

Primary Curriculum Review and Redevelopment

Written submission template for organisations, groups and individuals responding to the *Draft Primary Curriculum Framework*

This template is intended to support you (and your colleagues/organisation) in developing a written submission in response to the *Draft Primary Curriculum Framework*. Please e-mail your completed submission to PCRRsubmissions@ncca.ie

Individual submission details

| | |
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| Name | |
| Date | |
| E-mail | |

Organisation submission details

| | |
|---------------------|---|
| Name | Bernard Kirk |
| Position | CEO |
| Organisation | The Camden Education Trust |
| Date | 05 th February 2022 (extension provided) |
| E-mail | |

The NCCA will publish written submissions received during the consultation. The submissions will include the author's/contributor's name/organisation. Do you consent to this submission being posted online?

Yes No

Please provide some brief background information on your organisation (if applicable).

Camden Education Trust is a not for profit company with Charitable Status, based in Ireland. It is focused on managing education projects and developing curriculum and content for these projects and teacher education in Ireland and globally. We work closely with a wide range of corporate partners, governments and family foundations to create educational initiatives which benefit young people.

Bernard Kirk is the founder and CEO of the Camden Education Trust and was a primary school teacher and also the director of Galway Education Centre. He was tasked with leading the rollout nationally of the CPD for Religious Education as a new subject and also T4, the Technology Subjects. He was responsible for the CPD for the Revised Primary Curriculum in 245 primary schools in Galway, including the largest number of Irish speaking schools in the country. In addition he introduced and organised the FIRST LEGO League, Junior LEGO League and EA Robotics competitions in Ireland. In 2013, I was awarded an Honorary Masters in Science by NUI Galway for his contribution to Education in Ireland. He is also co-founder Africa Code Week, the largest digital literacy initiatives organised on the African continent, involving over 9 million young people (47% girls) and over 100,000 teachers in 42 countries since it began in 2015.

Since 2019, the Camden Education Trust has been responsible for the strategic development and management of the Marine Institute's Explorers Education Programme, which aims to engage with primary schools, teachers, children and the education network in Ireland. The Camden Education trust are extremely fortunate to have Cushla Dromgool-Regan as the strategic education manager running this programme.

Cushla has over fifteen years' experience working in education and outreach where she has developed and published educational resources for primary schools on behalf of the Marine Institute (www.explorers.ie). She has also made contributions to formal education resources published by CJ Fallons and Folens. Since 2007 Cushla has developed and run summer 5-day CPD teachers training courses with over seven education support centres approved by the DES. Cushla has also been responsible for creating training programmes and recruiting trainers for 3rd level teachers at both DCU and at Mary Immaculate College. Cushla also manages a team of 20 outreach officers delivering marine themed modules and projects in primary schools around Ireland, now reaching over 12,000 children annually as part of the Marine Institute's Explorers Education Programme.

In 2018, Cushla completed a MSc by research, where she achieved a first class honours examining the barriers and solutions to ocean literacy in Irish primary schools. Her research contributes to the advantages of using a social marketing systems approach to support societal change, and in particular addressing the gaps in the education curriculum. Her work is key in implementing children's learning and development in children's primary school years and offers fresh insights into how children learn and develop across the areas of the curriculum from primary to post-primary. Her work is further reflected in her recent appointment as a board member of the European Marine Science Education Association, where she is providing support in the development of the EU Blue Schools Pilot Programme.

In 2020 Cushla was appointed to represent Ireland on the EU Commission Atlantic Strategy advisory group: Pillar II Blue Skills of the Future and Ocean Literacy. This taskforce reports to the European Commission who have adopted an updated action plan for a sustainable, resilient and competitive blue economy in the EU Atlantic area, covering France, Ireland, Portugal and Spain.

The remainder of the template includes two sections. Section 1 invites your overall comments and observations on the *Draft Primary Curriculum Framework*. Section 2 is structured to align with the six key messages related to the framework. Each message is summarised as a support for you in working on the submission.

Section 1

Please outline your overall response to the *Draft Primary Curriculum Framework*.

The Camden Education Trust welcome the National Council for Curriculum and Assessment process in reviewing and redeveloping the primary school curriculum and the recent publication of *Draft Primary Curriculum Framework*.

As a former director of the Galway Education Centre for over 20 years, and now CEO of Camden Education Trust, working with teachers, educators and social change experts, our overall response is shaped by our direct involvement in the primary education system where we have experienced the *Primary School Curriculum (1999)* and the system in which it is administered.

We agree with the rationale of reviewing the curriculum, by firstly acknowledge those involved in the implementation and support of the *Primary School Curriculum (1999)* over the last 20 years. The extensive research from which it was formed in the development of the current curriculum has been a credit to the Irish education system. This in our view is reflected with the introduction and prioritisation of subjects including science and its associated strands on the curriculum. The formalisation of including science subjects as well as prioritising reading and mathematics, has been key to improving children's attainment in these areas. They have also been essential in the development of STEM subjects into post primary and third level education, as noted in the Framework and also evidenced in national and international assessments.

It is further noted that these subjects have also been key to increasing public awareness and science literacy at a community, regional and level with addressing societal changes and challenges. The continued support of these subjects is essential with the drive at an EU and national level to create a socially inclusive model of sustainable development, job creation, as well as address societal issues relating to climate change and securing a healthy ocean.

It is highlighted by scientists and leading experts that life on earth depends on the health of the ocean. We are reliant on the ocean for life, as it provides us with over half the oxygen we breath, it feeds us, entertains us, inspires us, and connects us. As an island nation with an ocean territory ten times the size of its land area, the ocean is very much a part of our heritage. From fishing, industry, sailing, shipping, tourism, and marine researchers, Ireland is very much dependent on the ocean. Unfortunately the ocean is under significant threat around the world; and at a time when the world is looking to recover from the COVID 19 pandemic, it provides a significant insight into the health and wellbeing of human beings. Scientists confirm that a healthy ocean in turn delivers a healthy society. A healthy ocean is connected to providing social, economic and environmental benefits. It has also been emphasised that the Ocean may separate us physically around the world, but it provides us the opportunity to bring humanity together for a healthy and prosperous future.

Therefore, at a time when we are faced with international societal challenges and responding to national priorities, we agree that it is an important time to ask key questions relating to the

curriculums' purpose, priorities, structure and components. Much research has highlighted how education is central to ensuring and instilling the values we adopt in our lives. This is particularly relevant to our social, economic and cultural development noted in the Framework. It is also key to ensuring an understanding of the influence the environment has on every human being as well as the impact we have on our ocean and climate.

The Camden Education Trust further welcomes the opportunity to engage within the NCCA, covering the areas of activity underpinning the formulation of advice in the developing the primary curriculum framework. With extensive experience and expertise addressing systems related issues, particularly relating to barriers in education systems, we would welcome the opportunity to add to the NCCA's extensive body of research, findings from networking with teacher , and adding to the consultation process. Key areas that may be further considered include short and long term strategies for marine education in primary schools. The ocean is an exemplar and central to supporting the delivery of the full curriculum subjects and strands as well as being hugely relevant to the Junior Cycle. Including set thematic teaching opportunities within the framework would also provide educators clear direction with supporting the UN Sustainable Development Goals (2030) and the decade of UN Ocean Science for Sustainable Development (2021-2030) which are the benchmarks for achieving a better and more sustainable future for all.

Section 2

Agency and flexibility in schools

The Draft Primary Curriculum Framework proposes that the redeveloped curriculum will:

- Be for every child.
- Recognise teachers' and principals' agency and professionalism to enact the curriculum in their individual school context.
- Give more flexibility to schools in terms of planning and timetabling to identify and respond to priorities and opportunities.
- Connect with different school contexts in the education system.
- Give greater opportunities for flexibility and choice for children's learning.

The Draft Primary Curriculum Framework outlines important messages in relation to agency and flexibility in schools. Please give your overall feedback in relation to this key message.

The Camden Education Trust welcome the proposed flexibility to schools in terms of teachers and Principals being recognised to enact the curriculum in their individual school context, as well as having the flexibility to in terms of planning and timetabling to identify and respond to priorities and opportunities for their class and school. We recognise that this provides opportunities for children, teachers and principals to connect with their local school community in the education system. Following this we are delighted to see greater emphasis on the opportunities for flexibility and choice for children's learning.

Providing schools with the Flexible Time to introduce in depth learning experiences based on the five curriculum areas, whole-school activities, community projects and focusing on key competencies will be of significant value to enhancing the school's wider community engagement, and is a welcome change. We would support the opportunity to see **Option 3** considered in the consultation process, where it suggests a minimum time allocation for each curriculum area and for Flexible Time with additional guidance on weekly minimum time allocations for Language 1, Language 2 and Language 3.

Cushla's MSc research examining the barriers to ocean literacy in Irish primary schools highlighted that the curriculum framework (1999) is seen by educators as a key barrier to introducing marine themes on the curriculum. One of the key barriers noted were restrictions on the teacher's time. This included time administering projects, to finding appropriate resources to use on the curriculum. Among the barriers also included teachers having access to external support, networks, funding (e.g. school trips), and fit-for-purpose resources (e.g. time and cost). It was agreed by marine and education participants that a lack of knowledge among the teachers of our ocean topics was also an issue of concern (e.g. understanding the oceans' influence on climate change). It was recommended by the participants that "school board members, principals, and school teachers should be encouraged by marine communities and organisations to include the Governments' *Harnessing Our Ocean Wealth Strategy – An integrated marine plan for Ireland* on the school's education framework. *Harnessing Our Ocean Wealth* calls for a strengthening of our

maritime identity, increased awareness of the value, opportunities and societal benefit of our oceans, as well as raising engagement with the ocean.

The Marine Institute's strategic aim strategic plan (2018-2022) further supports the Governments goals under its strategic enabler of engagement and education to create a new generation of ocean professionals. It aims to do this by increasing their efforts to partner with educators and support the mainstreaming of marine education and training at all levels of the national education system. This includes developing new programmes and curricula and, in some cases, 'marinising' existing education and training programmes. This will encourage new generations to pursue marine and maritime careers and equip students to become ocean leaders and marine champions of the future.

The Camden Education Trust sees the Explorers Education programme which is funded by the Marine Institute as an exemplar of teaching children and teachers about the marine through cross curricular activities and projects (see www.explorers.ie / [Explorers STEM and STEAM projects](#)) and the Flexible time is an ideal opportunity to further support developing these relationships with key stakeholders at a community and national level. However, from our experience working with over 500 school teachers nationwide, on an annual basis, introducing marine themes on the curriculum, from feedback from teachers indicates that without the ocean theme included as a subject, strand or included in formal content and resources, key areas that require societal change may be not be included on the syllabus on an annual basis.

We acknowledge that there is an increased time allocation to Science and Technology Education at stage 3 & 4 (third -sixth classes) of 6 hours over four weeks, compared to the other options. However we would highlight that the monthly allocation of hours is considerable low in comparison to other core subjects such as Mathematics 16 hours and Wellbeing 12 hours. Although it is stated that the flexibility with the allocation of time provides opportunities for teachers to block time for particular pedagogical approaches such as project work or involvement in local initiatives, we would also suggest that 6 hours flexible time per month needs to be increased. From our experience working on key projects with teachers through the Explorers Education Programme, we would recommend a minimum of 10 hours per month to allow for an increased opportunity to engage with community projects and receive support from other outreach networks. For example, 6 hours equates to a one day outdoor activity such as a seashore safari, or attending an event. Often national events such Galway Science Festival are held on a Sunday and includes a run up of activities the week prior to the public event. The allocated time leaves teachers little time to provide other engagement in new or a range of community and or national projects that are prioritised by the school.

In response to the concept of having Flexible time is seen as a positive move, we would also recommend annual resources and accessibility is provided to teachers, principals and education management to highlight outreach opportunities and collaborations at a local and national level. This as noted above, this would include projects relating to the UN Sustainable Goals and the inclusion of ocean & environmental literacy and climate literacy being addressed on an annual basis.

Curriculum connections between preschool, primary and post-primary schools

The Draft Primary Curriculum Framework proposes that the redeveloped curriculum will:

- Provide a clear vision for children’s learning across the eight years of primary school.
- Link with learning experiences provided through the themes of the *Aistear: the Early Childhood Curriculum Framework* and connect with the subjects, key skills and statements of learning in the *Framework for Junior Cycle*.
- Support educational transitions by connecting with what and how children learn at home, in preschool and post-primary school.

The Draft Primary Curriculum Framework outlines important messages in relation to curriculum connections between preschool, primary and post-primary schools. Please give your overall feedback in relation to this key message.

The Camden Education Trust welcome the seven key competencies and the proposal to embed these throughout the redeveloped curriculum. As indicated in the framework proposal, we agree the curriculum areas and subjects contribute to the development of the key competencies and many of these competencies are interlinked. These as noted are key to how children interact and engage in the social world, within their homes, the wider community at a local, national and international level; as well as how they mature from adolescence to adulthood.

However, the Camden Education Trust recommend that the key competencies proposed in the framework need to be further considered and or elements included in those listed. This is to ensure that there are connections between pre-school, primary and post-primary schools are made, as well as ensure some competencies are not overlooked. For example, it is noted in the draft framework that children “need to be able to interact and engage with the natural world around them and come to an appreciation of its value and their responsibilities as custodians of it” (p.7). However, this description on valuing the natural world is not included in any of the key competencies’ descriptions. Although the competency “Being an Active Citizen” reflects the impetus of the UN Sustainable Development Goals, it neglects to include reference to terms of engaging and supporting environmental sustainability, healthy oceans or climate change.

In this context, as the EU Commission prepare for the next generation of EU-funded programmes to foster economic recovery and contribute to the European Green Deal, they highlight the need for innovation in creating a blue society and blue economy and reducing the skills gap in both the traditional and new blue economy industries throughout the EU. The European Commissioner for Environment, Oceans and Fisheries, Virginijus Sinkevičius, said: *“In the midst of the crisis, more than ever, we must stay focused on making our future green: the EU Green Deal and the green transition should guide our recovery plan. The development of a sustainable blue economy, targeting specific challenges and opportunities at sea basin level, serves exactly these objectives. We must put green in the blue and blue in the green.”*

As the the European Commission has adopted an updated action plan for a sustainable, resilient and competitive blue economy in the EU Atlantic area, covering France, Ireland, Portugal and Spain, it is also recognised that in order to ensure policy decisions are in line with societal expectations, it is proving that to achieve a blue economy is challenging. This is particularly, where the number one barrier in Europe and Ireland towards ocean literacy, is having unfounded attitudes and a lack of awareness of marine issues (including climate change) (Fauville, et al.

2018.). Research into teaching children about sciences as well as marine and environment studies at primary and secondary school requires a systematic integrated approach to overcome the barriers (McCauley and Davison, 2015). This is particularly relevant with preschool, primary and post-primary where marine and environmental focused competencies are not on the curriculum.

The Camden Education Trust recommends that Ireland be at the forefront of generating competencies and connections between pre-school, primary and post primary schools that focus on ocean and environmental literacy. It is now recognised within the EU that Cushla Dromgool-Regan is the leading practitioner in Ocean Literacy and it behoves us to ensure that the future young people in Ireland benefit from her expertise. We are therefore offering to provide Cushla pro bono for any consultations, advice and guidance required in this key future area of young people wellbeing and the future economy.

Ocean & Environmental Literacy as a recommended competency may include:

Ocean and Environmental literacy is defined as understanding the ocean and environments influence on you and your influence of the ocean and environment. An ocean and environment literate person understands the importance of the ocean to humankind; can communicate about the ocean and environment in a meaningful way; and is able to make informed and responsible decisions regarding the ocean, environment and its resources.

Emerging priorities for children’s learning

The Draft Primary Curriculum Framework proposes that the redeveloped curriculum will:

- Embed seven key competencies across children’s learning outcomes from junior infants to sixth class.
- Focus on developing children’s skills, knowledge, dispositions, values and attitudes. The Learning Outcomes and the Key Competencies are broad in nature to describe this wider understanding of learning.
- Have increased emphasis on some existing areas such as PE and SPHE (Wellbeing) and digital learning, and have new aspects such as Modern Foreign Languages, Technology, Education about Religions and Beliefs (ERB) and Ethics, and a broader Arts Education.

The Draft Primary Curriculum Framework outlines important messages in relation to emerging priorities for children’s learning. Please give your overall feedback in relation to this key message.

The Camden Education Trust’s overall response to the emerging priorities for children’s learning, is led by the research that supports that schools and the curriculum are viewed as a critical for responding to national priorities, needs and addressing societal problems. (Brennan et al. 2014; Dromgool-Regan, 2018). A key example of this is demonstrated by the legacy of Urie Bronfenbrenner’s who was one of the world’s leading scholars in developmental psychology, child-rearing and human ecology. Research in this area continues to support that children are the centre of creating change and addressing long-term national and international priorities. This is typified in the Bronfenbrenner’s Ecological Theory model where the family, classroom, religion and

children's peers are central to children's short and long term development of values, perceptions, attitudes, beliefs and behaviour.

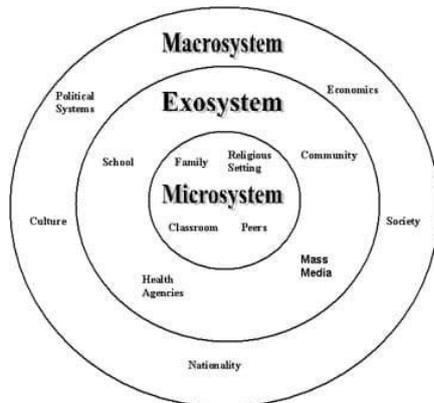


Figure 1. socio-cultural ecological systems model adapted from Bronfenbrenner

Therefore, on this basis and as noted above, we welcome the opportunities that the key competencies across children's learning outcomes offer in relation to: Wellbeing, Identity and Belonging, Communicating, and Exploring and Thinking - with the proposed inclusion of Ocean / Environmental literacy to be considered as a key competency; as well as the focus on developing children's skills, knowledge, dispositions, values and attitudes.

We also support the increased emphasis on some existing areas such as PE and SPHE (Wellbeing) and digital learning, and have new aspects such as Modern Foreign Languages, Technology, Education about Religions and Beliefs (ERB) and Ethics, and a broader Arts Education. These are all key areas which provide children the opportunity to excel in their learning experiences.

This development of the curriculum has the potential to enable national priorities to be recognised as a local and national level. For example the [Harnessing Our Ocean Wealth - An Integrated Marine Plan for Ireland \(2012\)](#) sets out the Government's vision, high-Level goals, and key enabling actions to put in place the appropriate policy, governance and business climate to enable our marine potential to be realised. This included embedding knowledge of our ocean wealth into the primary and secondary curricula. This was further supported by '[A Study of the Current and Future Skills Requirements of the Marine/ Maritime Economy to 2020](#)'.

Working nationwide with over 500 teachers 12,000 children annually and 3rd level students and educators also provide opportunities to include examples of how using a cross curricular integrated approach and marine themed projects is an exemplar to covering all of the subjects on the curriculum. As a key priority of the Government led by its Harnessing Our Ocean Wealth strategy, states that building on our rich maritime heritage, our goal is to strengthen our maritime identity and increase our awareness of the value (market and nonmarket), opportunities and social benefits of engaging with the sea.

The team that works with Camden Education Trust has extensive expertise in the provision of teachers training, formerly as Director of the Galway Education Centre and Cushla's role with

leading the development of continuing professional development training programmes through the Explorers Education Programme, and for the Marine Institute in the last 15 years. The Explorers Education Programme's team have also worked with a number of 3rd level Institutes (DCU, Mary Immaculate College) over the last five years providing initial teachers training to students.

Our experience has highlighted the need to work with teachers and educators to provide teachers with opportunities to learn about areas relating to national priorities. It has often been noted by the teachers, lecturers and students that they see the value of including marine themes on the curriculum that address national and international priorities, which they may not have been exposed to in the past. The CPDs provided by the Explorers Education Programme has included using the Seashore as a tool for cross curricular subjects and integrated learning. With the outdoor / indoor learning experience teachers are provided with the opportunity to learn how to introduce marine themes on the curriculum, through science, maths, geography, English & Irish, history, SPHE and the arts. Key priority areas include marine environmental awareness and care; living things – marine biodiversity, as well as climate change and healthy oceans. (For more information on teachers training see www.explorers.ie)

With Climate Change and the threats to our ocean, now recognised as a priority at a community, national and global level, it is key that these topics are identified by teachers and school leaders to identify and prioritise these as areas for school-based CPD training.

Changing how the curriculum is structured and presented

The Draft Primary Curriculum Framework proposes that the redeveloped curriculum will:

- Be broad and balanced in purpose and content.
- Be structured in five broad curriculum areas;
 - Language
 - Mathematics, Science and Technology Education
 - Wellbeing
 - Social and Environmental Education
 - Arts Education.

(In addition to the five areas above, the Patron's Programme is developed by a school's patron with the aim of contributing to the child's holistic development particularly from the religious and/or ethical perspective and in the process, underpins and supports the characteristic spirit of the school. These areas connect to the themes of *Aistear* and to the subject-based work in Junior Cycle.)

- Provide for an integrated learning experience, with curriculum areas in Stages 1 and 2 (junior Infants – second Class) and more subject-based learning in Stages 3 and 4 (third class – sixth class).
- Use broad learning outcomes to describe the expected learning and development for children.
- Incorporate the new *Primary Language Curriculum / Curaclam Teanga na Bunscoile*.

The Draft Primary Curriculum Framework outlines important messages in relation to changing how the curriculum is structured and presented. Please give your overall feedback in relation to this key message.

The Camden Education Trust also agree with the approach of a broad and balanced learning experience for school children. We particularly support the approach of learning outcomes in Arts Education. The Explorers Education Programme has successfully been involved in a number of local, national and international initiatives where marine themes have been taught through visual arts, music and drama, as well other aspects of arts education such as dance, film and digital media. Through arts linkages, other subjects have also been incorporated including science, history, languages, as well as CET and film making. An example of this includes the ['Build Your Own Unknown' sculpture and short film project](#), which was art and science project completed by the 4th class at Cregmore National School in 2017. It brought students, teachers, an artist and scientists, together in the classroom as co-creators and collaborators, learning about the discovery of the Moytirra hydrothermal vents that were discovered 3000m at the bottom of the Mid-Atlantic Ocean by an Irish led research team. The Build Your Own Unknown project was awarded Highly Commended in the best mid-size sponsorship category at the Allianz Business to Arts Awards in 2017.

The Explorers Education Programme annually works with schools throughout Ireland to engage in marine concepts that supports the Governments Harnessing Our Ocean Wealth – Goal 3: Engaging With our Sea – which sets out to build on our maritime heritage and strengthen our maritime identity. This has involved working with teams following unmanned mini-boats crossing the Atlantic, creating an art exhibition from plastic in the ocean and the circular revolution, to more recently producing a book of art and poetry called ['Our Ocean – Marine Legends, Fairy Tales and Folklore in Ireland'](#). The concept for this project was recognised by the European Marine Science Association as a novel and fresh way of teaching marine on the curriculum.

In relation to the curriculum being structured into five broad curriculum areas, we appreciate teachers concerns with the current curriculum being considered as being overloaded and is often cited as a barrier to including extended curricular activities. However in relation to the proposed combination of subjects such as maths and science into one curriculum area, and also including technology, we pose the question of how this alleviates an 'overloaded' curriculum.

As noted in points above, the Camden Education Trust see the benefits of an integrated learning experience with curriculum areas in Stages 1 and 2 (junior Infants – second Class) and more subject-based learning in Stages 3 and 4 (third class – sixth class). However, we would recommend that areas relating to learning about the principles of our ocean and climate change are also included under the future consideration of subject strands, in order to support children's learning experience, interests; as well as addressing key national and global priorities. It is also recommended that the integrated approach is also considered throughout Stages 3 and 4 relating to key topics to address global challenges at a community and national level.

As highlighted, life on earth depends on the health of the ocean. A healthy ocean is connected to providing social, economic and environmental benefits. It has also been highlighted that the Ocean may separate us physically across the world, but it provides us the opportunity to bring humanity together for a healthy and prosperous future.

The United Nations has proclaimed a **Decade of Ocean Science for Sustainable Development (2021-2030)** to support efforts to reverse the cycle of decline in ocean health and gather ocean stakeholders worldwide behind a common framework that will ensure ocean science can fully support countries in creating improved conditions for sustainable development of the Ocean. The ocean and marine realm is the largest component of the Earth's system that stabilizes climate and supports life on Earth and human well-being. However, the First World Ocean Assessment released in 2016 found that much of the ocean is now seriously degraded, with changes and losses in the structure, function and benefits from marine systems (UNESCO, 2020). In addition, the impact of multiple stressors on the ocean is projected to increase as the human population grows towards the expected 9 billion by 2050.

As noted above, learning about the principles of our ocean and climate is an exemplar for integrated teaching that can be included in the five subject areas. The Marine Institute's Explorers Education Programme has demonstrated the capabilities of including marine themes on the curriculum through its lesson resources, tool kits, films, and outreach support provided in schools (www.explorers.ie). Examples of this are further highlighted by other jurisdictions that have incorporated ocean and climate change principles on to their curriculum at a primary and secondary school level.

Reflecting on other education jurisdictions that support the Paris Agreement 2015, there is an emphasis to include climate action in the education syllabus. In the USA, the National Oceanic and Atmospheric Administration (NOAA) have produced guides for the US K-12 curricula. These include the [Ocean Essential Principles and Fundamental Concepts and Climate Essential Principles and Fundamental Concepts](#) and present a vision of an ocean and climate-literate society. Many scientists and educators collaborated to produce these resources, building on efforts to define ocean and climate literacy and identify the principles and concepts of ocean and climate science that should be included in K-12 curricula. In 2020, Italy was the first country to make sustainability and climate action compulsory subjects for students, where material is integrated in regular lessons such as mathematics and geography. UNESCO United Nations Education, Scientific and Cultural Organisation produced a resource for schools called [Ocean Literacy for All – A Toolkit](#), in which 35 countries have committed to piloting the toolkit in schools. In New Zealand the [Climate Change Wellbeing Guide](#) has been developed to provide teachers with background information and tailored resources to help them navigate the delivery of climate change scientific content, whilst maintaining the wellbeing of students.

EU funded projects [SeaChange](#) and [SOPHIE](#), in which NUI Galway were partners, both have produced key research findings supporting the importance of creating an ocean literacy society. These projects also highlight the benefits the ocean has on our health and wellbeing. Adopting a systems approach, these projects have also illustrated the need for collective intelligence and collaborations between key stakeholders when developing resources and content that supports children's and teenagers learning experiences in these areas.

The Camden Education Trust further highlight that at a time where children and teenagers are leading the world in campaigns raising awareness about the need for climate action, protection of biodiversity, and supporting healthy oceans; there is a need to ensure these topics are included on the curriculum on a long term basis. Research by Brennan (2014) states that to create long term change in human behaviour and values requires long term investment and collaboration. To see positive systemic change, it can take up to 25 years to see the effectiveness of a long-term campaigns. It is therefore recommended that these topics of interest relating to healthy oceans and healthy climate, for children need to be emersed in the curriculum subject areas on a permanent basis. It is also recommended that these subject areas are supported by integrated learning at all levels from curriculum areas in Stages 1 and 2 (junior Infants – second Class) as well as at Stages 3 and 4 (third class – sixth class).

The Camden Education Trust welcomes the opportunity to further provide support and collaborating with the NCCA, educators, and forming collaborations with experts in ocean and climate science to ensure tool kits, activities and resources are developed suited for teachers and children of all ages.

Supporting a variety of pedagogical approaches and strategies with assessment central to teaching and learning

The Draft Primary Curriculum Framework proposes that the redeveloped curriculum will:

- Promote high quality teaching, learning and assessment.
- Conceptualise assessment as an essential and critical part of teaching and learning.
- Highlight the importance of teachers’ professional judgement in supporting progression in children’s learning.
- Encourage teachers to make meaningful connections with children’s interests and experiences.
- Recognise the significance of quality relationships and their impact on children’s learning.
- Recognise the role and influence of parents and families in children’s education.

The Draft Primary Curriculum Framework outlines important messages in relation to supporting a variety of pedagogical approaches and strategies with assessment central to teaching and learning. Please give your overall feedback in relation to this key message.

The Camden Education further supports the promotion of high quality teaching, learning and assessment. Working with Explorers Education Programmes team and teachers nationally, we have always adopted a collaborative approach and value the teacher’s expertise. On this basis we support the importance of teachers’ professional judgement in supporting progression in children’s learning. It is our belief that developing a variety of pedagogical approaches and strategies of assessment are essential and critical part of teaching and learning in Ireland. With the different types of project modules offered by the Explorers Education Programme, as well as working with different size and locations of schools, we agree that strategies and approaches have

to be adapted and tailored to the learning experiences of children. An example of this is demonstrated by Explorers teams who work with teachers and a class of one age group in larger schools to then having to adapt content for multi-class groups in smaller schools.

It is also agreed that conceptualised assessment informs dialogue and decision making for teachers and also benefits children's learning and achievement. The Explorers Education Programme has gone through a developmental and formative process. In the development of the outreach programme it was essential that we consulted with teachers to ensure we utilised key pedagogical strategies and approaches that were fit-for-purpose in the classroom. With this approach, we have successfully provided teachers with content, resources, toolkits and outreach that supports teachers interested in using marine themes on the curriculum. This collaborative approach with teachers has provided us with the ability to continuously provide support, engage, motivate and progress teachers and children's learning experiences. We therefore agree with the recommended model of continuum of assessment as it provides both a qualitative and quantitative approach in collecting data that informs the teaching practice.

In the Explorers programmes developmental stages, different assessment strategies were also explored, which has led to creating a best practice in the delivery of the programme. By creating an evaluation process that assesses the children's pre and post knowledge and engagement, as well as gathers qualitative data of the children's learning experiences; this has enabled the Explorers Education Programme team to collect data that is rich in understanding the teachers and children's learning experiences. Working with teachers, we have seen children's increased knowledge and awareness of the marine; and most importantly their ability to engage and communicate about the ocean in a positive way.

The Camden Education Trust also recognises the significance of quality relationships and their impact on children's learning, as well as the role and influence of parents and families in children's education. We agree and recognise the value of teachers having the opportunities to interact with children and identifies "fruitful themes, interdisciplinary skills, big ideas and real-world problems that are starting points for integrated teaching and learning". Through written and face-to-face feedback collected from teachers and parents, we have been fortunate to gather positive reports on how the Explorers Education Programme has successfully promoted children's engagement, motivation, creativity and innovation. Therefore working with teachers to help them connect the curriculum with children's lives is particularly relevant in promoting integration in the primary classroom. On this note, the Camden Education Trust would welcome the opportunity to work with NCCA connecting teachers and children with our maritime heritage and culture, as well as strengthening our maritime identity.

Building on the successes and strengths of the 1999 curriculum while recognising and responding to the challenges and changing needs and priorities.

The 1999 curriculum contributed to many successes including:

- Enhanced enjoyment of learning for children.
- Increased use of active methodologies for teaching and learning.
- Improved attainment levels in reading, mathematics and science as evidenced in national and international assessments.

The Draft Primary Curriculum Framework proposes that the redeveloped curriculum will:

- Address curriculum overload at primary level.
- Take stock of strategies, initiatives and programmes and clarify priorities for children's learning.
- Link with *Aistear* and *the Framework for Junior Cycle*.

The Draft Primary Curriculum Framework outlines important messages in relation to building on the successes and strengths of the 1999 curriculum while recognising and responding to challenges and changing needs and priorities. Please give your overall feedback in relation to this key message.

The Camden Education Trust wishes to congratulate those involved in the *Draft Primary Curriculum Framework* in the delivery of an excellent proposal that realises the strengths of the 1999 curriculum and has responded to the challenges and changing needs of educators and teachers going forward. We also wish to also highlight the strengths of 1999 curriculum and applaud those who provided its foundations and the benefits it had brought to the Irish education system.

Working with many teachers, educators and key stakeholders through the Galway Education Centre, at national and international education events, and with outreach and support services provided by organisations such as the Marine Institute, NUI Galway, Galway-Mayo Institute of Technology, and the Science Foundation Ireland, to name a few, the Irish Curriculum (1999) has provided a significant framework for Irish education for primary schools in Ireland. The successes of the curriculum is reflected in the junior cycle, as well as secondary and third level education, where significant progress has been made in the area of sciences, technology and engineering in Ireland.

In our experience, in the last 15 – 20 years, although faced with some challenges of the curriculum, many teachers and educators have shown the tenacity and creativity to think and work beyond its limitations, particularly with the changing teaching environment. The 1999 curriculum has enhanced the learning experience of children with the variation of subjects and strands that other countries do not cover. The history, geography, arts and science subjects and strands have provided teachers with the guidance and enhanced enjoyment for children as well as stimulating an increased use of teaching and learning methodologies. An example of this is highlighted with the outreach support in the classroom and CPD training provided by the Explorers Education Programme in which many teachers have learned how science strands could be introduced into the classroom, thorough marine themes as well as using cross curricular

lessons. Using the following curriculum subject and strand units shows how marine themes have been included on the existing curriculum as part of the seashore safari module:

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|---|---|
| SESES (Science) | |
| Living Things | Marine animal and plants life |
| Environmental awareness and care | Caring for your local environment – the seashore |
| Energy and Forces | Water and electricity – ocean energy and technology |
| Materials | Properties and characteristics and change/ water/ insulators |
| SESEG (Geography) | |
| Environmental care | Caring for my locality |
| Natural environments | Physical features of the earth, the local natural environment, Seas of Ireland – introduction to the Real Map of Ireland |
| SESEH (History) | |
| Story | Life, Society, Work and Culture in the Past – identifying with Irish marine engineers, scientists and sailors of the pasts (e.g. John Phillip Holland – inventor of the modern submarine to Grainne Ní Mháille, pirate and ocean extraordinaire. Myths and Legends – Irish folklore relating to the ocean |
| NM (Numeracy; Mathematics) | |
| Number / Algebra | Maths on the seashore |
| Data | collection and reporting – animals and living things on the seashore |
| Shape & Space | Spatial awareness / Symmetry of animals / creating 2D & 3D shapes based on animal life |
| Measures | Creating tidal wall game – length, weight, capacity, money, time, area, |
| | estimating and comparing, lengths and time |
| LE (Literacy; English) | |
| Communication and writing | Structure and writing poems & songs / newsletters / letters – Seashore legends and fairy tales. |
| AEVA (Visual Arts) | |
| Drawing | seashore species/ keys |
| Paint and Colour / Textiles | theory of colour – save the sea poster, marine collage, seashore artwork |
| SPHE (Social, Personal & Health Education) | |
| Myself / Myself and Others / Myself and the Wider World | Working and making decisions as an individual, in a group, and with the wider community – sharing knowledge and environmental care |
| PE | |
| Creating and playing games | Exploration and games on the seashore |
| Cooperating and communicating | Cooperating and communicating through orienteering activities and outdoor challenges on the shore |

However, with a full curriculum many teachers that we have worked with have felt the increased administration associated with the delivery of the curriculum in recent years has created a sense of curriculum overload at primary level. Along with this, the introduction of new Science subjects was challenging for teachers who had not had science training. It is therefore welcomed to see the newly proposed curriculum framework adopting a pedagogical approach and strategy that provides

teachers and school communities the opportunity to address curriculum overload, as well as have the opportunities to adopt strategies, initiatives and programmes, that clarify priorities for children's learning.

It is also welcomed to see linkages with the *Aistear* curriculum identifying the importance of wellbeing, identity and belonging, communicating, and exploring and thinking with the *Framework for Junior Cycle*. The proposed flexible time enables teachers to work on projects at a school and community level which supports the children's transition into the junior cycle, where they are introduced to newly developed subjects and short courses. Working with other educators at secondary and third level as well as with marine outreach and community stakeholders, the Camden Education Trust has seen a significant increase in students' interest and engagement in marine STEM and climate action issues. The Camden Education Trust however do recommend that school principals and management are provided with the support mechanism within their schools to ensure teachers are given the opportunity and encouraged to take part in new and ongoing projects. From our experience, it is important that all teachers' voices are heard within their schools, and some teachers are not limited to becoming the silo teacher for national projects.

As also documented in our response, the Camden Education Trust would welcome further developments with the Framework to include ocean and climate literacy on the primary school curriculum. As highlighted, ocean and climate literacy is understanding how we influence the ocean and climate and how the ocean and climate influences us. A vision of an ocean and climate-literate society is paramount for all of our wellbeing. As indicated, the concepts of ocean and climate change literacy do not always fit neatly within a particular discipline and therefore shows the importance of an interdisciplinary and integrated educational approach.

The Camden Education Trust welcome the opportunity to work with schools and the wider education partners to help identify practical ways of including the ocean and climate action on the new curriculum.

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Thank you for your submission.