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# Convivialist multilingual education: theoretical and practical suggestions from a Norwegian perspective

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The article aims at exploring the use of multilingual education to build a convivialist society. The article reflects theoretically on how to combine convivialist education and multilingual education. Today's hyperdiversity in society faces a dual challenge in accelerating and unsettling climate change. The convivialist manifesto entails five key principles namely: common naturality where humans are interdependent with nature; common humanity which must be respected in each person beyond any identity differences; common sociality, based on long-lasting and rich relationships in various human communities; legitimate individuation where the singularity of the person contributes to the common good; and eventually, creative opposition where conflicts are dealt in a fertile, peaceful and deliberative manner. These key principles are additionally subordinated to the need to control human desire for hubris and never-ending possession which represents a political alternative to material growth ideology. The concept of intertwining convivialist education and multilingual education is illustrated through a case study [Master dissertation] in a Norwegian school context focusing on the significance of mother tongue education in the school curriculum for mitigating climate change. The data for the case study was gathered by conducting focus group discussions with three mother tongue teachers and two Norwegian language teachers working in a language school for newly arrived immigrant pupils in Norway. The findings identified the limitation of the Norwegian, section 2-8, lacunas in the bilingual learning curricula and it argued for the need to strengthen mother tongue education and the role of mother tongue teachers in promoting sustainable development in the school curriculum. Based on the study's specific contextual findings and theoretical perspectives combining convivialist and multilingual education, the article infers that promoting multilingual education in schools can help mitigate climate change, and promote biocultural diversity and build a more convivialist society. The article thus aims to suggest some practical suggestions in a Norwegian plurilingual context and furthermore, it explores an expanded theoretical frame for convivialist multilingual education.

## KEYWORDS

convivialist paradigm, convivialist education, multilingual education, mother tongue education, climate change, biocultural diversity, sustainable development

## Climate change prevention through multilingual education? Introducing our discussion

Language is power and power is influenced by politics. Therefore, language policies are the result of political trade-offs. Consequently, the use of power can bring socioeconomic and cultural dominance to certain groups and subjugation to others, which affects not only the factual learning conditions of pupils at school but also illustrates inequitable language policies and educational debates at large. In this article, we aim to focus on the multilingual education of minority pupils in Norway and discuss to what extent its inherent conditions may mitigate and prevent climate change. We argue that multilingual education may contribute to promoting climate justice, not only social justice, and discuss through some concrete examples its connections to climate change prevention.

The issue of social justice through multilingual education is not a new one (Cummins, 2000, 2009). Research from around the world has efficiently shown that the presence of unequal languages in society plays a significant role in the perpetuation of social injustice. It is often driven at school by subtractive multilingual pedagogies based on racialized deficit-thinking views and a governmental lack of prioritizing minority mother tongues (Hauge, 2014; Spernes, 2020). We believe that educators must contribute to reversing such views and become agents of justice, also in adverse political settings. To do so, they must be better equipped with critical intercultural reflection (here including multilingual) going beyond liberal educational views by embracing transformative purposes (Gorski and Dalton, 2020). In short, to commit to the objective of equity literacy and biliteracy in their pedagogy (e.g., Cummins, 2009; Gorski and Swalwell, 2015) and to illuminate connections between oppression and anti-oppression practices in school and outside.

In other words, it places a demanding responsibility on the shoulders of educators. For example, bilingual teachers are filling in the critical voids in the school system that otherwise go unnoticed. They are a bridge between home and school, an irreplaceable support to pupils in their identity construction, and transmitters of values and knowledge. It becomes significantly important to train mainstream teachers to acknowledge the bilingual teachers' work and role at school (Dewilde, 2013; Brossard Børhaug and Helleve, 2021).

However, it is also crucial to recognize that educators for social justice in unequal multilingual societies face increasing challenges due to the escalating effects of climate change. As articulated by not only young activists, and scholars but also by international organizations, social justice cannot be dissociated from climate justice; climate justice is social justice (e.g., Holden and Linnerud, 2021; UNICEF, 2022; Green Peace Middle East and North Africa, 2023). This new call for justice therefore has a profound effect on what good education is, and the pursuit of social justice in intercultural education must align with the pursuit of climate justice (Brossard Børhaug, 2021, 2023). This assertion also calls for a transformative shift in the realm of multilingual education promoting more vigorously minority mother tongues along with majority languages, and for embracing alternative epistemological approaches (e.g., Escobar, 2016; Biswas, 2023). The notion of biocultural diversity captures well the twofold dimension of justice: resilient diversity is intrinsically dependent on strong biodiversity and cultural/linguistic diversity (Terralingua, 2014; Maffi, 2018). Languages and cultures have coevolved with nature, and the loss of nature is correlated with the loss of knowledge of local traditions mediated through local languages: they are destroyed by hegemonic socioeconomic cultures/languages (UNESCO, Terralingua, and World Wide Fund for Nature et al., 2003) In other words, maintaining high-quality multilingual education thus implies active engagement in climate change prevention, and further in this article, we will provide examples and suggestions mainly from a Norwegian point of view.

It also is worth noting that the connections between biodiversity and cultural diversity are stated at a global scale in SDGs,<sup>1</sup> objective 4, particularly in 4.7.

By 2030 ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development [SDG Indicators — SDG Indicators (un.org), authors' emphasis in bold].

While acknowledging the positive value of cultural diversity in this objective, we still may question how to measure the full extent of opportunities within education for sustainable development. In fact, as already mentioned, education does not always favor the interests of minority groups and might on the contrary reinforce the privileges held by those in power. Therefore, through critical intercultural education (Gorski and Dalton, 2020), indicators for measuring progress by UN recommendations [Metadata-04-07-01.pdf (un.org) must be carefully defined and expanded if needed].

Furthermore, the IPCC<sup>2</sup> report published in February 2022 indicates clearly in the objective of D.2 the value of cultural diversity in building climate-resilient development.

Climate resilient development is enabled when governments, civil society and the private sector make inclusive development choices that prioritize risk reduction, equity and justice ... Climate resilient development is facilitated by international cooperation and by governments at all levels working with communities, civil society, educational bodies, scientific and other institutions, media, investors and businesses; and by developing partnerships with traditionally marginalized groups, including women, youth, Indigenous Peoples, local communities and **ethnic minorities** (high confidence). These partnerships are most effective when supported by enabling political leadership, institutions, resources, including finance, as well as climate services, information and decision support tools (high confidence) (IPCC, 2022, authors' emphasis in bold).

In our context, we thus argue that multilingual and critical intercultural education must play a fundamental role in fostering climate-resilient development at political level and in educators' pedagogies. We will now turn our attention to the Norwegian context and examine the extent to which minority pupils are given adequate educational opportunities to contribute to such development. As already mentioned, the minority pupils we focus on in the article are distinct from the indigenous Sami people. These minority pupils are children with immigrant backgrounds, whether born in Norway or

<sup>1</sup> Sustainable Development Goals

<sup>2</sup> The Intergovernmental Panel on Climate Change.

having migrated to the country. They constitute 19% of the total pupil population in Norwegian schools (The Norwegian Directorate for Education and Training, 2022).

## Structural constrained conditions for mother tongue education in Norway

The minority language pupils entering the Norwegian school system often face the language of instruction as a barrier to their learning, Norwegian being the mainstream language of classroom teaching. However, Norway has put in its resources and efforts to facilitate a smoother transition of the newly arrived minority language pupils to their new school system and the new language of instruction. More specifically, the Norwegian Education Act (1998)<sup>3</sup> is designed to provide adapted instruction in Norwegian to pupils whose mother tongue is other than Norwegian or Sami, and they are entitled to get Norwegian as a second language (basic Norwegian) and mother tongue instruction and/or bilingual subject teaching if considered necessary as stated in section 2-8 of the Education Act. In other words, minority language pupils have the right to special instruction in Norwegian as a second language, and their competencies in Norwegian are assessed during that process (Egeberg, 2016; Selj and Ryen, 2019; NAFO, 2023).

However, the present learning guidelines are too limited, especially regarding the role of mother-tongue instruction (Dewilde, 2013; Øzerk, 2013; Spernes, 2014). The clause "if necessary" is highly ambivalent because the decision-making authority to identify a pupil's right to avail mother tongue teaching has not been clearly specified in the law and it leads to confusing practice. The question is, "Who will decide?." Practically, it is the school that assesses if the student is sufficiently proficient in Norwegian and the municipality decides if the mother tongue will be taught (Loona and Wennerholem, 2017; Norozi, 2019). Furthermore, even if the pupil is considered eligible for mother tongue teaching, it can only be taken for up to 2 years which is insufficient for proficient language development (Cummins, 2009). This situation has led to a wide variation in mother tongue instruction in Norway depending on local linguistic policies. For example, there were only 38 pupils receiving mother tongue teaching or/and bilingual education in Oslo out of 13,814 minority pupils receiving basic Norwegian whereas there were 1,640 such pupils out of 3,965 in the county of Rogaland in the school year 2023 (SSB, 2023). Local residency thus becomes an educational and political matter.

Generally, critical issues regarding the quality of transition conditions for that student group are taken up recurrently by research and the transition period is too little inclusive in law and practice (e.g., Jortveit, 2014; Brossard Børhaug and Helleve, 2021). This questions the notion of equality in education, one of the foundation stones of Norwegian public education policy (Øzerk and Kerchner, 2014; Spernes, 2020). Furthermore, the quality of education for these minority pupils is also impacted by the lack of the theme of sustainable

# A case study of mother tongue education in climate change prevention

A case study [master dissertation] was conducted to identify the ways to benefit from mother tongue education in climate change prevention (Manral, 2022). The study was undertaken in a language school located on the west coast of Norway; the school has teachers who teach basic Norwegian and teachers who provide mother tongue support to newly arrived minority language pupils. Focus group discussion (FGD) was employed to gain insights into the views of the two different groups of teachers for minority language pupils namely, mother tongue teachers and basic Norwegian teachers. Three bilingual teachers formed the informants of the mother tongue teaching group, and two basic Norwegian teachers were the informants of the basic Norwegian teaching group. FGD from the two groups of teachers generated empirical data on the benefits of linguistic diversity in combating climate change and nurturing biocultural diversity in Norway.

The data show that all the teachers acknowledged cultural diversity in the classrooms and helped pupils learn about each other's language, demonstrating that classrooms could become a platform for cultural exchange between the pupils and their new society. However, it also shows that sustainable development learning for immigrant minority pupils was largely limited due to its lack of priority in the curriculum discourse and because of the limited support for mother tongue education, even if all teachers emphasized the importance of fluency in language skills (Manral, 2022, p. 52–55). Languages and conceptualization are key elements for developing an appropriate interpretation of the effects of climate change as it is not only a scientific phenomenon but also a linguistic and cultural phenomenon (Fløttum et al., 2016; Fløttum, 2017).

More specifically, the teachers in basic Norwegian emphasized the power of vocabulary in grasping new concepts in the classroom but recognized that lack of fluency in Norwegian and the limited teaching hours allocated to Norwegian restricted the discussion on climate change. We also witnessed mother-tongue teachers engage in conversations

development. If climate change and loss in biodiversity are two of the top 10 existential threats to human survival that are caused by human activities (Sæverot and Torgersen, 2022, p. 3), it is high time that all students get involved in critical thinking to find strategies to the climate change issue (Castek and Dwyer, 2018). As such, the UNSDG agenda outlines sustainable development as a key educational objective in all education (UNESCO, 2017), and in Norway, sustainable development has become a pluridisciplinary theme in Knowledge Promotion (2020). However, sustainable development is not included in the mother tongue curriculum, and its absence is very noticeable as all other subjects are required to cover sustainable development, the basic Norwegian curriculum included.

<sup>3</sup> The Education Act has been revised several times; a new version is expected to be enforced 1 August 2024; the section 2–8 will be changed to paragraph 3–6 (https://lovdata.no/dokument/NL/lov/2023-06-09-30/KAPITTEL\_2-1#KAPITTEL\_2-1; Education Act, 2023).

<sup>4</sup> e.g., 2.5 Interdisciplinary topics (udir.no).

<sup>5</sup> Interdisciplinary topics – Curriculum in mother tongue for linguistic minorities (NOR08-02) (udir.no).

<sup>6</sup> Interdisciplinary topics – Curriculum in basic Norwegian for linguistic minorities (NOR07-02) (udir.no).

regarding the absence of sustainable development in their curriculum "we do not have it as a topic" (Manral, 2022, p. 39); and they were there *only* to offer mother-tongue support (p. 43). The mother tongue teachers thus expressed their concern for the expected large gap in sustainable development competence of minority language pupils vis-a-vis the Norwegian pupils (p. 52). Nevertheless, they used current examples in teaching to raise awareness about sustainable development related to their first and second languages. For example, they had discussions with pupils on topics such as waste sorting, sustainable sources of energy, and carbon footprint, aiming to enrich their multilingual knowledge of sustainable development (p. 41). The Norwegian teachers were equally concerned as they advocated for the inclusion of sustainable development from the perspective of social justice (p. 53) and emphasized the pluridisciplinary feature of sustainable development implying that it should be included in the mother tongue curriculum as well (p. 41).

In sum, all teachers pointed out the need to nurture the potential role of students in climate change prevention and cultural diversity by educating them about it and empowering them with language skills so that minority students could become important social actors in climate change. Nonetheless, a lack of resources and the objective of sustainable development in bilingual teaching restrained their practice. Being introduced to the concept of biocultural diversity, the teachers also showed a willingness to have it included in the curriculum (p. 62); a notion that is absent in today's curriculum for the mother tongue. However, some opportunities are present. As the Education Act (1998) section 2-8 provides a limited possibility of having mother-tongue teaching and considering the large immigrant pupil population, we argue that mother tongue and basic Norwegian education can better empower minority students in climate change prevention.

The organization Terralingua (2014) designed a biocultural diversity curriculum that familiarizes students with the three dimensions of life, biological, cultural, and linguistic. This pedagogical approach is based on the intricate link between the manifestations of diversity, the significance of local languages, and the traditional knowledge connecting people with the environment (p. 2). We, therefore, claim that education for sustainable development in the instruction of immigrant pupils is incomplete without better facilitation for the common sustenance of all species and communities, reconnecting with natural as well as social environment, and fostering cultural diversity in society (Batista and Andrade, 2021). We also argue that further efforts must be taken to acknowledge multilingual education and climate change prevention for the instruction of minority pupils, and we suggest here a new approach, which we hope can open interesting theoretical and practical discussions in a Norwegian and hopefully a larger educational context.

## Outline for a convivialist multilingual education

Let us start with a concrete example of how words reflect ways of beings and doings in cooperation with the local nature. The practice of "hesje/hesjing" in Norwegian is a local way of drying hay on the edge of a fence in rainy and cold West Coast summer weather in Norway (Dybdahl, 2023). Losing this Norwegian word would imply in the longer run losing the local knowledge about hay-drying in this specific context. In other words, through local linguistic and cultural

practices, individuals might learn to take care of themselves and care of nature. We will come back to that example later; we will now approach the topic of linguistic diversity in today's nature crisis on a more abstract level.

It is interesting and relevant to combine the paradigm of Convivialism with language preservation. This paradigm is coined in the second manifesto of Convivialism,<sup>7</sup> which is a broad-based humanist, civic, and political philosophical document aiming at restoring relations of cooperation between humans, and cooperation with nature; it has been conceived collectively by over 300 intellectuals worldwide (Convivialiste International (Internationale Convivialiste), 2020a, p. 11–12). It aims to capture the potentiality of a better future, a convivialist future endangered by profound ecological, political, economic, social, and moral threats. The collective authors argue that our present profit-based ideology requires a foundational paradigm shift for what it means to be human and what is progress (p. 33) – a convivialist paradigm where Convivialism is defined as "[a] philosophy of the art of living together" (Convivialist International (Internationale Convivialiste), 2020b, p. 7).<sup>8</sup>

It is based on five principles and an absolute imperative. Firstly, it stipulates the principle of common naturality which is that humans are intrinsically interdependent with nature, and not standing above it. Secondly, the principle of *common humanity* expresses that there is only one humanity that must be respected beyond identity differences. Thirdly, the principle of *common sociality* appreciates that the greatest wealth is building concrete relationships with other humans in various communities. Fourthly, the principle of legitimate individuation implies that everyone's singularity should contribute to community upbuilding. Finally, the principle of creative opposition where co-creation is learning to encounter opposition in a non-destructive way in accordance with the above-mentioned principles. These five principles are interrelated and limit each other's possible deviance if selected and standing only on their own. Furthermore, the five principles must be subordinated to a meta principle, the absolute imperative of hubris control. This imperative is essential as hubris is a desire for supremacy, and never-ending possession, a desire to stay within any community and everyone (Convivialiste International (Internationale Convivialiste), 2020a, p. 42-45; Convivialist International (Internationale Convivialiste), 2020b, p. 24).

In what ways could this declaration enrich multilingual education? Firstly, it is important to note that it is conceived as "a universalizable doctrine, one that can adequately wrestle with the emergencies of the day, even though its concrete application will necessarily be local and cyclical" (Convivialist International (Internationale Convivialiste), 2020b, p. 7). It thus opens for flexibility, and creativity in local convivialist adaptations, here in education. Furthermore, we believe that it is possible to combine these principles with multilingual

<sup>7</sup> The manifesto originally was published in French (International Convivialiste, 2020) and translated into English (Convivialiste International (Internationale Convivialiste), 2020a) [spice]. In the references, we differ from the French version by using 2020a and from the English version 2020b and consequently write Convivialist International.

<sup>8</sup> An English translation of the manifesto written originally in French is to be at: THE SECOND CONVIVIALIST MANIFESTO: Towards a Post-Neoliberal World|Civic Sociology|University of California Press (ucpress.edu) (2020).

education. Our argument is that through languages taught at home and at school, children learn for instance to recognize and name plants, to know which ones are comestible or/and medicinal, and associated cultivation practices.

Additionally, we claim that combining language and culture preservation contributes to climate resilient development. Looking at the first principle, common naturality, communication is a phenomenon that all living creatures share. The bees' languages or the mushrooms' communication with trees begin to be well-known to the public (e.g., Wohlleben, 2017). Why should humans have a forehand of languages?

Regarding the second principle, common humanity, multilingual education also advocates that all human languages should be protected because they are part of our common humanity (Maffi, 2018). Languages make humans part of a rich family that must be respected for its diversity of identities and because they are adapted to and reflect the local context. Reading a child story at bedtime, a father in an Asian country might speak of the tiger's eagerness to eat the cattle or the danger of a snake, and a father in Europe might tell of the wolf's appetite to eat sheep and goat in the mountain pasture. Portraying animals in children's stories often invites children to relate to the nature around them.

As far as the third principle is concerned, common sociability, it indicates that the greatest wealth is building relationships with the human and the non-human Other. Through multiple examples of linguistic landscapes, individuals can become more critical of linguistic, cultural, and nature homogenization and its reduced capacity for adaptation to rapid climate change effects, for instance, with mass cattle farming, water overuse, and land degradation. Vocabulary in a language can act as a tool in building connections with nature. Hindi, for instance, has multiple synonyms for words related to nature: there are around 10 words for ocean (sāgara, samudra, samndara, pyodhi, vāridhi, sindhu, ratnākar, vārīśa, udadhi, ambudhi, araṇava), and mountains (pahāṛa, parvata, girijā, śaēla, naga, girī, bhūdhara, kaṭidhara, achala). The different synonyms are used depending on the context, some are used in day-to-day communication while others are used more often in science, geography, geology, poetry, and literature. For example, while the word mountain has multiple synonyms the word pahāṛa is often used in vernacular Hindi; the word parvata is commonly used in articles in geography, geology and science; the words girijā, śaēla, naga, girī, bhūdhara, kaṭidhara, achala are found more often in poetry and literature. One can imagine how this rich vocabulary can help the child multiply and strengthen his/her bonds with nature. It thus boosts the art of living together by promoting the capacity of legitimate individuation and her understanding of common naturality.

As such, the fourth principle, legitimate individuation underlines the importance of everyone's inclusion into the community, and clearly, it must imply the ability to express oneself in one's mother tongue and/or any other language at disposal (Cummins, 2009; Øzerk, 2016). Being able to use the word "hesje/hesjing" is becoming better able to reflect on changing weather conditions during a Norwegian summer. Other examples could be provided: using mother tongues from desertic areas might help to reflect on how to adapt local habitat and food production to recurrent and longer drought periods in South-Europe. Minorities might thus retain knowledge in their first language which is worthy for the learning of majorities to pay attention to and respect for the common care of nature.

The last principle, mastered and creative opposition, implies co-creation through not only cooperation but also by welcoming opposition in a non-destructive way. Based on fair linguistic practices, humans can develop a more nuanced understanding of reality and boost their creativity (Øzerk, 2005; Egeberg, 2019). It may not only boost the capacity of adaptability, but also solidarity practices, a key factor in climate resilient development (IPCC, 2022). For example, the word "dugnad" in Norwegian means voluntary work (Nordbø, 2023). The teachers discussed that apart from its literal meaning "dugnad" also depicts a dimension of Norwegian culture in relation to nature; dugnad can signify community work taking care of and appreciating nature while being responsible for it as a community. Therefore, dugnad is not only a word but a way of acting/being, and parallels can be made from other cultural settings, for example, Ubuntu and Ubomi.

In sum, these principles may contribute to curbing the profound desire of hubris, by sharing nature through the diversity of cultural and linguistic traditions; through efficient multilingual education, notions of what is to own and what is to share something may be approached creatively. Take for instance the existence of trees. What trees, names, and cycles do they have around the globe? How do they provide shelter for humans and other animals/plants? Through multilingual education, pupils may be more aware of conviviality in praxis, the art of living together which we also may understand as hospitality as the earth is hospitable for humans (Meunier Kjetland and Brossard Børhaug, 2023).

## Convivialist multilingual education: some practical suggestions

Returning to the Norwegian school context, we claim that maintaining high-quality multilingual education for an active engagement in climate change prevention requires efficient mother tongue instruction. In the case study (Manral, 2022), the teachers explained the importance of not depriving the child of the opportunity to learn in a multilingual context. It addresses especially the convivialist principles of common naturality and sociality.

Therefore, the Education Act (1998) section 2-8, revised in, 2023 to section 3-6 (Education Act, 2023) and the current curriculum (Knowledge Promotion, 2020) must be amended. More specifically, mother tongue instruction should not be considered as an option, and 'if necessary' should not be mentioned in sections 2–8/3–6. Frequent activities in mother tongue should be given to all minority pupils no matter their proficiency in Norwegian (Øzerk, 2009; Egeberg, 2019) challenging a steady decrease; in 2022, national statistics show that only about one-fourth of the minority pupils are getting bilingual instruction and there are huge differences between counties (SSB, 2023, Tables 6 and 7). In addition, sustainable development should be considered a multidisciplinary objective in the curriculum of mother tongue education as it already is stated in the curriculum of basic Norwegian.

We also argue that mother tongue education must be explicitly associated with climate change prevention. Terralingua's initiative of the curriculum (2014) provides an example of convivialist multilingual

<sup>9</sup> Ubuntu: A South African philosophy of life that shapes and carries Ubomi – UBOMI.

education where the five convivialist principles can be addressed. In this innovative multidisciplinary curriculum approach, the overall aim is to draw from and bring together humanities, social sciences, and the natural sciences, for instance, biology, environmental studies, geography, anthropology, linguistics, history, and political studies, and make biocultural diversity a prominent notion to learn in education (p. 4, 6). The diversity of life is understood as a web of life with profound interlinked relations between humans and nature (p. 4-5), and advocates for what the Convivialists call the principle of common naturality. Additionally, the curriculum initiative seeks to highlight the relevance of biocultural diversity at multiple levels, in the students' lives, and local and global communities, through "youth's budding interest in the world around them and their place in it" (p. 7). Its educational approach may in other words sustain the convivialist principles of common humanity, sociality, and legitimate individuation as well as creative opposition within an inquiry-based learning framework and student reflective practice (p. 8). The place given to the mosaic of traditional indigenous cultures and minority languages around the world also gives way to different philosophies and holistic worldviews which may contribute to promoting problem-solving skills, and the resilience of humanity (p. 8-9), an objective in line with the convivialist principle of common humanity and sociality.

Finally, the overarching questions about «what is happening to biocultural diversity worldwide, why are we losing biocultural diversity and what can we do to counter this loss? (p. 11) also promote the objective of critically discussing the convivialist meta principle of hubris control. Terralingua's curriculum initiative has resulted in some implementations in American and Canadian educational contexts, and we hope that it may also provide some inspiration for reforming Norwegian multilingual instruction for all pupils. In addition, it shows that better inclusion of minority pupils (Nes and Nordahl, 2015) and their teachers must take place (Brossard Børhaug and Helleve, 2021). Inclusive practices in times of climate change require more climate resilient linguistic policies and curricula.

## Concluding remarks

Therefore, all teachers, including mother tongue teachers, have an important role to play in promoting educational practices that mitigate and prevent the effects of climate change. This perspective was also shared by the teachers in the study in Norway (Manral, 2022). However, the teachers' pedagogical choices are not sufficient; they must be carried out by comprehensive educational reforms for sustainable development, and in multilingual education, mother tongue instruction must gain acknowledgment as it may contribute to promoting biocultural diversity (Maffi, 2018) and sustainable cultural diversity (SDG 4.7). Biocultural studies have revealed that while diversity in nature promotes linguistic diversity and *vice-versa*; loss of diversity in nature negatively affects linguistic and cultural diversity (Terralingua, 2014, p. 4). Therefore, it becomes highly important to nurture linguistic and cultural diversity today.

The case study of Norway sought to highlight the significance of mother tongue education for climate-resilient development and there is high confidence that governmental bodies (educational included) bear significant responsibility (IPCC, 2022). As language policies rest on power use and hegemonic

practices, greater concern for equity literacy (Gorski and Swalwell, 2015) and critical intercultural education (Gorski and Dalton, 2020) are required. Additionally, alternative paradigms about existence and sharing on an endangered Earth are welcome. The Convivialist paradigm represents an alternative viewpoint that envisions a future characterized by convivialism and analyses critically ideological beliefs based on competition and greed. It emphasizes key principles for living in cooperation with nature and humans. This paradigm offers a fresh perspective on multilingual education and helps in a critical examination of local language education measures. As such, Convivialist multilingual education (here through mother tongue education in a Norwegian school context) can have a positive impact on both education for sustainable development and the teachers' pedagogical practices. The present article opens the door for the possibility to nurture nature through multilingual education and this can have a larger effect if different mother tongues are provided support from the early years of education.

## **Ethics statement**

Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article.

## **Author contributions**

FBB: Conceptualization, Methodology, Supervision, Writing – original draft. MM: Investigation, Methodology, Writing – original draft.

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## Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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