed in the three participating schools in Sweden, Finland and Slovenia, and at the teacher education programmes at Østfold University in Norway, and at the University of Gothenburg, Sweden. This has been refined over time during the project using the new knowledge produced through the work, which has been shared and discussed at our project meetings. These meetings have been crucial for exchanging experiences, possibilities, and obstacles. Both practitioners and researchers have been active in exchanging new understandings of what, how and why to integrate issues of sustainability in a Storyline. The objective to find collaborative and proactive approaches has thus been achieved.

By incorporating sustainability themes into the Storyline methodology, the project provided practical resources and tools for teachers. The project team produced assessment tools that allowed for the evaluation of interdisciplinary learning and the measurement of values, attitudes, and feelings related to sustainability. A teacher's guide accompanied this tool, providing support for its implementation and assessment in the classroom. This was one of the project's prioritised achievements. This assessment tool can be used and developed by teachers everywhere.

The project emphasised the creation of a network to support the ongoing development of teaching for sustainability. By bringing together practising teachers, school leaders, researchers, and teacher educators, the project established an international network. This network facilitated the exchange of ideas, experiences, and best practices, fostering collaboration and shared learning. Through this network, participants were able to continue their professional development and drive further advancements in teaching for sustainability. We consider that bridging the gap between research and practice, as the strength of this project. As our work, results, and findings have been shared and discussed during the conferences and project meetings continuously, with other practitioners, researchers in pedagogy and education for sustainable development, and experts on Storyline, we have had great opportunities to develop and refine our work as it has been carried out. We are convinced that our experiences from classroom work and research results can be used in didactical discussions on all pedagogical levels and can be useful in developing future-oriented curricula.

The Swedish Schools Inspectorate is a government agency that examines the quality with which schools work to ensure that learning for sustainable development characterises the education as a whole. Their latest report, published 2023, states that more pronounced governance and/or more support could promote schools' work with learning for sustainable development.

To be able to give students the tools to be able to make independent and reflected choices in various sustainability issues, teachers need to have good knowledge in the area themselves.

All partners in this project have, in many ways over these three years, followed and applied the methodology on how organisations according to authorities such as The Swedish Schools Inspectorate now recommend in their reports and guidelines.

6.2. Dissemination and Use of Project Results

To whom did you disseminate the project results inside and outside your partnership? Please define in particular your targeted audience(s) at local/regional/national/EU level/international and explain your choices.

The results have been disseminated to various target audiences, including student teachers, practising teachers, teacher educators, educational researchers, curriculum creators, and international networks, through various channels. This dissemination aims to promote the integration of sustainability into education and empower educators to effectively teach for sustainability.

The main dissemination channel is the Educational Resource Bank, where all material produced during the project is published. Through the website, educators and stakeholders worldwide can access and benefit from the project's resources and insights. Video recorded lectures, key-note speakers, educational films, academic and short articles, and an evaluation tool are published. Our films have been shown during our conferences and other events and NAV, in Stockholm, has spread several of the project's films in their digital channels and made them available to a large number of social actors, nationally and internationally.

Two members of the project are actively disseminating the project's results within an international network for Storyline (Lockhart-Pedersen & Häggström). This network allows for the sharing of knowledge, experiences, and best practices with a broader audience, extending the impact of the project beyond its immediate context.

In Kocevje, the two participating teachers published their work in a local newspaper. They were also invited to be presented on the local TV to the local community. The presentation was about outdoor learning, food production and sustainability. In particular, they presented their Storyline about beekeeping. They presented it to the mayor of Kocevje and the municipality of Kočevje. This resulted in a cooperation with Podjetniski incubator; a business incubator that works on a local level to connect all schools and development of entrepreneurship, development of digitalisation and computer programming to develop entrepreneurial learning, cooperating with Slovenia and local beekeepers' association. They also had a presentation of the Storyline approach for teachers in local schools.

The Storyline approach was presented for the teachers at Katarinaskolan, Finland, and the teachers in the whole municipality had the chance to take part. Pupils from the whole school visited the class involved in the project, and the pupils guided the other pupils through the Storyline. The Director of Education in their municipality visited the school during an open door day and had a presentation about the Storyline approach.

The researchers and the project coordinator have disseminated the project's results through several conferences, such as the Swedish conference Pedagogiskt arbete (2023), the international conference ECER (2023), The Nordic conference TAL (2021) and more. The target audience in these conferences is mainly other scholars, researchers, and educational policy makers.

In June 2023 Backatorpsskolan presented results of the project at a national level, the conference Framtidens lärande. They presented, among other things, the assessment tool based on the Green Comp (EU) framework. The four main areas and the 12 competences of Green Comp are converted into a learning matrix called "My sustainability skills". The matrices and the accompanying tutorial for teachers can serve as support for the teacher in the planning and assessment of a theme unit, and excerpts from the matrices can be used by the students as support for individual reflection and peer response.

Teacher educators from Halden have been actively involved in the dissemination process. They have conducted workshops in other teacher education programs, facilitating a three-way collaboration between the Norwegian National Centre for English and Foreign Languages, Teacher Education at Østfold College University, and OsloMet University. Henriksson (Åbo) has spread the outcomes from the project, especially the assessment toolbox to a large group of teachers from seven different municipalities in Finland. The participating teachers in the in-service education courses can try out and implement the tools in their own teaching. Häggström was interviewed about the project's outcome at the national book fair (2022), in which the target audience is any interested public. She has also presented the results at Dalarna University, to colleagues within academia. Häggström, has published two academic international articles (open access). The target audience is mainly other scholars, researchers, and students. Henriksson (Åbo) has written an international academic article, which has been accepted. Since the articles are published with open access, anyone interested can download the texts and read them. Three anthologies about the Storyline approach will be published in 2023 and 2024, aiming at student teachers and teachers. Two of the project's researchers are editing these (Motzfeldt and Häggström), together with colleagues at Østfold University.

6.2.1. What kind of dissemination activities did your partnership carry out and through which channels? Please also provide information on the feedback received.

The project has hosted two conferences, used the teaching and learning events and associated events for spreading the work of the project. For example, the participating schools have welcomed visitors to talk about their work. School pupils were included in these events and have presented the Storyline work, both in national languages and in English. Some of these events have been video recorded and are now integrated in the films published on the project's website. They received a very positive response. In Slovenia, for example, many new teachers are now interested in the Storyline approach and want to learn more and to cooperate in new projects. In Finland, at Katarinaskolan, the project was presented to the entire faculty on various occasions. During the second autumn, teachers were able to seek assistance in their Storyline projects.

At two universities, Storyline workshops focusing on sustainability were conducted for both student teachers and practising teachers. They received positive responses from the participants, shown in short evaluation surveys. They highlighted the opportunity to engage directly with the content and methodologies, and especially to experience the methodology instead of only reading and listening to lectures about it.

The project has also been presented by means of several newsletters. For example, at The National Centre for English and Foreign Languages, which updated information through their newsletters. These newsletters served to reach a wide range of educators and curriculum creators, keeping them informed about the project's progress and outcomes. The two conferences were also spread through the channels of The Faculty of Education at GU and reached all staff at the four different departments at the faculty. Different events have been published on the website of Backatorpsskolan, and reach all staff and the parents, and others, who visit the site.

By using diverse channels, including websites, social media, practical workshops, newsletters, films, written texts, and presentations at international conferences, the project effectively reached and engaged with its target audiences, ensuring widespread dissemination of its outcomes and promoting the integration of sustainability into education.

The project has received valuable feedback from various stakeholders, highlighting the impact and relevance of its activities. Workshops conducted as part of the project have garnered positive feedback, with participants expressing a desire for follow-up workshops. This feedback underscores the effectiveness and value of the workshops in providing practical insights and guidance for implementing Storyline approaches in the context of sustainability education. The request for follow-up workshops indicates the participants' recognition of the importance of continuous professional development and their desire to further deepen their understanding and skills in this area.

One recurring theme in the feedback is the acknowledgement of the complexity of integrating Storyline and sustainability into teaching. Teachers have expressed that there is a shortage of time to fully explore and address the depth and breadth of these topics. This feedback highlights the need for continued support and resources to help teachers navigate the complexities and incorporate sustainability effectively into their instructional practices.

Another notable aspect of the feedback is the appreciation for the provided literature lists and the educational films produced as part of the project. Teachers have found these resources to be informative and user-friendly, enhancing their understanding of sustainability concepts and supporting their instructional efforts.

The use of assessment tools in the classroom has been met with positive feedback, with teachers recognising the tools' ability to provide a framework for assessing interdisciplinary learning. Although some teachers note that becoming proficient in using the tools may require additional time and practice, the feedback suggests that the tools have been instrumental in guiding and structuring the assessment process, contributing to a more holistic approach to evaluating students' progress in sustainability education.

The video films and the presentations at YouTube have been viewed several times. For example:

- Storyline at Østfold University College, 118
- Storyline på Katarinaskolan, 241
- Storyline Kočevje Slovenia, 37
- Storyline på Backatorpsskolan, 350
- Thoughts about Storyline, 50
- On pain and participation, transformation, and resilience in a living world by Pella Thiel, 66
- Eco-Anxiety and Environmental Education by Panu Pihkala, 61
Educational and social futures, climate change leadership by Anne Kathrin Peters, 67
- Teachers Role and relational pedagogy, by Margaretha Häggström, 86
- Storyline, Sustainability, Resilience and Hope, by Carol Omand, 64
- Storyline, Past, Present, Future, by Sallie Coverly Harkness, 90

6.2.2.

Erasmus+ promotes an open access requirement for all materials produced through its projects. In case your project has produced intellectual outputs/tangible deliverables, please describe if and how you have promoted free access to them by the public. In case a limitation was imposed for the use of the open licence, please specify the reasons, extent and nature of this limitation.

The main dissemination channel is the project website's Educational Resource Bank, where all material produced during the project is published at www.storyline.education

This website is open for anyone. Here, they can find video recordings, articles and concrete tools and resources for assessing interdisciplinary learning, values, attitudes, and feelings.

The website has five tab pages for different content. Under the tab page Resources, you find the planning and evaluation tool, which is currently still in progress. There is a short summary of the text in English: My sustainability skills - Tools for planning and evaluation: Embodying of GreenComp's competencies for a sustainable way of thinking.

Under the tab page Storyline, you find eight films produced by the project, ten short articles (in popular scientific style), three academic articles, which are also published with open access at the publishers' sites, open for all to use, and another article has been accepted, which also will be published with open access and on the project's website. Here, you also find 24 video presentations from the Storyline conference, which of course all speakers have consented to. Under the tab page The project, you find the project's events. Each event tab contains a description of the event, invitation letter and an evaluation of the event. Together, these tabs contain 44 video recordings/films.

The action research team at Backatorpsskolan has written an anthology, which is published in Swedish by Studentlitteratur. The researchers at Østfold University have written articles for three up-coming anthologies, in Norwegian. These anthologies are aimed at student teachers in Sweden and Norway. The decision to publish some of the research in anthologies printed in respective countries, rather than opting for open access, can be attributed to several factors. Firstly, the COVID-19 pandemic hindered data collection for research projects in Norway and Finland, which likely resulted in time constraints for publishing the research. Given the urgency to disseminate project results and insights, publishing in anthologies provided a quicker channel for sharing findings with a wider audience. However, to ensure broader accessibility, all research articles have been re-written in English in a simplified form and published as open access on the project's website. This approach allows for a wider dissemination of the research findings beyond the respective countries and enables researchers, educators, and interested individuals worldwide to access and benefit from the project's outcomes.

Publishing international research with open access typically involves a lengthier process that may not have aligned with the project's timeframe. The participants recognised the need for timely availability of information on Storyline and sustainability, and publishing in open access journals often requires more time for peer review, revisions, and administrative procedures. By choosing anthologies, which are often written in the language of the respective countries and tailored to the needs of practising teachers, the project aimed to ensure that the research findings would be more accessible and utilised by the target audience. It is worth noting that open access journals written in English may not necessarily be commonly read by practising teachers, as language barriers and specialised content can

limit their accessibility and relevance. The decision to publish in anthologies addressed this concern by making the research more accessible to teachers in their native languages and presenting the information in a manner that directly catered to their needs and contexts.

6.2.3. How have you ensured that the project's results will remain available and be used by others?

To ensure the long-term availability and utilisation of the project's results, several measures have been implemented. First and foremost, the project website will be continuously monitored and updated by the project's coordinator, Backatorpsskolan. This ensures that the website remains a reliable source of information, resources, and tools related to Storyline and sustainability. Regular updates will enable users to access the latest materials and to stay informed about any developments or additions to the project's findings.

In addition to website maintenance, language support for the project's resources will be provided by members of Storyline International group. This support ensures that language barriers are addressed, allowing a wider range of educators and researchers to access and benefit from the project's results. By offering language assistance, the project aims to enhance the usability and accessibility of its materials, enabling individuals from diverse linguistic backgrounds to engage with and apply the findings in their own educational contexts.

To further promote the articles and anthologies that contain the project's research, dedicated web pages will be created at the universities involved in the project. These webpages will serve as platforms for showcasing the anthologies, providing information about their content, and facilitating access to interested readers. By utilising the existing online presence of universities, the project can reach a broader audience and ensure that the anthologies gain visibility among relevant stakeholders, such as educators, curriculum creators, and researchers. The project's participants will let the results and material influence continued operations in the areas in which they all work.

6.2.4. How did you see the potential to use this project's approach in other projects on a larger scale and/or in a different field or area?

The project's approach using Storyline methodology holds potential for application in various fields and areas beyond traditional education. By incorporating Storyline as a method, professionals in different fields can explore how to integrate sustainability principles and considerations into their design processes, infrastructure projects, and technological innovations. Storyline can provide a framework for investigating the complexity of sustainability and engaging stakeholders in collaborative problem-solving. Storyline can be used as a tool to involve community members, policymakers, and urban planners in envisioning sustainable futures for their localities. It can facilitate discussions and decision-making processes that integrate social, economic, and environmental dimensions of sustainability, leading to more inclusive and effective community planning initiatives.

Furthermore, sustainable development and business marketing can benefit from the project's approach. By incorporating Storyline into business education and marketing strategies, professionals can explore how to incorporate sustainable practices, values, and consumer preferences into their decision-making processes. Storyline can help businesses understand and communicate the complexities of sustainability, foster innovation, and develop strategies that align with sustainable development goals.

Building on the results from the Slovenian members' work, we see the potential of enhancing cooperation with local communities and with, for example, artists, politicians, and others. This project has given many opportunities for a school to make new international contacts to other schools, and to reach out and meet researchers in the field of Education for Sustainable development, school improvement and policy-making. Teaching should always be based on researched knowledge, and this collaboration with researchers opened new opportunities for development. This approach brings a whole new frequency to the teacher's work.

The project has been a foundation for two research applications. One to the Swedish Institute for Educational Research, and one to Gunvor och Josef Anérs foundation. These applications are an opportunity to build on the experiences and knowledge developed within the work at Backatorpsskolan and the project as a whole. Together with one of their colleagues, Motzfeldt, at Østfold University, Häggström at GU will edit a special issue for an academic journal. They will invite researchers who address issues of sustainability in its broadest sense.

6.3. Sustainability

What are the activities and results that will be maintained after the end of the EU funding, and how will you ensure the resources needed to sustain them?

By choosing open access channels there will be no financial barriers to using the project's results. The website includes all the other material and links to journals.

The renewal of the Storyline approach has led to new templates and didactic tools for ways of working with sustainability. All has been published on the website, can be used, and developed further by any teacher and school. The Storyline community has used templates in such a way. Through upcoming conferences, the renewed templates will be spread and developed again and again.

The project has identified several activities and results that will be maintained after the end of EU funding, and their sustainability will be ensured through various means. Firstly, Backatorpsskolan will prioritise sustainable development at all levels of their educational practices. By integrating sustainable development as a key priority, the school will continue to emphasise the importance of teaching for sustainability and uphold the project's objectives in their curriculum and pedagogical approaches. This commitment will provide the necessary resources and support to sustain the activities and results achieved through the project.

Furthermore, the participants' new understanding and engagement with the topic of sustainability will serve as an essential resource for the continuation of the project's impact. While not in monetary form, the participants' increased knowledge, skills, and motivation in teaching for sustainability will contribute to the ongoing success and maintenance of the project's outcomes. Their dedication and passion for the subject will drive the implementation of sustainable development practices in their classrooms, ensuring that the project's results remain alive and relevant even after the end of EU funding.

By leveraging the internal resources of Backatorpsskolan, such as their commitment to sustainable development, and harnessing the participants' newfound understanding and engagement, the project aims to secure the resources needed to sustain the activities and results achieved during the EU-funded phase. This approach ensures that the project's impact extends beyond the funding period, creating a lasting and self-sustaining framework for teaching and promoting sustainability in education.

During the process of writing the application The National Agency for Education in Sweden published a final report (U2019/01622/S) which stated that the challenges described in Agenda 2030 are complex by nature which suggests that education will benefit from being cross curricular. Moreover, the National Agency stated that today's education is missing cross curricular methods. They also stated that teachers are asking for guidance for how to work with learning for sustainable development. They stressed that both teacher training, and relevant pedagogical tools are missing. Their analysis was that there must be revisions in the steering documents, and consequently, such revisions at that time, have been presented to the government. In the neighbouring countries Norway and Finland, the curriculum had already been revised to promote cross curricular work, but even their teachers are asking for guidance.

We believe that the project's results, with further development, can be of great interest to the development of a European sustainability competence framework or national authorities working with school development.

Go ahead and use it!

7. Project Summary - (5000) not in Mobility Tool

Background: Why did you apply for this project?

What were the needs you have addressed?

This project was initiated by Backatorpsskolan, Gothenburg, as the school board recognised the goal 4.7 in Agenda 2030: *Education for sustainable development and global citizenship* as a considerable challenge. Thus, the application for this project was driven by the recognition of the pressing issues related to sustainability and the need for education to meet the aspirations of the new generations. Knowing that many students have climate anxiety, and that some of them regard school's education less relevant made the project urgent. Traditional school framing, divided into several different subjects, describing reality in small parts, no longer addresses the issues students are looking for. *Fridays For Future* has spread all over the world and some students feel that it's more relevant to protest than to attend school. The underlying need for the project was to find ways of changing our schools to be more relevant for students.

The school acknowledged the need for help from other countries' curriculum work, to develop teaching approaches for sustainability and resilience, and the need for including researchers to analyse these approaches. Schools in Slovenia, Iceland and Finland were asked to participate, as were the universities of Gothenburg in Sweden, Østfold in Norway and Åbo Akademi in Finland, since they were all working with sustainability and student-centred teaching. In addition, two organisations from Sweden, NAV and Storyline Sweden were invited; both have long experience in innovation and learning. We wanted to bring researchers, schools, and professionals outside the school system together to try to develop new ways of dealing with sustainability issues in schools, but also to examine closely the personal, and dynamic group processes, when working with the way we view the world and how we affect it. We therefore wanted to bring together individuals from different age groups, disciplines, trades, and organisations.

Our project sought to address the challenges we face today and the challenges of how education can meet the new generations' call for action as demonstrated by the massive school walkouts in 2019-2020. The participating partners in this project wanted to develop current strategies for sustainability education by moving away from instructing students in predictable directions towards providing them with a sense of agency. We wanted to develop teaching and learning methods that empower students and enhance qualitative pedagogical methods by using the student-active Storyline approach as a framework, as it is interdisciplinary, and various school subjects are intertwined. We sought to create stories that inspire students as well as teachers, to view themselves as agents of change to be better prepared for an uncertain future. Subsequently, the underlying aim was to develop the pedagogical approach of Storyline itself, foremost as a pedagogical tool to increase learning for sustainability.

We wanted to gather people with different backgrounds to share and discuss how we could develop the Storyline approach to engage students. By analysing different Storylines we wanted to identify what, how and why the elements in a Storyline work. Also, we wanted to contribute new knowledge to the Storyline community as well as to the broader educational field. By engaging researchers from three different countries we wanted to study the approach and shed light on the method's opportunities and obstacles. We believed it was crucial that practitioners and researchers collaborated to find these results.

Objectives: What did you want to achieve by implementing the project?

The project aimed to develop and provide new knowledge about the pedagogical approach of Storyline in relation to Education for Sustainable Development. We expected an enhanced understanding of how to use Storyline in the twenty-first century in general, and how to use Storyline in relation to education for sustainable issues specifically. We expected that the project, while developing the Storyline approach as a tool for teaching and a method of learning about sustainability, would have an impact on students, teachers, teacher educators and the research community. The impact we wanted to achieve was on a practical level – e.g. by developing and testing pedagogical tools for teaching and learning about sustainability – and on an intrinsic level while supporting the feeling of agency, and competency to act towards sustainability, amongst students, student teachers, teachers, and researchers. This enhanced understanding encompasses all participants, the participating organisations as well as target groups, although on different educational levels, still interlinked. Specifically, we expected that the project would have both an impact on a practical level in schools, and on a theoretical level amongst scholars in the educational field. Conversely, we consider the practical and the theoretical aspects of education as a reciprocal process, hence both practitioners and scholars need to enhance their understanding of both sides of this coin. In turn, target groups, such as students, would benefit from the development.

We wanted to spread the project's results by creating a webpage including research results, and practical experiences; that is, a resource bank. For example, we wanted to develop pedagogical tools and theoretical understandings on different educational levels, and at the same time on different regional levels. That was to have an impact 1) locally, on the schools in the participating countries, 2) nationally, on the Universities included in the project, 3) globally, on the Storyline community. Though, we hoped that the pedagogical tools would be spread among schools in the regions and hopefully extend to other regions and eventually, also nationally. Our plan for that to happen was to make the tools known through, amongst other things, a website, video recordings, instructions, and other multimodal texts. In addition, we hoped that the theoretical understanding could reach out to teacher education, teachers, head teachers, scholars and others interested in how to develop education regarding sustainability and resilience. Furthermore, we hoped that the pedagogical tools and theoretical understanding would influence the Storyline community and inspire new projects that will develop Storyline and education for sustainability even further.

By implementing the project, we aimed to:

1. Engage researchers, teacher educators, teachers, and students in **developing the Storyline approach as a pedagogical tool** for teaching and learning about sustainability in the twenty-first century. Through collaboration we aimed to refine and expand the effectiveness of the approach.
2. Allow the participating partners to meet for **in-depth discussions** about their experiences with teaching and learning about sustainability. We aimed to foster collaboration and networks of participation both locally and internationally and sought to create a platform for sharing experiences and exchanging best practices.
3. **Develop pedagogical tools** for teaching and learning about sustainability and make these tools available to teachers and researchers globally. The pedagogical tools are shared through an open Educational Resource Bank that focuses on approaches for teaching and learning about sustainability and resilience. It includes research articles, filmed lectures, teachers' plans, assessment tools and motivational videos.

4. **Develop competence** and foster long-term behavioural changes amongst students, student teachers, and teachers to become agents of change, supporting sustainability. Through education, we aimed to inspire students and educators to act in the areas they could influence, fostering changes in individual preferences, consumption habits, and lifestyles that support sustainability.
5. **Promote didactical discussions** on all pedagogical levels, that would be useful in developing future-oriented curricula. On a broader and longer-term basis, the innovative developed practices would have a positive impact on human behavioural changes, changes of individual preferences, consumption habits, and lifestyles that will support resilience and a sustainable worldview.

Overall, our goal was to prepare students for the future by equipping them with the knowledge, skills, and mindset necessary to address sustainability challenges effectively. We aimed to make a lasting impact by promoting sustainable behaviours, strengthening collaboration, and providing resources and tools for educators globally.

Implementation: What activities did you implement?

To achieve the overall aims of the application, we implemented the following activities:

1. **Six physical international meetings:** These meetings, with practising teachers, researchers, and teacher educators, provided a platform for in-depth discussions, sharing experiences, and exchanging best practices related to the implementation of the Storyline approach in teaching sustainability. They contributed to strengthening collaboration and networks of participation both locally and internationally.
2. **Over 30 international online meetings with the project team:** These virtual meetings allowed for regular communication and collaboration among the project team members from different countries. They facilitated coordination, progress updates, and knowledge sharing, ensuring a cohesive and coordinated approach to the project's objectives.
3. **Project research team collaboration meetings:** These meetings brought together the research team members to discuss and collaborate on research activities related to the project. They involved sharing research findings, analysing data, and discussing implications for teaching and learning about sustainability.
4. **Two international conferences:** These gave the researchers opportunities to disseminate the research results, and the involved schools to spread their developing school projects. One of the conferences was part of the first Multiplier Event, and also the 8th international Storyline conference (see point 8). This contributed to the broader academic and educational community. This activity helped to raise awareness and engage a wider audience in the project's goals and outcomes.
5. **Teacher workshops on Storyline and Sustainability:** These workshops were conducted to provide professional development opportunities for teachers. They focused on introducing and exploring the application of the Storyline approach in teaching sustainability. The workshops aimed to equip teachers with the necessary knowledge and skills to effectively incorporate sustainability themes into their teaching practices.

6. **Shared discussions and reflections on Storyline and Sustainability:** Throughout the project, shared discussions and reflections were facilitated among the project participants. These discussions provided a platform for exchanging ideas, insights, and experiences related to the implementation of the Storyline approach in teaching sustainability. They fostered a collaborative learning environment and allowed for continuous improvement and refinement of pedagogical practices.
7. **Shared experiences with Storyline and Sustainability:** The project participants actively shared their experiences, successes, and challenges encountered while implementing the Storyline approach in teaching sustainability. These shared experiences helped to build a collective knowledge base and provided valuable insights for further development and improvement of the approach.
8. **8th Storyline Conference:** This activity played a vital role in disseminating knowledge, promoting dialogue, and fostering a global community of educators committed to teaching sustainability through the Storyline approach. It exemplified the project's aim to develop pedagogical tools, inspire educators, and empower students to become agents of change for a sustainable future. By bringing together a diverse group of participants from different nations, the conference cultivated cross-cultural learning and collaboration. It allowed educators and researchers to share their insights, challenges, and successes. It enriched the collective understanding of effective pedagogical practices regarding sustainability issues and education. It served as a networking opportunity, enabling participants to establish connections, build relationships, and strengthen collaboration within the field of sustainability education. The exchange of ideas and experiences at the conference contributed to the long-term goal of enhancing collaboration and networks of participation both locally and internationally.

By implementing this activity, we intended to engage stakeholders, promote collaboration, generate and share knowledge, and enhance pedagogical practices in teaching sustainability through the Storyline approach.

At the start, the project plan was revised because of the lower budget and financial changes necessitated by Iceland's withdrawal. For example, all planned activities at the Icelandic school had to be re-prioritised and spread out at other events.

Changes were also made because of Covid19, and in relation to the comments and critique of the project description received from the external experts in the application.

Results: What concrete outputs and other results did your project produce?

We have followed the project plan, and all planned outputs are completed and published in the Educational Resource Bank. We have published more material than originally planned, such as films, articles, lectures, and other resources. We have also used the resources ourselves in our own organisations. For example, Backatorpsskolan has used filmed lectures, teachers' plans, inspirational movies etc from the resource bank in a number of different ways and levels, according to our needs. As the material is easily accessible, it can serve as a platform for Inservice training for years.

There are many things that we would like to describe, to share the uniqueness of the project.

Classroom level

1. Interdisciplinary teaching methods have been used as a change from schools' traditional single subject teaching. The Storyline work has stretched over up to eight weeks at a time. This is unprecedented and has been repeated in Slovenia and Finland during the project. All students, classes and teachers have been involved in Storyline work once a year at Backatorpsskolan.
2. We have deliberately worked with emotions in the classrooms. Through the characters, students have discussed anxiety, worries and personal emotions. Hence, they have been able to express their own feelings.
3. We have focused on strengthening the students' sense of agency. The ability to act in a fictive situation may make them see that they can act in similar situations in real life.

School

1. We have acknowledged the importance of bringing the staff's worries, anxiety, and emotions into the discussions. Teachers need to start with themselves to be better equipped to integrate emotions in teaching.
2. We have found that it is important that the whole school share experiences if we want progress. All staff read the same texts, listened to the same lectures, and discussed different questions in depth at Backatorpsskolan. The result of this deliberate work, where all discussions about sustainability and resilience have been taken seriously, is a major change in the school's schedule, with more time for thematic work.
3. We have found that the school's headteacher and other leaders are crucial for the development of the school. Individual teachers can do great work but to get a lasting change at a school the leading team is crucial.

Teachers

1. During the project it has been possible for the teachers to attend conferences, meetings, and study visits abroad and to discuss what they have learned.
2. The teachers have had the possibility to work closely with researchers and have also been challenged to describe the work they do in an anthology led by a researcher.
3. It has been possible to support teachers who have shown special interest in certain fields. Some have had time to develop thematic work, others to develop an assessment tool and others to develop lectures and workshops that have been held for teachers from other schools.

Researchers

1. Researchers from three countries have worked closely together for a common goal and have written articles together.
2. They have been able to reflect on sustainable development through their different curriculums.
3. Teachers and researchers have met and become colleagues. The trust developed by that has made it possible for new collaborations. Together researchers and teachers have developed discussions based both on science and proven experience.

A Swedish anthology was published in 2022, edited by Häggström, and written by teachers at Backatorpsskolan and six student teachers from the University of Gothenburg. In addition, six student studies were undertaken, which resulted in six academic theses.

The research studies have also resulted in two practice-based chapters for a Norwegian anthology and four research-based peer-reviewed chapters for another anthology.

Website educational resource bank

The resource bank contains the productions that we set out to produce in the project plan and many more outputs, which have been used by participants in the project. We have continuously mirrored the process throughout the project. Every lecture has been published on the website instantly. We have over 50 filmed lectures, instructional films, interviews with teachers and researchers published, with English text to be accessible from all over the world.

The conference, the first Multiplier Event

The planned conference in Gothenburg in 2021 was postponed to 2022. Due to Covid19, we gathered people on-site, and participants on-line. In some places participants organised hubs where people met and took part in the conference together. By doing so they had the chance to hear all lectures, but also to discuss with others face to face. We think this is something that should be developed further since travelling by air is not compatible with sustainable living. Participating in conferences on-line individually limits interactions, but taking part as a group enables it, which may enrich the experience.