

## Assessing the usefulness of outdoor learning in the early years during the COVID-19 pandemic in Malta

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### Abstract

The infectious potential of the SARS-CoV-2 virus (COVID-19) has demanded radical responses from world leaders in attempt to minimise the outbreak. One such measure has been school closure, which impacted children and adults globally. Schools in Malta have closed on March 13<sup>th</sup>, 2020. Physical distancing has become a key component in determining a safe reopening of schools. This paper focuses on early childhood education and care (ECEC) within the context of COVID-19 and outdoor learning as a potential response for the reopening of schools amidst the pandemic. Any study released prior to mid-October 2020 that reported on literature related to outdoor learning and COVID-19 was systematically reviewed using the PRISMA (Preferred Reporting Items for Systemic review and Meta-Analysis) statement. This paper suggests outdoor learning as a tentative plan to help with the implementation of the curriculum in ECEC while reducing the risk of virus transmission via physical distancing in outdoor spaces. As a result, some suggestions are made. It concludes with offering potential directions for future research.

**Keywords:** early childhood education, outdoor learning, COVID-19, young children

### Introduction

The COVID-19 pandemic has presented unprecedented challenges for the political, health, economic and education systems worldwide (World Organisation for Early Childhood Education [OMEP], 2020; Yoshikawa, Wuermli, Britto et al., 2020). The highly-contagious coronavirus led to an outbreak, which has been a severe and sustained threat to human life in

countries worldwide, including Malta. In many countries, this was the first time that such unique and bizarre situation has been experienced on such a large scale. Billions of people have been required to make substantial adjustments to cope with these unprecedented times. To say that the impact of the pandemic on public services, business, private lives and education has been profound is an understatement (Robinson, 2020). Paradoxically though, the pandemic has exposed humanity's vulnerability to crisis and revealed how interconnected we are (Schleicher, 2020).

Humanity is eagerly waiting for a new normality to emerge, even if we do not know how long this will take as there seems to be no end in sight as to how this crisis will unfold. Chances are the pandemic is likely to involve long-term cycles, during which infection rates fluctuate over time. What is sure though is the impact of the pandemic on children's mental and physical health, and their future educational prospects have been huge (Freeman & Eykelbosh, 2020; Grech & Bartolo, 2020). In order to overcome some of these impacts, policy interventions that adapt to this uncertainty are required, even if educators are often adapting to the necessity and unpredictability of the moment.

It seems that so far, COVID-19 has impacted the elderly, significantly raising the death toll among this vulnerable population, at least in Malta. Interestingly, scientific evidence suggests that children are less susceptible to COVID-19 and they demonstrate fewer symptoms than adults (Bond, Dibner, & Schweingruber, 2020; Grech & Bartolo, 2020). However, in the absence of an effective vaccine and as the number of new infections continues to rise, globally and in Malta, it is imperative that now that schools in Malta have reopened, they do not become COVID-19 hotspots and impact the Maltese community at large.

In Malta, there are protocols and mechanisms in place for a safe reopening of schools (Grech & Bartolo, 2020), yet none of these have considered outdoor learning as an effective measure to minimise the transmission of the virus among young children and ensure they get the education they deserve, particularly in early childhood education and care (ECEC). This paper explores whether outdoor learning could ensure a safe return to school in ECEC. Here, the term ECEC refers to provisions for children between birth and eight years of age. The term "educator" refers to caregivers, certified

preschool educators and other paid adults who supervise young children in preschool settings.

### **Early Childhood Education and COVID-19**

The early years of a person's life, from birth till age eight, have been recognised as playing a fundamental role in human development (Organisation for the Economic Co-operation and Development [OECD], 2019; OMEP, 2020; United Nations Children's Fund [UNICEF], 2020). Good-quality education in early childhood has the potential to improve children's outcomes, especially those living in low-socioeconomic contexts (Schleicher, 2019; United Nations, 2015).

Recently, the importance of ECEC for optimal child development has been highlighted by the United Nations Sustainable Development Goals (SDGs), in SDG 4 (United Nations, 2015). Specifically, Target 4.2 of SDG 4 promotes good-quality ECEC contexts that support the learning and development of young children to "Ensure that all children have access to quality early childhood education and care so that they are ready for primary education" (United Nations, 2015). The need for good-quality ECEC cannot be stressed enough, especially in light of recent research indicating that poor-quality ECEC can have long-term implications on child development (OECD, 2019; Schleicher, 2019).

The uncertainty created by the COVID-19 pandemic, coupled with assumptions about young children's possible vulnerability and their role in disease spread, has led to the inclusion of precautionary measures such as school closure in many countries, including Malta. One thing is sure though, school closure has resulted in learning losses, which if left unremedied, are likely to impact the educational and financial outcomes of children (Schleicher, 2020). While school closure has prevented new infections and even decreased the mortality rate, they affected and changed the lives of many children (OMEP, 2020; Robinson, 2020). At the height of the first wave of the virus, the United Nations Educational, Scientific and Cultural Organization [UNESCO] (2020a) estimated that nearly 90% of the student population worldwide have experienced disruptions in their learning, making this period the largest shock to education in our lifetime (World Bank, 2020). The burden of school closure on children, parents, communities and the economy has been huge, and both the economy and society cannot

fully reopen without reopening schools (Bond et al., 2020; Cooper, Guay-Woodford, Blazar et al., 2020).

In the absence of an effective vaccine for the coronavirus, physical distancing and hygiene practices in schools should be maintained to minimise the spread of the virus. Maintaining safe access to schools is a challenge, given that our knowledge of the virus transmission is constantly evolving (Bond et al., 2020). Assuming that all children will go back to school, young children may find it difficult, if not impossible to maintain physical distance from peers, especially in classrooms where space is limited. At this age, young children may not have grasped the concept of personal space yet. They may also find it difficult to keep masks on, especially on warmer days, putting them further at risk of contracting the virus. Indeed, many are looking at mounting plastic shields around desks in addition to making children wear face masks and face shields, something which many young children will have difficult time abiding by. At the time of writing, education officials are still struggling to determine the best way to keep schools open and COVID-19 safe.

### **Outdoor Learning**

Even though the role of airborne transmission of COVID-19 and the effectiveness of various mitigation strategies is not yet clear, it is evident that proper ventilation is necessary to reduce the risk of transmission (Bond et al., 2020). Indeed, there is evidence to suggest that time outdoors protects children and educators against virus transmission (Quay , Thomas, Sandy et al., 2020). This means that during an outbreak, children and educators will be better off if they get outside more often.

Children have a right to play outdoors (Bento & Dias, 2017; Bilton, 2010; Kernan & Devine, 2010) and nature offers them rich sensory experiences and materials that support their development (Bento & Dias, 2017; Bilton, 2010; Clements, 2004; Kernan & Devine, 2010; Spiteri, 2020). The idea of young children playing and learning in nature dates back to Aristotle and Plato. Early childhood theorists, like Rousseau, Locke, Dewey, Froebel and Pestalozzi, further emphasised the idea that young children should learn through play in nature. Strong evidence suggests that time spent in nature is beneficial to healthy child development (Freeman & Eykelbosh, 2020; Louv, 2008). The benefits of outdoor learning go beyond academic achievement (Beames, Higgins, & Nicol, 2012; Bento & Dias, 2017; Bilton, 2010; Clements,

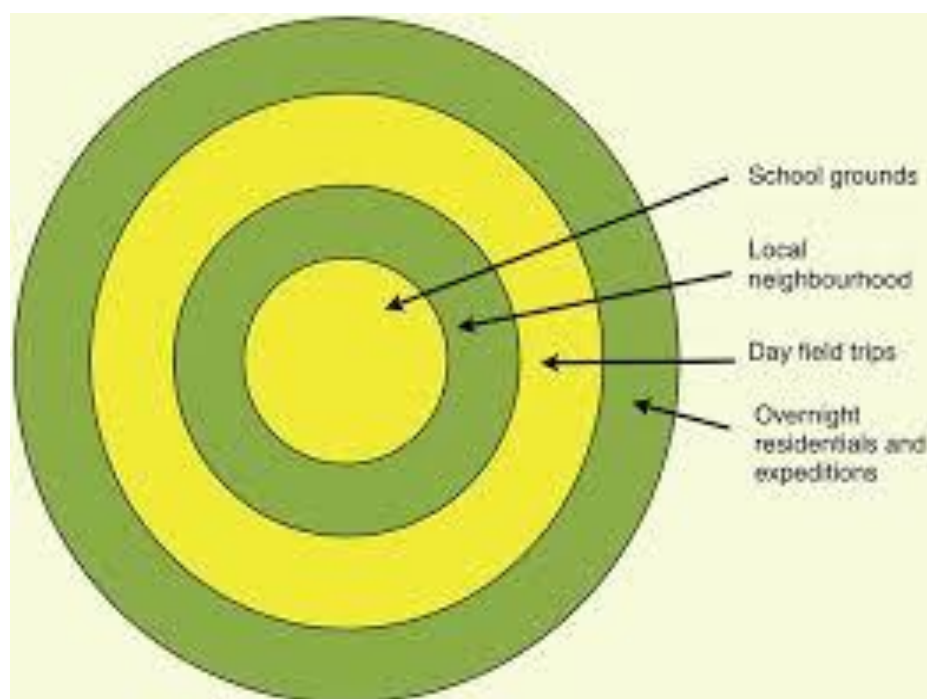
2004; Kernan & Devine, 2010; Nicol & Waite, 2020; Quay et al., 2020). Not surprisingly, children's experiences in natural setting support their physical, emotional, social and intellectual development, and enhance their cognitive skills and ability to focus (Bento & Dias, 2017; Bilton, 2010; Clements, 2004; Gifford & Chen, 2016; Kernan & Devine, 2010; Ulset, Vitaro, Brendgen et al., 2017). Spending time outdoors increases children's well-being and physical activity, and prevents excessive weight gain (Quay et al., 2020). Through free outdoor play children relieve stress, satisfy their need for creativity and adventure, and acquire important skills for life, including social, problem-solving and safety skills (Bento & Dias, 2017; Clements, 2004).

Therefore, outdoor learning can be an effective method of curriculum delivery in ECEC because it allows children to actively participate in activities and learn by doing in properly ventilated areas (Quay et al., 2020). The terms outdoor education and outdoor learning are often used interchangeably, and traditionally meant learning that occurred predominantly at a residential centre or on school visits to remote settings, therefore, away from school (Beames et al., 2012; Nicol & Waite, 2020).

The Forest School/Kindergarten approach, a pedagogical concept that originated in Scandinavia (Murphy, 2018), is an example of outdoor learning commonly practiced in the ECEC and primary schools worldwide. More importantly, it is an approach informed by the socio-cultural context and the land on which it is situated. At Forest School/Kindergarten, children participate in outdoor learning via regular visits to natural spaces to engage in learning through play-based activities (Knight, 2018). A fundamental ethos of Forest School/Kindergarten is to encourage children to gain confidence through regular and repeated activities outdoors. This approach supports a learner-centred pedagogy via learning through play, and promotes the personal social and emotional development of the children (Murphy, 2018). Emphasis is on a freely-chosen, child-led approach, involving both free play and risky play (Knight, 2018). Usually though, this would require a qualified educator in the field. As a result, it is becoming customary for educators to get the necessary qualifications in outdoor learning and Forest School/Kindergarten. Still, the vast majority of educators have no training for safe delivery of adventure and survival skills (Nicol & Waite, 2020). In addition, outdoor learning may actually be a greater concern for some educators and parents than dealing with issues of infection and learning loss. This opens gaps in understanding the goals of outdoor education and has

initiated an international move towards outdoor learning, even though Malta still lags behind in this regard.

It is worth noting that outdoor learning “does not necessarily involve adventure activities that require specialist providers. Instead, significant cross-curricular learning opportunities exist just outside the classroom” (Nicole & Waite, 2020, pp. 2-3). As shown in the concentric circles in Fig. 1, outdoor learning can be sustained in various places, including school grounds, making outdoor learning easy to incorporate in the Maltese context.



**Fig. 1. Concentric circles model of forms of outdoor learning.** (Beames et al., 2012, p. 6)

Of significance to this paper is the greening of school playgrounds for the numerous outdoor learning and play opportunities these afford. This way, outdoor learning provides an opportunity for schools to foster children’s engagement with the natural world while maintaining safe distance to prevent further outbreaks. Outdoors, children can feel socially connected but safely distanced. It is clear therefore that there are positives to be gained from outdoor learning for children and educators alike and it is necessary to consider whether it can be undertaken within the Maltese context, subject to current curricular guidelines.

## **Purpose**

This paper explores the benefits of outdoor learning in ECEC and makes a timely recommendation for more opportunities for outdoor learning during the pandemic in the early years in Malta. It asserts the pandemic requires a reimagining of the pedagogical opportunities that exist particularly in ECEC. To assist with this, schools need to locate more learning outdoors, to radically re-evaluate teaching methods, and to promote learning that engages young children in meaningful learning, outdoors. The suggestions presented here may appear ambitious and grandiose at first, but this paper will provide political, practical and theoretical justification, and international examples of the usefulness of such possibilities. In doing so, it emphasises two things. The first is a pedagogical point about how the COVID-19 pandemic can be useful in introducing creative forms of outdoor learning in the Maltese education system. The second is a political point - outdoor learning can make valuable contributions to ECEC in particular, and the Maltese education system in general. However, to do so requires a rethink of the pedagogies adopted by educators.

## **Method**

This systematic review utilised the PRISMA (Preferred Reporting Items for Systemic review and Meta-Analysis) statement in conjunction with the PRISMA checklist and flow diagram for manuscript format development (Liberati, Altman, Tetzlaff et al., 2009; Streater, Spector, Aguirre et al., 2012) to provide the philosophical and conceptual rationale for the introduction of outdoor learning in ECEC as a measure to reduce a coronavirus outbreak in Maltese schools. This is done through the initial background, context-setting and definitional parameters. This choice was made because the major interest of this paper is to provide quality of the themes emerging across and within studies which were more relevant to this research rather than the number of studies and reviews conducted.

Seven databases were reviewed for published studies prior to October 10<sup>th</sup>, 2020: SpringerLink, GreenFile, Education Resources Information Centre (ERIC), Education Source, Science Direct, Academic Search Complete, and Humanities International Complete. Boolean logic was used for conducting database search and Boolean search operators "AND" and "OR" were used to



link search terms and to produce more relevant results. Table 1 shows the search strategy adopted.

**Table 1. Inclusion and exclusion parameters.**

<b>Criteria</b>	<b>Inclusion</b>	<b>Exclusion</b>
Keywords	“Early childhood education” AND “school” AND “outdoor Learning”, “outdoor education” AND “pandemics” AND “COVID-19”, “SARS-CoV-2” OR “learning outside the classroom” OR “outdoor learning” OR “outdoor education” OR “coronavirus”	
Focus	COVID-19, ECEC, outdoor learning, learning outside the classroom	Outdoor learning and COVID-19 research related to older children.
Educational level	Age range birth - 8 years	Children over 8 years of age
Language	English	Any, other than English
Publication type	Scholarly peer reviewed publications, review articles, grey literature	Non-scholarly publications
Publication date range	January 2010 - October 2020	Before December 2009

A total of 79 records were returned. Titles, abstracts, and full text were screened to ensure they met eligibility criteria. Any study published in English, which reported about ECEC, COVID-19 and outdoor learning were included. This returned 51 articles. There may be more publications within this range, however only relevant literature published in English was considered for this article. Each article was manually reviewed by title, keywords and abstracts.



### *Data extraction*

Data were manually extracted from eligible studies by the author. Articles were selected on the basis of whether the focus was in line with the parameters of the review as described above, and if they were deemed robust enough in terms of clear research/evaluation dimension, relevance of the research, clear and justified methodology, and analysis.

### *Limitations*

This review has some limitations though. Since only articles written in English, the international norm of academic publications, were included, other material, which could have also been useful but was written in a language other than English, has been excluded. In addition, the search parameters and the terminology used may have excluded specialist publications of other disciplines.

## **Outcomes and Discussion**

### *School Closure*

Based on evidence from previous pandemics, such as the 1918 influenza pandemic, physical distancing measures were implemented worldwide in an attempt to slow down the transmission of the virus, resulting in many restrictions – school closure was one of these (Viner, Russell, Croker et al., 2020). Previous epidemics have shown a modest impact of school closures, of around 15%, on preventing new infections (OECD, 2020). While this can help keep the transmission of infection under control, when compared with other public measures such as social distance, quarantine and case isolation, school closure seems to be less effective (Schleicher, 2020). Bond et al. (2020, p. 2) conclude that there is:

no definitive evidence about what suite of strategies is most effective for limiting transmission within a school setting, when students, teachers, and other staff are present. The fact that evidence is inadequate in both of these areas – transmission and mitigation – makes it extremely difficult for decisionmakers to gauge the health risks of physically opening schools and to create plans for operating them in ways that reduce transmission of the virus.

School closure during the COVID-19 pandemic, coupled with the realisation that children are going to miss out on essential learning, led educators to address this growing concern by transferring learning online in a short time. Hence, the use of remote teaching platforms has become commonplace (Schleicher, 2020; United Nations, 2020). Consequently, young children engaged in education have faced uncertainties and disruptions, especially children hailing from disadvantaged backgrounds, who already lacked resources necessary for learning, such as Internet connection and the availability of electronic devices (Spiteri, *in press*). Together, these changes have implications for ECEC, much of which relies on face-to-face and hands-on activities. Therefore, there are unquestionable benefits to children returning to school. However, these benefits must be carefully weighed against the risks and safety measures that need to be in place.

Upon school closure, educators in Malta used various digital learning platforms to create opportunities for online teaching and learning in ECEC. Research indicates that the use of technology indoors for the purpose of online learning can be both taxing and ineffective for young children's learning (Bond et al., 2020; Hughes, 2020), mostly because young children are not meant to learn in front of a screen. Young children learn through meaningful hands-on activities and play, and online learning does not seem to meet all of these needs. It is worth noting though that most available research has focused on children's use of technology indoors (McGlynn-Stewart, Maguire, & Mogyorodi, 2020). In fact, recent research indicates several cognitive and social benefits for children and adults when using technology during outdoor play and learning experiences, suggesting that it can be a useful tool for outdoor learning (McGlynn-Stewart et al., 2020).

Still, within the current context of the pandemic, OMEP (2020) suggests that online learning in ECEC needs to be minimised. Such concern has been supported by recent research pointing to correlation between children's increased use of online platforms and the risk to online threats, such as exposure to inappropriate content and exploitation (Yoshikawa et al., 2020). This calls for proper monitoring and support from an adult at home, to minimise these risks. Unless online learning is carefully implemented, it will exacerbate the inequalities for disadvantaged children (Bond et al., 2020) since they may not have adults who can support their learning process at home, thus reinforcing social inequalities in terms of access to resources (Spiteri, *in press*). Certainly, the pandemic accentuated the digital divide which young children are currently experiencing (UNESCO, 2020b). To be successful,

digital learning platforms should be accompanied by outreach to caregivers and parents (Yoshikawa et al., 2020).

### *Children's wellbeing*

While this paper is not about the epidemiology of the coronavirus, preliminary medical research confirms that COVID-19 rarely makes children ill (Bond et al., 2020; Grech & Bartolo, 2020), and the fatality rate among children who contract the virus is very low (Spaull, 2020). While the clinical effects of COVID-19 on young children are not clear yet, when compared with older age groups, there is emerging scientific “evidence of increasing rates of child hyperinflammatory shock” (Yoshikawa et al., 2020, p. 188). Certainly, “large-scale viral nucleic acid and serologic testing in children” (Cooper et al., 2020, p. 183) is needed to guide schools safely. Therefore, the profound implications of this pandemic cannot be discounted.

The pandemic has been stressful for children and adults (Calleja , Attard Tonna, Brown et al., 2020; Robinson, 2020). Mental health issues at any age have been further amplified by the pandemic and these are expected to be severe in the long run (Freeman & Eykelbosh, 2020; Grech & Bartolo, 2020). Indeed, OMEP's (2020) expresses concerns about the education and wellbeing of young children during the pandemic. The Faculty of Education at the University of Malta too expressed concerns about children's wellbeing during the pandemic and issued recommendations for addressing children's psychosocial and emotional wellbeing, and access to effective teaching approaches to remedy for learning losses, upon children's return to school (Calleja et al., 2020).

The uncertain trajectory of the pandemic makes it hard to create an educational plan to recover the learning lost during the previous academic year (Ramrathan, 2020). Aware of this, Calleja et al. (2020) suggest that children's wellbeing is facilitated through strong and empathic relationships between peers, educators, parents, and other stakeholders in the school. Thus, Calleja et al.'s (2020) recommendations are in line with the United Nations Sustainable Development Goal 4 (United Nations, 2015) in favour of supporting strong and empathic relationships in a school community, something which is very important to help humanity overcome the hardship caused by the outbreak of COVID-19.

### *Outdoor learning*

OMEP (2020) recommends play and movement, common characteristics of ECEC, as an essential part of learning in ECEC, especially during the pandemic. While a return to normality will not happen immediately upon the return to school and it will take some time for new arrangements to settle in, there are options for implementing an effective and safe return to school ECEC, through outdoor learning. Evidence base of the transmission of the virus in outdoor spaces is still patchy, however, it seems that outdoor airborne transmission of the virus is rarer compared to transmission in enclosed and often crowded indoor spaces, such as classrooms, where children are likely to be in close personal contact often (Bond et al., 2020; Quay et al., 2020). Therefore, outdoor learning seems to be a more reliable solution to solve the physical distancing problem of classrooms too small to accommodate whole classes is to use the outdoor space for movement and play.

Outdoor learning as a physical distancing measure during pandemics is not a new idea either but rather a time-tested option, which is known to work well. For example, at the beginning of the 20<sup>th</sup> century, during the tuberculosis pandemic and later the Spanish flu pandemic, classes were successfully held outside to protect children (Bellafante, 2020). This is because outdoors there is ventilation and space to spread out, minimising the spread of the virus (Bond et al., 2020; Quay et al., 2020).

While there is limited data to provide guidance for the safe reopening of schools during the COVID-19 pandemic (Cooper et al., 2020), a closer look at the reopening of schools in other countries around the world during this pandemic seem to support the idea of outdoor learning as an effective strategy for learning in ECEC while safeguarding everyone's health. As an effective attempt of reopening schools safely, some Nordic countries turned to outdoor learning, including the Forest School/kindergarten approach, even though this has been a common part of their educational landscape for many years. Research shows that when Danish schools reopened in April 2020, after lockdown, they held outdoor classes as often as possible (Mulvahill, 2020). Similarly, Scotland has supported the benefits of outdoor learning (Brooks, 2020). Taking these countries as good examples of effective ways of reopening schools during the pandemic, it is likely that this pandemic offers the right opportunities for the Maltese education system to also embrace outdoor learning. Possibly, this practice will influence

legislations, policies and key educational stakeholders to embrace this pedagogy (Quay et al., 2020). Failing to do so would impact children's learning now and in the future. The converse is also likely if education authorities capture the opportunity provided by COVID-19 and advocate for outdoor learning and leverage this historical moment for the betterment of education systems and the future of the planet (Quay et al., 2020).

Having faced the trauma of the pandemic, the outdoors could be the therapeutic and calming antidote against the stress and anxiety brought about by the uncertainty of the pandemic. Moreover, research shows that early experiences in nature are precursors to facilitating ecological and sustainable behaviours which can last a lifetime (Bento & Dias, 2017; Bilton, 2010; Clements, 2004; Kernan & Devine, 2010; Spiteri, 2020), a much-needed effort in Malta. Such evidence makes a strong case for ECEC to take learning outdoors.

Recognising the need to maintain physical distance to decrease the chances of spreading the virus, a robust suggestion would be outdoor learning, which is a viable option to provide learning opportunities for young children in ways that are fun, meaningful and help them catch up where they have left off in March 2020. Learning is a fundamental natural process for human beings, yet education systems around the world have evolved from the 18<sup>th</sup> century model of industrialism, with its focus on output rather than the process (Robinson, 2020). Interestingly, during these tumultuous times brought about by the pandemic, there has been a renewed interest in the impact of contact with nature on children's development and wellbeing, while building relationships with self, others and the natural environment (Quay et al., 2020). Ironically, the pandemic has shown that there are alternatives to these systems, and learning in the great outdoors is one of them. This paradigm shift may have been influenced by epidemiological findings indicating that the coronavirus does not last for long periods outdoors (Quay et al., 2020).

While recreation in the great outdoors contributes towards children's social, physical and mental wellbeing, the use of space by a large number of children could still pose potential risks of community spread of the virus (Freeman & Eykelbosh, 2020). Hence, strategies to minimise disease transmission risk at individual level, such as physical distance of two meters away from others, hand hygiene and face covering, and at community level, such as

management of outdoor spaces to limit the number of individuals in one place at the same time, are warranted (Freeman & Eykelbosh, 2020).

### *Outdoor learning in Malta*

Since Malta opened its economy, an influx of tourists and frequent mass gatherings led to a surge in the local transmission of the virus. Due to the ever-evolving nature of the pandemic, vigilance and continuous management of the inherent risks is warranted. The future is unpredictable. Yet, one thing is sure – in response to the pandemic and in the absence of an effective vaccine, children’s return to school in Malta, in October 2020, was anything but the old routine they had been used to. Most importantly, the role schools might play in the spread of COVID-19 in the community is yet unknown (Bond et al., 2020).

Outdoor learning in Malta is not mainstream; rather, it occupies a peripheral space in the curriculum (Spiteri, 2016). Being on the periphery has meant that outdoor learning is not a pedagogy which is often implemented by educators (Bento & Dias, 2017; Kernan & Devine, 2010). This practice may be influenced by the dominant discourse in relation to different constructions of childhood and children’s positioning in society as a group with particular rights, needs and duties, and power relations in society (Kernan & Devine, 2010). These constructs are underpinned by power and control between children and adults, and emerge from the perception of children’s vulnerability to dangers and risks in outdoor environments, leading to a disconnect from nature (Kernan & Devine, 2010). Children need to feel secure not vulnerable, and they need the resources and opportunities to become independent (Bilton, 2010).

Ironically, many believe that the proper place for learning is indoors despite the fact that the majority of learning in one’s lifetime happens outdoors in informal settings (Bilton, 2010; Kernan & Devine, 2010). This is an assumption which needs to be challenged, if not disrupted. That being said, outdoor learning is not a contrast to learning inside the classroom (Bilton, 2010; Nicol & Waite, 2020). While it may be argued that the infrastructure for outdoor learning is hampered, or not in place, in Malta due to the limited natural spaces available resulting from years of land speculation, using school grounds and local outdoor spaces has been recommended to schools worldwide (Beames et al., 2012). It is possible for ECEC classes to be held outside, with the school yards and the natural environment deployed as a

resource for exploration and new ways of teaching and learning (Beames et al., 2012; Bilton, 2010). Considering the numerous benefits to spending more times outdoors, schools could use as much accessible outdoor space as possible to reduce the number of children in the classroom at any given time, thus allowing for proper physical distancing. Additionally, instead of rotating between live school and remote learning, children could rotate between indoor and outdoor work during the day.

Taking this point forward, the relevance of quality outdoor learning during, and in the aftermath of, the pandemic is to be considered, especially since there is no education without human interaction (Principle #3, UNESCO, 2020b). ECEC calls for the “involvement of the body as a way of experiencing, discovering, and investigating the environment, the manipulation of natural and cultural objects, and close human contact” (OMEP, 2020, pp. 2-3). All this can be achieved in the great outdoors, while maintaining handwashing and hygienic habits. Official measures to support this, while continuing to offer good-quality ECEC for all children, are necessary to managing the risk of potential outbreaks in schools and early childhood settings. Doing so, would require a great reset in the Maltese education system towards outdoor learning. Paradoxically, the COVID-19 pandemic might be the catalyst for the much-needed educational change in Malta.

Utilising outdoor spaces as an extension of the classroom, for learning in ECEC, creates more spaces to teach children safely (Beames et al., 2012; Bento & Dias, 2017; Clements, 2004), while minimising the risk of infection. In such contexts, exciting and interactive lessons conducted outdoors will help engage children and ease the transitions into more formal learning (Bilton, 2010). Moreover, hands-on outdoor learning activities, the hallmark of learning in ECEC, will help reintroduce children to teamwork and social interactions while minimising the risk of transmitting the virus to others, thus supporting learning and health, and promoting a sense of continuity of learning. To achieve this, outdoor spaces do not have to change significantly from what they look like now. Doing so, will promote a sense of familiarity to most children and will ease their tensions created during the pandemic.

#### *Overcoming challenges of outdoor learning*

Given that the pandemic may require long-term change as to how children interact, finding strategies that increase opportunities for learning outdoors is preferred. Taking children outdoors encourages dispersion in the local



environment rather than resorting to indoor activities only. Yet, indoor activities are often preferred by educators particularly because outdoor activities are considered as extra additions to children's experiences in ECEC settings (Kernan & Devine, 2010). Another reason is that outdoor learning is more demanding (physically and mentally) than indoor learning because of the physical activity involved and the potential dangers posed by some natural elements (Bilton, 2010). These challenges can be overcome by good organisation skills, careful planning of activities, management, evaluation, resources, staffing and adult interactions are key to facilitating teaching and learning outside the classroom (Bilton, 2010), where caring educators can facilitate young children's academic achievement and help them learn to live together and learn to be. Additionally, careful consideration for the access, design and layout of the environment, proper equipment and adequate clothing are essential to ensure safety and health outdoor experiences in ECEC (Bento & Dias, 2017; Bilton, 2010).

Given the unpredictability of the current crisis, educators need to prepare children emotionally, socially and intellectually for outdoor, safe learning experiences (Beames et al., 2012; Bilton, 2010) by offering them explicit instructions for the outdoors. Outside, educators should monitor for dangerous behaviour and ensure child safety to decrease the likelihood of injuries (Clements, 2004). Still, educators need to encourage children to make discoveries, investigate and explore the outdoor environment to enhance their creativity (Bilton, 2010).

The success of outdoor learning rests with well-trained, and enthusiastic and caring educators (Bilton, 2010). Yet, research suggests that many educators may feel unprepared to provide young children with meaningful and enriching experiences outdoors (Bento & Dias, 2017; Beames et al., 2012; Bilton, 2010; Kernan & Devine, 2010; Nicol & Waite, 2020). While further investigation into this issue is warranted, this unpreparedness could be the result of the Maltese education system geared towards academic achievement in terms of literacy and numeracy from an early age.

Safe outdoor activities require proper hygiene measures, as suggested by paediatric health authorities. Children with chronic health conditions need careful attention given their increased sensitivity to possible COVID-19 infection. Being outdoors can help children with chronic health conditions maintain physical distance from peers to prevent an infection, while combating loneliness and social isolation. Yet, more research is necessary to

understand the risks that children with chronic conditions may encounter in school settings in the COVID-19 era.

The outlook of the pandemic is still unclear. The horror and tragedy of the pandemic has the potential to profoundly affect child development. However, education can bring out the very best of humanity. Education can offer young children experiential learning opportunities powered by physical activity and play in the outdoors to energise learning, mental and emotional health, and boost wellbeing of every child and every educator. Certainly, neither limited outdoor space and limited funds, nor bad weather should stand in the way of taking learning outdoors.

### **Conclusion**

This pandemic will have significant implications for the learning potential of many young children in Malta who depend on it. The health and economic pressures on education systems worldwide are valid justifications to reopen schools, even if the risk of COVID-19 in schools cannot be completely eliminated (Bond et al., 2020).

Considering the numerous benefits of outdoor learning to child development, this paper aims to raise awareness for the children's right to play outdoors even during a pandemic. In such context, outdoor learning can be an effective measure to keep schools open while reducing the risk of transmission of COVID-19, safeguarding children and educators alike, and increasing children's awareness of environmental issues. A useful starting point would be to raise awareness of the need to have enthusiastic, supportive, committed and motivated educators to include more outdoor learning activities in ECEC (Bilton, 2010; Kernan & Devine, 2010).

The pandemic has also accelerated numerous opportunities for research. Clearly, future research is needed to determine if outdoor learning in ECEC in Malta is a viable option. Ultimately, voicing children's ideas about effective pedagogies could help improve the Maltese education system. Even more important may be the call for more research on how young Maltese children and educators feel about it. Future studies on how, or if, outdoor learning during the pandemic plays a role in later academic achievement for example, would allow policy-makers and education authorities to further understand the importance of outdoor learning.

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