Norway • Montessori Students as changemakers

Special thanks to Cecilie Fosseidbråten, Henning Johannessen and Montessori Norway for this contribution

All Montessori schools and kindergartens in Norway are private, which in Norway means independent, in the sense that these schools are privately owned and have more freedom to choose an alternative pedagogy and method. However, private does not mean elite as all private schools and kindergartens are strictly regulated, not-for-profit, and receive between 85-100 percent state funding. Unique to Norway is their National Montessori Curriculum organised by the national interest organisation Montessori Norway. This national Montessori curriculum is approved by the Norwegian directorate of Education (UDIR) and regulated through the Independent Schools Act⁹⁰. In line with Norway's national curriculum renewal, the Montessori curriculum renewal also took place in 2020 and is an example of a curriculum that supports a holistic integrated approach to sustainability-oriented education.

Maria Montessori's main focus was to assist children and adolescents in creating a more sustainable, fairer and more peaceful world. This became the driving force for her work with children and education and is central to the pedagogy even today. Consequently, Montessori pedagogy is often referred to as "peace education". The values in Montessori pedagogy are intricately linked to and in line with, human rights and the UN's Sustainable Development Goals. (Montessori curriculum 2020).



School gardening teacher training course, NMBU



Front cover Montessori Læreplan 2020 illustration Marianne Karlsen

As of August 2021, 91 Montessori schools, 40 Montessori kindergartens and 10 associations are members of Montessori Norway. 32 of the Montessori schools have junior high schools. Norwegian Montessori schools (and all independent schools in Norway) receive 85 % state funding and thereby are accessible to most families. As well as the national curriculum aligning with a WSA, Montessori Norway have through their Montessori 2030 strategy. made a commitment to achieve two aims in alignment with the SDG 2030 agenda: 1. To help our students become the change-makers the world needs today and in the future 2. To make sure we as institutions are part of the solution in all we do"91.

Excerpt from Montessori Norway 2030 strategy •

"The Institutions as part of the solution: Our schools are institutions. These institutions purchase products and services. In these roles, we can take an active part. We can make sure we know the origins of the products services

we purchase – all through the value chain. [...] Do we ensure that our staff and student body include a diversity of ethnicity, gender, social background etc? Do we help the little girls and boys avoid gender stereotypes? Do we help the families understand how they can be part of the solution? Are we as carbon neutral as we possibly can? Are we using a financial service that is not involved in any financing of war, climate-challenging investments? Are we using our power to improve our own and our constituents' SDG friendly behaviour? These are just a few of the questions we will ask and find answers and solutions to together". 92

One example of this 'Montessori' approach in action comes from a cluster of schools situated in a semi-rural town called Drøbak, in southeast Norway. In 2016, Drøbak Montessori schools (a kindergarten, primary and lowersecondary), created and committed to their own 2030 strategy: "Children who start in kindergarten today will graduate Drøbak Montessori secondary school in 2030. What demands and challenges are placed on young people then cannot be fully anticipated. Nevertheless, it is our responsibility to give them the best possible skills/conditions for when they meet the challenges and

demands that will be placed on them when they advance into higher education, and / or enter the labour market. Our kindergartens and schools are part of the local community. We must have a clear role and voice in the community, to be an example, and an inspiration. The local community must know our goals and how we work to reach them. Everyone who is associated with Drøbak Montessori must agree to our vision and our goals and do their best to help live up to this." (Mervi Flugsrud, manager of Drøbak Montessori) The school strategy was part of the inspiration behind Montessori Norway's national agenda and is an example of how individual schools can support change on a national level. Ingrid Stange, founder of Drøbak Montessori, has spearheaded this national 'Montessori Norway' commitment to the SDGs through her role as the chairman of the Montessori Norway board and is also committed to inspiring schools around the world to do the same⁹³.

According to the heads of school, another 'top-down' influence, offering the authenticity and assurance needed to live-up to this commitment to the SDGs, is that all teachers have this focus included in their contract. For example, in the teacher contract for the primary school it states all teachers are required to use the school garden



Drøbak Montessori secondary school students preparing lunch for the whole school

and outdoor classroom in their teaching. Moreover, at board meetings, each school is required to give progress reports in connection to their yearly plan concerning the 2030 agenda, and within this ESD. While teacher autonomy is respected in these schools (historically teacher autonomy in Norway is very strong), this top-down requirement, that goes beyond the commitments upheld by following a national curriculum, helps support a whole school/staff commitment to a common goal. However, it is important to note that there needs to be flexibility and the ability for each teacher to find their own way. Cecilie Fosseidbråten, the primary schools head teacher describes this also in terms of student participation: "As with our students, some teachers are more interested in working outside than others and we really try to follow the students and teachers lead with this. While we require all teachers to interact and utilise the school garden, each teacher is given the flexibility to find their own approach. We want to find the balance between top-down support and bottom-up initiatives taking the lead."

Other top-down support includes Montessori Norway providing administrative support for teacher training course related to numerous aspects embedded a WSA ESD. For example, Montessori teachers have been offered to take part in a 2-year long education in School-gardening, a course provided by the university NMBU⁹⁴. Having this top-down support is further strengthening this as a resource for all teachers. It means more teachers, not just the ones already fully engaged, are receiving valuable high-quality training.

The schools also have close cooperation with various other national and international organisations such as United Nation Norway⁹⁵ (FN sambandet), as they are a UN-school. Through this initiative, teachers regularly join seminars and have access to other recourses. Practical examples of a 'WSA in action' is now presented by Drøbak primary and secondary school head teachers.

Contribution (1) by Henning Johannessen, head teacher of Drøbak Montessori secondary school: 75 students grades 7-10th (12-16 years of age):

The Secondary Schools vision⁹⁶ is grounded upon 5 principles 1. Freedom, 2. Individualisation, 3. Independence, 4. Cooperation, 5. Harmony with Nature. We have always (18 years) worked with sustainability-oriented education, but we intensified the focus in 2015 when the new SD goals were revealed. Our school website goes into more details about our pedagogical approach and everyday life at the school, and our involvement in national and international projects, such as Montessori Model United Nations⁹⁷. In our school we are really stressing the importance for students to be involved in their own learning experience/ process. We have a council meeting every week, where the

students lead in front of other students, teachers and the principal. All the students have responsibilities for daily tasks such as cleaning, making warm lunches, feeding the hens, doing the hives etc. This approach was also taken when we built our new school building, Norway's first **powerhouse school** "Architects from Snøhetta designed the new school, while Skanska has been responsible for the construction. The school is a powerhouse, a building that during sixty years of use will produce more energy than it has used. The calculation includes the entire process, from material production, transport and construction to operation and finally disposal" You can read more about the Powerhouse building process on the school website. Student participation has been a focus here also, even in designing the building as Mervi Flugsrud, manager of

Drøbak Montessori secondary school students in the schools local forest



Key WSA Principles in action at **Drøbak Montessori secondary school**

Capacity building

- Teachers are encouraged to follow their interests and go on different types of training course, such as, bee keeping courses – both students and teachers have attended this
- The Human Resource Development and staff hiring strategies consciously looks for people who are attuned to the school's philosophy and the SDGs

Vision, Ethos, Leadership & Coordination

- The school vision is to assist the adolescents to develop a strong sense of self-worth, identity and a clear understanding of their meaningful role in society at large. To prepare the students for adult life, to be able to feel a strong sense of independence both socially and economically
- Elements of the school are non-hierarchical, especially in the classroom, the aim is to work side by side with the student
- All the teachers and school leaders eat, play sports and free-time games with the students, there is no separate 'teachers lounge'

Pedagogy & Learning

- Micro economies are set up and managed by students. Using circularity and creating a student and teacher-led micro economy as an approach to teaching sustainability
- Student-led learning is promoted, for example through the in-depth projects where the students get to learn about whatever they want for 6 week periods at a time

Curriculum

 The school has the freedom to develop its own localized curriculum which is supported by the wider Montessori school network (nationally and internationally)

Institutional Practices

- The school building makes 'walking the talk' a natural part of everyday life as it is a 'Powerhouse' building.
 Meaning that during 60years of use the building (including construction) will produce more energy than it has used
- Students make money giving guided tours to visitors of the school showcasing the sustainability features inside and out
- Students directly contribute to the running of the school, they maintain the school ground, cook and clean
- Students are part of school decision making democratic decision making in action

Community Connections

- Citizenship science in our surrounding community such as working with local charities on water quality issues, also beach and nature clean-ups initiated by students
- Students take part each year in Montessori Model United Nations connects to the international community
- UN-school Norway National community connections

Drøbak Montessori explains: "We had a workshop where we divided into groups, worked out suggestions, went back together and presented different solutions to each other. Then there was a student who asked: "Can we not just put the school here, towards the forest?" And that is the proposal we went for. One should not shy away from having people with different skills and ages in such projects. Just like in a Montessori classroom, we benefited from both age mixing and interdisciplinarity."

Another example of student driven education is when we had all the students and teachers focusing on and cleaning up the small pond we have in our neighbourhood. We spent 3 weeks doing this, and we went all in. The result is a really nice pond, bird boxes, the stream of water is cleaner etc.

Being a small school with limited resource, we have taken it one step at a time. For example, three years ago we started beekeeping, this took time to establish with both teachers and students being trained in how to do this responsible

work. This is a classic example of what we like to focus on. It is a good thing for our local environment, and it gives us money into our microeconomy. We feed the result into our daily operations. In terms of challenges, being a small school, we are always vulnerable when for example a teacher leaves or gets sick for a period of time. We have 9 teachers, all specialists in different areas, and it is not easy to substitute this on a short notice. It is also important to have long term plans for the school concerning continuing education for the teachers, and we need to have a plan for the next 4 years describing all the things we are going to do. It is vital to make sure we have a security net when things fail, and to be prepared, to be dynamic and creative. For example, 4 years ago, the cod in the Fjord disappeared gradually. We have a small boat we go fishing in, but now we had to look for other sustainable resources in the sea. We focused on seaweed. Now we collect seaweed and use it for food, soap etc.

Contribution (2) by Cecilie Fosseidbråten, head teacher of Drøbak Montessori primary school: 80 students, 1-6th grade (age 6-11):

I feel the successes we have had are because of ESD naturally aligning with the Montessori pedagogy. At the primary school this is best seen in the cosmic education curriculum99. Another crucial factor is that all levels of management have been behind this from the start. Sustainability values have existed in our schools and curriculum since the school started in 1995. However, our focus on ESD really increased when our school garden and outdoor classroom was established in 2011 when a teacher committed to Environmental Education was employed. She coordinated numerous environmental education initiative at the school. One of our main focuses is that anything we start should be student led from the beginning and involve the students at every stage. This often means changes are slow, take time and often fail, but this is where we believe the real learning and culture of sustainability is fostered. In terms of challenges, figuring out how to collaborate with external actors has sometimes left us feeling overwhelmed. For example, Eco-Schools¹⁰⁰ and The Natural School Bag¹⁰¹ are two initiatives that offer schools support with ESD. Although we are very thankful for their support, the reporting and assessment required for these types of awards/initiatives can feel at odds with the way our school works. It is often difficult to capture all the different interdisciplinary and everyday sustainability actions going on in our school. We hope to find easier and more streamlined ways to monitor and assess our schools progress with all we are doing, as well as finding a way to be involved with external actors that is mutually supportive, and do not add to an already full administrative workload. We also feel that when embracing a WSA, it is essential to create opportunities for all students to be empowered in a role of responsibility. Establishing a school eco-committee supports this, as it creates more opportunity for active participation. It also holds us accountable to commit to continual improvements. While we have a sustainable focus at the schools, we are far from being fully sustainable. Our student committee also offers opportunities for active participation and peer to peer learning. The challenge though is for this not to be available to the 'few', but to create opportunities for all students to experience responsibility - and through this empowerment. The school garden can provide numerous ways to engage with sustainability. Some of what we have set up has cost very little, such as establishing bokashi composting and things we have managed to get donated to the school, like our greenhouse, while other aspects have been more expensive to set up like our outdoor kitchen and pizza oven. Students being able to follow food from 'seed to table' however continues to be an integral part of ESD at our schools. The questions that come from this are endless! The school ground also offers different ways for students

Key WSA Principles in action at **Drøbak Montessori primary school**

Capacity building

- Multiple Continued Professional Development courses attended connected to being a UN School, green flag EcoSchool and with project funded by DNS – The Natural School-bag
- Montessori Norway are also supporting and promoting schools to take part in professional development courses, for example the school gardening courses
- A sustainability-education coordinator in a 60% position was employed from 2011-2019 which supported 'in-house' capacity building

Vision, Ethos, Leadership & Coordination

- Strong top-down vision that directly addresses their commitment to the SDG's 2030 agenda. Everyone who is associated with the school must agree to our vision and our goals and will do its best to help live up to this
- Committed teachers that have officially agreed in their contract to support the schools ESD focus and teach lessons in the outdoor classroom

Curriculum

 A holistic and integrated approach to sustainabilityoriented education is embedded in the Montessori national curriculum

Pedagogy & Learning

- Interdisciplinary teaching is a core part of the Montessori pedagogical approach
- Student led learning
- Peer to peer learning
- Garden as classroom

Institutional Practices

- Outdoor classroom and garden established in 2011
- Eco-School committee and student council work together continually to support the whole school to become more sustainable

Community Connections

- Nature and local town as our classroom, 'uteskole' takes place every week where the students visit the local beach or forest all year round.
- Students are proactive in writing letters to motivate changes in our local municipality – more recycling bins, reporting damage for example

to get involved, as over the years it has become clear not all students want to grow food. Different activities motivate different types of students. Most recently a ground of

Students hard at work in the primary school garden and outdoor classroom

young boys built a willow walkway in the school grounds and this year will teach their fellow students to build another. This is another example of the domino effect, peer to peer learning and the student becoming the teacher. We are also witnessing this in eco-committee as they become empowered to talk about what they are learning and discussing with the rest of their class. This really helps to build a sustainability minded school culture that is motivated, instead of overwhelmed, by the sustainability challenges our world faces. One area we feel we could do better at is being active and form more connections in our local community. We hope we can do this by supporting other schools (more peer-peer teaching) to set up ecocommittees for example. We also have plans to involve more parents and local businesses. However, this needs to be done in a way that is manageable and slowly enough for us to learn from the process, including our failures and all our staff and students are involved.

Strengths/Prospects (from both schools)

- Long-term commitment to sustainability-oriented education
- Top-down support from all levels of managements
- Long-term core staff members (both the head and deputy head of the school have worked at the school since it opened 18years ago)
- CPD courses educating the whole school not just a few teachers.
- Support on all levels school board, Montessori foundation, school principles
- All teachers and leaders have ESD/2030 strategies are required in their contract –
- Legal requirement in work requirements in the contracts – including a requirements to use the outdoor classroom and garden in their teaching (outdoor classroom was a saviour in COVID!)
- Real-life responsibilities given to students.
- Garden/outdoor classroom helped to motivate us to do more -

Challenges (from both schools)

- A small school with only 9 teachers, all specialists in different areas, it is not easy to substitute this on a short notice
- Things fail, not all of the changes made succeed so there needs to be back up plans and a culture which responds positively to failure.
- Student led projects take more time and often fail BUT it is worth it! Students
- Not all students like everything (for example being in the school garden), there needs to be different task to suit and empower each individual child.
- To teach like this ideally needs small groups and a higher staff/teacher ratio

