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Innovation, implementation, knowledge transfer on Healthy Linguistic Diet project: practitioners and academics working in partnership³

Abstract

This paper focuses on the classroom innovation model named “Healthy Linguistic Diet” (HLD), which is conceptualised as an innovative approach to language learning with the aim to enhance our cognitive functioning throughout different life stages: from early childhood throughout adulthood to advanced age. HLD is an interdisciplinary approach which uses as its research base clinical studies from the field of neuroscience and applied linguistics research conducted in education settings. The model, conceptualised by Dina Mehmedbegovic-Smith and Thomas H. Bak, was presented within a MOOC promoted by the European Commission and by European Schoolnet and implemented by three Italian schools within a research project carried out by INDIRE (National Institute for Documentation, Innovation and Research) and coordinated by Letizia Cinganotto. Comments and reflections provided by the MOOC attendees and by the Italian teachers will be reported in this paper, showing the potential of the HLD model to develop: conceptual understanding of innovative approaches, awareness of linguistic diversity as a resource and sustainable longer-term practice improvements beyond the life of the project. The model can provide useful insights for inclusion, equity, plurilingual and intercultural dialogue for a democratic education in 21st century schools.

Keywords

Plurilingualism, inclusion, plurilingual repertoire, Healthy Linguistic Diet.

1. Introduction

This paper is an outline of a project and its follow up evaluation that resulted from several partnerships which were formed during collaborations facilitated by the European Commission, within the Thematic Workshops focusing on re-thinking literacies and language learning (2016-2018) (European Commission,

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³ The article was planned and developed collaboratively by the authors. Nevertheless, the writing of paragraphs 4,5,6,8,9 is attributed to Letizia Cinganotto, while the writing of paragraphs 1,2,3,7 is attributed to Dina Mehmedbegovic-Smith. The Abstract was written jointly by the both authors.

2016, 2017). There were four workshops during this period, which brought together academics and practitioners, European and national experts in the area of multilingualism/plurilingualism and inclusion. They were organised and led by Kristina Cunningham, who was at the time senior expert in charge of Unit for Multilingualism in the Directorate General for Education, Youth, Sport and Culture of the European Commission in Brussels. The workshops explored language competences, in mother tongues and foreign languages, as outlined in the Recommendations on Key Competences for Lifelong learning, adopted by the European Parliament and the European Council, in 2006 (European Parliament, 2006). One of the aims was to encourage policy makers and other stakeholders to 'think differently' when it comes to language education in schools and to provide inspiration for how language teaching and assessment could be designed in the future (European Commission, 2017, p 5).

Dina Mehmedbegovic-Smith was invited to present as an expert in the field of maintaining and supporting linguistic capital among bilingual and multilingual children with different backgrounds. In this capacity, she was invited to several expert panels too. In the early stage of the process, she submitted an input paper for discussion, entitled "What every educator needs to know about cognitive benefits of bilingualism". Her work on "Healthy Linguistic Diet" (HLD) is quoted in both the interim report, "Rethinking language education and linguistic diversity in schools" and in the final report, "Migrants in European schools – learning and maintaining languages". In 2019, the Council of the European Union adopted a "Recommendation on a comprehensive approach to language teaching and learning". HLD work is quoted in the Commission Staff Working Document, which contains the scientific background for the policy proposals in the Recommendation.

In 2018 and in 2022 the European Commission and the European Schoolnet promoted HLD via a MOOC on the Gateway's Teacher Academy, entitled "Embracing language diversity in your classroom". The course attracted some 2500 participants from 55 countries, with a well above average completion rate and 99 % positive ratings.

HLD has been embraced by the European Commission organisers as an innovative way to reposition language learning and use as a lifelong cognitive resource and support educators and policy makers in rethinking language learning and challenges.

The partnership between Dina Mehmedbegovic-Smith, Thomas H. Bak and Letizia Cinganotto grew from the collaborations in the events organised by the European Commission. Letizia Cinganotto, on behalf of INDIRE at that time, had the vision to plan and lead the implementation of HLD in Italy, which was conducted with a great success.

The authors of this paper would like to acknowledge the importance of the European Commission in bringing together academics, experts and practitioners in education and facilitating opportunities for the development of international partnerships, such as this one.

2. *Theoretical background*

Research has shown that engaging with multiple languages fosters neural plasticity, which is the brain's ability to adapt and reorganize itself (Bak & Mehmedbegovic, 2017). This plasticity is linked to the brain's executive functions, which include skills such as problem-solving, attention control, and cognitive flexibility. For example, bilingual individuals often demonstrate superior problem-solving skills compared to their monolingual peers due to their ability to switch between languages and adapt to different linguistic contexts, as well as have a greater ability to focus on relevant information while ignoring distraction (Bialystok, 2011). These cognitive advantages are attributed to the constant mental exercise involved in managing multiple linguistic systems, which in turn strengthens neural networks.

Several studies, which will be discussed below, without claiming to be exhaustive, provide evidence for the profound impact of multilingualism over a range of cognitive functions and at different life stages.

Bialystok et al. (2007) established that bilingual individuals outperformed monolinguals in tasks requiring executive control, such as the Stroop task, which measures the ability to manage conflicting information. Kovács and Mehler (2009) demonstrated that bilingual infants show signs of enhanced cognitive flexibility compared to monolingual infants, suggesting that the cognitive benefits of multilingualism begin early in life. Green and Abutalebi (2013) explored the neural mechanisms involved in bilingual language control, showing that managing multiple languages strengthens the brain's executive control network, particularly in the prefrontal cortex, which is known as 'neurological signature for bilingualism'. Several studies reveal that bilingualism can contribute to cognitive reserve, which may delay the onset of cognitive decline in older adults. Research indicates that bilingual individuals show a delay in the onset of dementia-related symptoms by several years compared to monolinguals (Craik, Bialystok, 2010; Bak, Alladi, 2014).

This evidence suggests that the cognitive benefits of bilingualism extend beyond mere academic achievement, reinforcing the need for educational frameworks like HLD that advocate for the inclusion of multiple languages in learning environments.

By reframing language learning as a lifelong cognitive resource, HLD offers a transformative vision for integrating language education into the broader goals of cognitive development and well-being frameworks, such as Healthy Schools London Strategy⁴.

The theoretical foundation of the HLD model draws on research demonstrating that bilingualism/plurilingualism positively affect cognitive processes, such as executive functioning and cognitive reserve, which can delay the onset of age-related cognitive decline (Craik, Bialystok, & Freedman, 2010). These cognitive benefits are not only restricted to high-status languages but extend to all languages,

⁴ <https://www.london.gov.uk/programmes-strategies/health-and-wellbeing/healthy-schools-london>.

thereby promoting linguistic equity and the overcoming of language hierarchies (Mehmedbegovic, 2011).

HLD model invites and challenges educators and policymakers to re-evaluate traditional approaches to language teaching, advocating for a more holistic perspective that values all languages equally and recognises their potential to enhance cognitive functioning.

3. What is HLD? A brief overview of its development, key features and contribution to the field of multilingualism/plurilingualism

Healthy Linguistic Diet is an innovative concept and approach to language learning and language use conceptualised by Dina Mehmedbegovic-Smith based on her research with multilingual learners in England and Wales (Mehmedbegovic, 2011). HLD model uses interdisciplinary evidence to advocate a shift in education practice and policy from positioning language learning as purely an academic subject to argue for its central place in our cognitive functioning and its role in building reserves which help us delay or limit the damage of certain illnesses such as: dementia, stroke, aphasia.

EU Commission had facilitated for Dina Mehmedbegovic-Smith, associate professor of applied linguistics and education, at UCL University College, London and Thomas H. Bak, associate professor of neuroscience at The University of Edinburgh, to meet in person during the Thematic Workshops as previously outlined, which was the beginning of their partnership. They have published several joint papers in which they use research evidence from neuroscience, applied linguistics studies and good practice in education to position language learning and use of multiple languages as a resource for cognitive enhancement (Bak, Mehmedbegovic, 2021, Bak, Mehmedbegovic, 2017, Mehmedbegovic, Bak, 2017). This shift in positioning language learning and use as a cognitive resource means that all languages, be they high status European languages, such as Italian and French, or languages of ethnic minority groups living in Europe, such as Kurdish or Amharic, have the same value in terms of contributing to one's enhanced cognitive functioning across the life span and better achievements across the curriculum, for children of school age.

HLD aims to enhance students' plurilingual repertoire, which includes home languages, by creating opportunities for the linguistic and cultural backgrounds of increasing numbers of multiethnic and multicultural learners in European classrooms to be used a resource in teaching and learning, for all.

HLD mission, as outlined on the HLD website⁵, is: 'to initiate and facilitate a shift in thinking about learning another language/other languages as a key skill or an academic subject, to understanding that using two languages is a key ingredient in our cognitive development and well-being. This is achieved by focusing on developing life-long habits of learning and using at least two, ideally three or more,

⁵ <http://healthylinguisticdiet.com>.

languages, based on awareness that these types of activities will help us equip our brains for enhanced cognitive functioning from early years to advanced age. These habits will result in better focus during early childhood, superior educational attainment and improved quality of intellectual life in adulthood and advanced age. An important part of HLD mission is to reach out to children, parents, communities with accessible knowledge on cognitive benefits of bilingualism. HLD goal is to make benefits of using two languages as widely known as the health guidance: two litres of water a day!

The best way to grasp HLD approach is to engage with the analogy between physical and mental health. Regular physical activity and a healthy diet are important factors in maintaining physical health. Similarly, language learning and its regular use provide essential mental exercise, leading to better brain health and an increase in 'cognitive reserve' resulting in later dementia and better cognitive outcomes after a stroke (Bak & Mehmedbegovic, 2017).

While reading this paper, one may question the need for another concept. Why cannot we simply stick to using "*linguistic diversity*" in this context? One of the crucial differences between "*linguistic diversity*" and HLD is that the former does not imply any personal involvement. One can be in favour of other people learning, using and preserving their languages, but this does not mean that this has anything to do with their own lives. It is an issue for others, members of linguistic minorities, immigrants, heritage language speakers, language revival enthusiasts. The crucial difference to HLD concept is that the latter is healthy for everybody, as much as a healthy diet and physical exercise are. HLD is about engaging with creating an environment, in our schools, homes, work places, in which children and adults are exposed across the lifespan to different languages, they have opportunities to learn and use more than one and acquire some knowledge (not necessarily perfect command) of others, which results in a considerable potential to enhance our well-being at the individual level and societal level too.

HLD also has a potential to overcome complexities of language hierarchies and contribute to the push for decolonising research and education practice agendas, as well as to provide the evidence for overcoming 'English is enough fallacy' in Anglophone countries.

Based on the research with children in London schools, parents, headteachers, lead professionals in England and Wales and policy makers HLD model uses the argument that all types of bilingualism have the equal value of cognitive benefits linked to bilingualism and language learning/use regardless of which languages are in question (Mehmedbegovic, 2011, 2017). Language hierarchies have been identified as the greatest obstacles in terms maintenance of home languages in immigrant communities and a key reason for language loss again amongst migrant communities, but also amongst speakers of indigenous minority languages, as documented in interviews with the Welsh speakers (Mehmedbegovic, *ibid*). The dichotomy of high and low status languages, underpinned by historic reasons such as political, cultural

and economic dominance (including colonialism), prevents minority groups from being aware of the value of their languages.

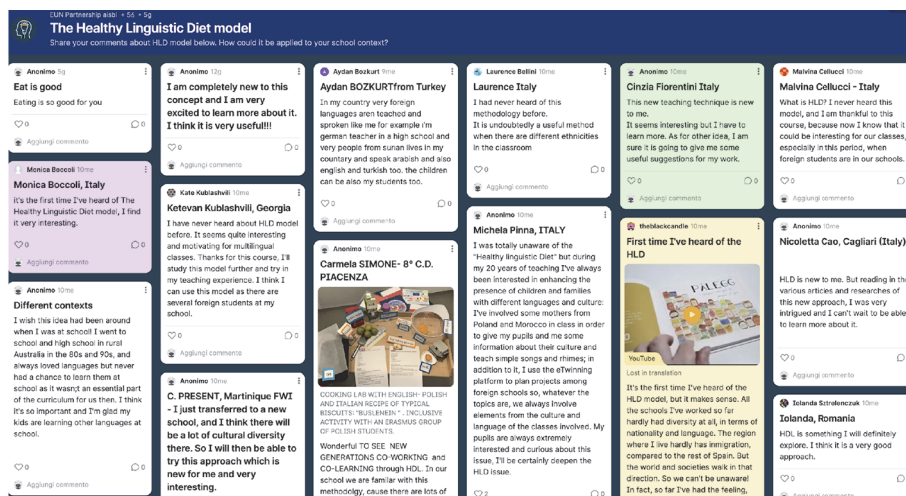
Hence HLD plea for a sharp and urgent U-turn in terms of presenting and promoting the cognitive benefit rationale for developing bilingual/plurilingual skills and overcoming the issue of language hierarchy. This is the winning card that HLD model uses to promote language learning, as well as home languages maintenance. The cognitive benefits rationale based on advantages of bilingualism powerfully overcomes the 'English is enough' fallacy.

4. HLD in Europe: the ESEP MOOC

As already mentioned, in 2018 and 2022 a MOOC on plurilingualism was held on the ESEP platform (European School Education Platform), promoted by the European Commission and European Schoolnet. The aim of the MOOC, attended by teachers and educators from all over Europe, was to raise awareness on the need to adopt plurilingual and pluricultural approaches and intercultural dialogue for a democratic citizenship and education since early years of schooling.

The HLD model was presented to the participants, who were asked to imagine the implementation of the model in their school context. Their reflections, collected on the padlet below, show a very positive reaction to the model and their willingness to experiment it with their students.

Fig. 1 – Padlet from the MOOC



Below some of the comments of the participants, posted on the platform:

I bet the school in many cases has made us all speak English, has made us all use uniform, and so on, so we look alike, speak alike... I mean, things have been traditionally like this. But this needs a change. Nowadays teachers should put into value the

difference, make it obvious within the class and appreciate it. (A participant from Spain)

There is no need to say how important is being able to speak the language of your ancestors at home and openly in the public. (A participant from Croatia)

From the recognition of the role of multilingualism in intellectual development and mental health, to the idea that the speaker is freed from the native-like language acquisition, or even the perspective that migrants might be looked at as added value instead of a “problem”, though simple or maybe even obvious ideas, can be, at the same time, revolutionary. (A participant from Portugal)

“HLD model is not only a way to approach different and unknown languages. It gives you the chance to broaden your point of view on yours and others’ culture”. (A participant from Romania)

As a teacher, when I am at school I am always interested and curious about my student’s home languages. Sometimes I ask them to write some words on the blackboard and then we all look for a translation in Italian first and in English later. I think it’s a way to familiarize (ourselves) with other cultures. This should train students to open their minds. (A participant from Italy)

I am afraid the healthy linguistic diet model does not address issues like linguistic imperialism, hidden curriculum and globalisation; as a model it is promising, but in foreign language research and teaching/learning practices things are not so “neat and tidy”. Still I may try a couple of interesting ideas in my English classes. (A participant from Albania)

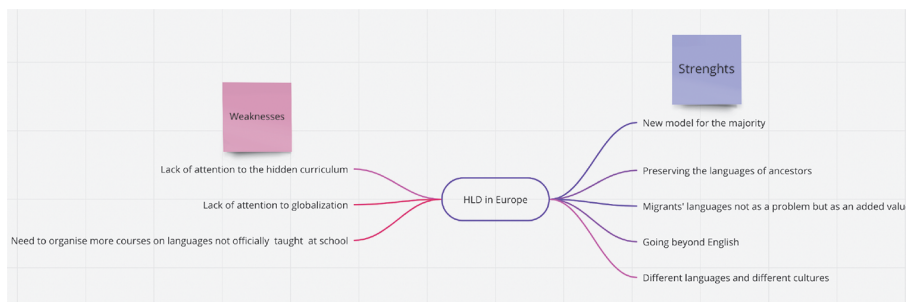
I also think that Italian Schools should also offer some extra-courses that allow students with different linguistic and cultural backgrounds to develop their linguistic competences, studying their “standard L1”, especially considering extra-European languages. (A participant from Italy)

The comments were analysed according to the Framework Analysis (Ritchie, Lewis, 2003) and the graph below shows the outcome of the analysis, highlighting the main categories grouping the comments according to their frequency.

Main strengths of the HLD model were identified in terms of preserving the language of ancestors and the migrants’ languages, introducing new teaching models and going beyond English, overcoming the so-called linguistic hierarchy, which tends to consider more important prestigious Western languages, compared to Asian languages. Some weaknesses were also identified in the lack of attention to the hidden curriculum and to the need to organise a specific training on this model, which is not so easy to implement as an integral part of the curriculum and not as an add-on.

In fact, teachers are so busy with their lesson plans and with the official languages taught at school, that they may consider it too demanding and stressful paying attention to the students’ home languages, which are commonly spoken only at home with parents and relatives. Therefore, a huge mental shift is required to embrace this new model.

Fig. 2 – Framework Analysis of the comments of the participants



5. HLD in Italy

In the academic year 2020-21 HLD project was launched with a sample of Italian comprehensive schools with a high density of migrants. The schools were selected by a special public call for proposals and committed to involving a team of teachers of English, Italian as a Second Language and other teachers who participated in training activities, run by INDIRE and by the authors of this contribution (Cinganotto, 2021).

After a theoretical study and analysis phase, the research team focused on international case studies and carried out several study visits to primary schools identified as schools of excellence in the area of multilingualism/plurilingualism and EAL (*English as an Additional Language*). In particular, the Scoil Bhríde (Cailíní) in Dublin, Newport School and Byron Court School in London, were visited and explored. The visit to the Irish school was then documented as a case study in a video format: a sort of virtual tour of the physical spaces with interviews with the different stakeholders (teachers, headteachers, language assistants), who explained how the enhancement of plurilingualism and home languages has become a daily practice in their context, so much to make the school an example of excellence of the HLD method (Little, Kirwan, 2019).

After the study and analysis phase, the experimentation of the model had started, in cooperation with UCL and under the supervision of Dina Mehmedbegovic-Smith, contracted as an expert adviser.

The schools participated actively in the project, attending training webinars, designing and testing Learning Scenarios to be experimented with their students. The training sessions were originally designed to be conducted in person on site, but due to the pandemic, all the planned activities were moved online. Therefore, HLD in Italy can be considered as an example of project carried out entirely online during the pandemic, fostering language learning and teaching and supporting teachers in those unprecedented times.

The three schools which join HLD project were the following:

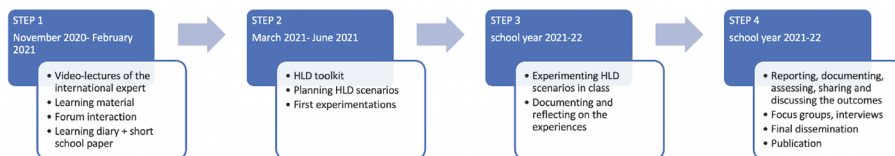
- IC Vivaldi, Catanzaro
- IC La Città dei Bambini, Rome
- IC K. Wojtyla, Rome.

Each school appointed a project coordinator and a project team of teachers. They were guided by the research group in planning and implementing HLD Learning Scenarios according to their specific school contexts.

The main phases of the project implementation included:

- preliminary meetings to launch the activities with teachers;
- teacher training on bilingualism, multilingualism/plurilingualism, translanguageing and on the HLD methodology;
- designing of the bespoke HLD Learning Scenarios for each school;
- implementation of the planned scenarios in the lessons;
- data collection through questionnaires and interviews to monitor and assess the impact of the project on teachers and students;
- documentation of the activities carried out with the students, also through videos and photos.

Fig. 3 – *Timeline of the project*



All the online events related to the project were recorded, and this represents nowadays, an important asset for the project, as a repository of digital content provided by the expert and the research team and as a digital library of materials, tools and documentation produced by the teachers, that can provide input and inspiration to other teachers interested in the model (Cinganotto et al., 2022).

According to the teachers' comments and reactions collected through the interviews, HLD model is very effective and can be integrated into the school curriculum, as part of the daily teaching practice. In fact, the activities were fully integrated into the curricula of all the schools, without separating them as a specific project. The predominant subjects in which HLD Learning Scenarios were designed were: foreign languages (English and French), geography, history and science. In a few cases, other subjects were involved, such as art and technology.

The different home languages of the students represented a large variety of linguistic and cultural backgrounds. It should also be mentioned that the students were encouraged to use their family dialect, where relevant.

The students were engaged in interactive activities, such as producing posters, maps, word clouds, songs, bilingual or multilingual storytelling in different home languages; co-operative activities on multilingual tasks, including lexical items, expressions and phrases in their home languages and dialects of the class. Parents and relatives were also involved in different activities and they were often invited to school to organise cultural festivals and to prepare traditional food as an effective way to foster intercultural dialogue and peer learning.

6. HLD Learning Scenarios

The teachers were asked to plan their Learning Scenarios according to the template below, which includes different steps of the project, starting from the warmup activities to the implementation, evaluation and dissemination phases. Teachers were also encouraged to have a learning journal to keep a record of all the activities and the progress achieved.

Fig. 4 – Template of HLD Learning Scenarios

Title of your HLD LS: Languages connect people	STEP 1	STEP 2	STEP 3	STEP 4
September / October 2021	Introduction / Warm up activities in classes			
November 2021		Presentation of the activities to students, parents and teachers		
December 2021/ January/February/ March /April 2022			Implementation of HLD project with classes /Keeping a reflective journal during implementation	
May /June2022				Evaluation (student feedback, staff feedback)/ Dissemination

The picture below shows an example of HLD artifact: a digital poster showing all the home countries and home languages of the students in a third class, with the word “hel-lo” in their different languages. It is a very effective example of peer learning, as the students were invited to teach their classmates, how to say hello in their home language.

Fig. 5 – An example of HLD artifact



7. The Italian teachers' comments and reflections

The comments of the Italian teachers involved in the project, collected through interviews, were all very positive and rewarding.

The teacher Antonella Sellia, representing one of the three schools, conducted a survey with the learners and their parents. One of the key questions was: "Would you like HLD activities to continue beyond the length of the project?" The responses were overwhelmingly enthusiastic: 100 % of students and 95% of parents expressed full support for HLD activities to continue as a regular part of teaching and learning. This teacher reported that her students were so keen to share their cultural and linguistic background they often stayed spontaneously over their break time in order to complete fully the activities.

Students were so engaged in contributing famous sayings/quotes in their languages they did not want to go out for their break. (A teacher from a participating school)

One of the unexpected successes was that the students on the autistic spectrum contributed for the first time to group work. A boy whose first language is Amharic, when given the opportunity to work with other Amharic speakers on a group task, demonstrated positive attitudes and behaviors that the teachers had not previously seen. He was eager to contribute to his team and he was enjoying the interactions.

The positive aspects of HLD method highlighted by the teachers referred to a greater involvement and motivation shown by the students, particularly foreign ones, and by the parents, generating very positive results in terms of equity and inclusion. The activities also contributed to fostering more discussion and group work, enhancing positive dynamics and relationships in the class.

The teachers were witnessing the transfer of skills and knowledge between different subject areas: music, art, literacy. All of these areas of the curriculum seem to have connected in a more meaningful way when students were encouraged to utilise their linguistic and cultural capital for structured learning and sharing with their peers and teachers.

HLD certainly represented an amazing occasion to foster both teachers and children creativity. Linguistic diversity can become an extraordinary tool of connection among speakers, but it also connects different areas of knowledge. You can use multilingualism by practicing and enhancing music, art, digital, oral skills etc. As a result, creativity becomes the way to employ linguistic diversity in different learning contexts. (A teacher from a participating school)

Some challenging aspects were highlighted, such as the shyness of some pupils who still do not feel at ease in a new context, due to their weak language competences in the language of schooling.

Some teachers also referred to their own feelings of insecurity and to needing more time to master this methodology, as it implies a new perspective and a new approach to teaching, being always ready to be flexible and to embrace change, without a full control of the students' interaction and talking time.

This is as expected since in the majority of cases it is teachers are not familiar with all the home languages of their students, which sometimes causes anxiety. The interviewed teachers expressed their confidence that implementing HLD will be rewarding in mid and long term. To achieve the mid- and long-term benefits there needs to be continuation of academics- practitioners collaboration which support the conceptual shift HLD promotes, which this teacher has perfectly articulated in her response:

I think HLD project has been crucial for my professional activity in the school where I teach, as it has changed my perspective. The presence of pupils with languages of origin other than Italian is generally considered almost a 'problem' to solve, an obstacle on the road to integration. This view actually conditions the teachers' activities and makes them act to overcome the "obstacle", trying to reduce the language distance within the classes. After having experienced HLD project at school, I strongly think that language variety isn't an obstacle but an extraordinary resource for all the students. (A teacher from a participating school)

The testimonies of the teachers who observed instances of HLD model providing opportunities for development of intercultural curiosity and competences, which fostered the sense of meaningful moments of inclusion, highlight the potential that HLD has in terms of global citizenship education and addressing complexities of diversity which many schools find challenging:

The children were motivated and involved and their curiosity prompted them to explore particular aspects of the topic. The diversity of Arabic graphemes, for example, prompted them to search the various alphabets online and each of them they wanted to write their name in Arabic, Chinese and Cyrillic. There have been many positive moments, during which the true sense of inclusion has emerged in a significant way. This project was undoubtedly valid and engaging. (A teacher from a participating school)

HLD improved relationships among students and between students and teachers by stimulating communication and cooperation in language learning process. It made children become aware of diversity as an important resource which gives importance to everyone as a unique and precious individual. (A teacher from a participating school)

8. *Discussion*

The analysis of the implementation of this pilot in three schools in Italy and the data collected through reflections by students and teachers and their evaluations indicate that Healthy Linguistic Diet (HLD) model has a potential to facilitate a paradigm shift in language education, grounded at the intersection of neuroscience, applied linguistics and educational practice.

Educationally, the HLD model aligns with contemporary theories of language acquisition that emphasise the dynamic and interconnected nature of plurilingual

practices. By adopting HLD approach, the pilot project showed that educators can easily create learning environments that validate and utilise students' full linguistic repertoires, enhancing both academic and social outcomes, as evident in the collected data.

Furthermore, the HLD model's emphasis on intercultural competence aligns with global educational initiatives aimed at fostering inclusive and harmonious societies. By engaging with diverse linguistic and cultural contexts, students develop critical skills for intercultural dialogue and democratic citizenship, which are essential in our increasingly interconnected world (Byram, 1997).

The implications of the HLD model for educational policy are profound. By advocating for the integration of multiple languages into the curriculum, HLD challenges policymakers to rethink traditional language education frameworks and adopt more inclusive strategies that reflect the linguistic realities of contemporary classrooms. This aligns with the growing recognition of the need for educational systems to prepare students for the demands of an intercultural global society (Cummins, 2000).

Educators play a critical role in implementing the HLD framework within their classrooms. The transition from traditional language teaching models to HLD requires a mindset shift among teachers, moving from viewing language as a subject to be taught in isolation to recognizing it as a tool for cognitive and cultural enrichment. This transition can be challenging, as evidenced by feedback from educators involved in the HLD project. Working in partnership with HLD experts provided the support and professional development needed for a successful implementation (Cinganotto et al., 2022).

9. *Conclusions*

This paper outlined Healthy Linguistic Model as an example of good teaching practice which fosters plurilingualism, intercultural dialogue and peer learning. HLD provides opportunities for enhancing students' plurilingual repertoire and maintenance of home languages, as an effective strategy to promote inclusion and equity in school, especially considering how multilingual and multicultural 21st classes are, as a consequence of so many waves of migrations and war events. By rising awareness amongst the educators on the cognitive benefits of using home languages in the school environment, HLD model can make a big contribution to the agenda aimed at decolonising the curriculum.

After a brief presentation of the model and its conceptual framework, the paper highlighted main reflections and comments of the participants in a MOOC from different countries, who had the opportunity to work with HLD model.

At the national level, the paper presented the main results of an experimentation carried out with three Italian comprehensive schools, where teachers, students and families showed interest and enthusiasm for the project, as an integral part of the curriculum, willing to go beyond the timeframe of the official initiative.

Although HLD model can be perceived challenging and hard to implement at the beginning, due to the required shift in the teachers' mindset and to some organisational issues, it soon becomes obvious that HLD offers innovative ways of engaging with key issues in our schools, such as the need for inclusion, equity and intercultural dialogue for a democratic and global education. Above all, HLD model positions all languages as equal in value they provide for individuals and societies in regards to cognitive benefits of bilingualism/plurilingualism.

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References

- Bak, T.H. and Alladi, S. (2014) 'Can Being Bilingual Affect the Onset of Dementia?', *Future Neurology* 9: 101-3.
- Bak Thomas H & Mehmedbegovic-Smith Dina. 2021. "The cognitive and psychological dimensions of plurilingualism". In Piccardo E, Germain-Rutherford A., Lawrence G. (eds). *Handbook of Plurilingual Education*, Routledge, UK.
- Bak Thomas H & Mehmedbegovic-Smith Dina. 2017. "Healthy Linguistic Diet: the value of linguistic diversity and language learning across the lifespan". *Language, Society and Policy*, vol. 1.
- Bialystok, E., Craik, F.I.M., & Freedman, M. (2007). Bilingualism as a protection against the onset of dementia. *Neuropsychologia*, 45(2), 459-464. doi:10.1016/j.neuropsychologia.2006.10.009.
- Bialystok, E. (2011). Reshaping the mind: The benefits of bilingualism. *Canadian Journal of Experimental Psychology/Revue canadienne de psychologie expérimentale*, 65(4), 229-235.
- Byram, M. (1997). *Teaching and Assessing Intercultural Communicative Competence*. Multilingual Matters.
- Cinganotto Letizia. 2021. "L'apprendimento precoce delle lingue: quadri teorici, riflessioni e esperienze". *IUL Research*, 2(4), pp. 175-187.
- Cinganotto, L., Benedetti, F., Langé G., Lamb T. (2022) *A survey of language learning/teaching with an overview of activities in Italy during the COVID-19 pandemic*. INDIRE.
- Craik, F. I. M., Bialystok, E., & Freedman, M. (2010). Delaying the onset of Alzheimer disease: Bilingualism as a form of cognitive reserve. *Neurology*, 75(19), 1726-1729.
- Cummins, J. (2000). Language, power, and pedagogy: Bilingual children in the crossfire. Multilingual Matters.
- European Commission. 2017. *Rethinking language education and linguistic diversity in schools – Thematic report from a programme of expert workshops and peer learning activities* (2016-17). Publications Office. 2017.

- European Commission. 2016. *New Skills Agenda for Europe*.
- European Parliament. 2006. *Recommendations on Key Competences for Life learning*.
- Green, D.W., & Abutalebi, J. (2013). Language control in bilinguals: The adaptive control hypothesis. *Journal of Cognitive Psychology*, 25(5), 515-530. doi:10.1080/20445911.2013.795442
- Kovács, Á. M., & Mehler, J. (2009). Cognitive plasticity in the first year of life. *Proceedings of the National Academy of Sciences*, 106(13), 5253-5258. doi:10.1073/pnas.0812028106.
- Little D. & Kirwan D. 2019. *Engaging with Linguistic Diversity*. Bloomsbury Publishing.
- Mehmedbegovic Dina. 2011. *'Miss, who needs the languages of immigrants?': A study in attitudes to languages in England and Wales*. Lambert Academic Publishing, Germany.
- Mehmedbegovic, D. 2017. "Engaging with Linguistic Diversity in Global Cities: Arguing for 'language hierarchy free' policy and practice in education". *Open Linguistics*. Vol 3, Issue 1, pp. 540-553. De Gruyter. Germany.
- Mehmedbegovic Dina & Bak Thomas H. 2017. "Towards an interdisciplinary lifetime approach to multilingualism: From implicit assumptions to current evidence". *European Journal of Language Policy*. Vol. 9, Issue 2, pp.149-167.
- Ritchie Jane, & Lewis Jane. 2003. *Qualitative research practice: A guide for social science students and researchers*. London: Sage.