

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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Date	
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Organisation submission details

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Yes No

Please email your submission to PCRRsubmissions@ncca.ie

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

The Sustainable Energy Authority of Ireland (SEAI) is Ireland's sustainable energy authority. We work with householders, businesses, government, communities, and schools to create a cleaner energy future. Our vision is for Ireland's energy to be sustainable, secure, affordable and clean. To achieve this, Ireland must use less energy, move to clean energy and innovate new solutions to meet our energy needs. Leading the transition to smarter and more sustainable energy activities is central to what we do.

SEAI's Schools & Education programme, established in 1995, supports schools across Ireland to help children learn about sustainable energy and climate change by providing curriculum linked resources and workshops. During 2019, our team of Environmental Educators reached 27,500 children and 750 teachers with in-school workshops. In addition, 1,225 children took part in our annual competition showing us their ideas on how to tackle climate change and reduce energy www.seai.ie/schools

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.

Please email your submission to PCRRsubmissions@ncca.ie

Section 1

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

SEAI welcomes the development of a new Primary Curriculum and the opportunity to input to the Draft Primary Curriculum Framework. There are several very positive aspects within the framework, such as addressing curriculum overload and making proposals that are responsive to emerging priorities for children's learning. However, we believe that the most important priority must be educating our children about nature and building nature rich schools to tackle the issues of climate change and biodiversity loss. We expand on these points as follows:

Addressing curriculum overload

Allowing more flexibility to the curriculum, providing more of a structure for subject integration and theme-based learning are very positive steps towards reducing curriculum overload for teachers.

Emerging priorities

The proposals put forward which are responsive to emerging priorities for children's learning are also welcoming. However, we believe that the most important challenges facing humanity today have not been given priority.

Climate Change and COVID-19

The World Health Organisation recently stated: *Climate change likely poses a serious threat to human health, with warmer, wetter conditions making it easier to transmit dangerous infectious diseases.*

It then goes on to say: *Every person has been negatively affected by COVID-19, a dangerous and highly infectious disease. It has led to a dramatic loss of human life worldwide and presents an unprecedented challenge to public health, food systems and the world of work. We must rethink the future of our environment and tackle climate change and environmental degradation with urgency. Only then can we protect the health, livelihoods, food security and nutrition of all people.*

The draft framework lists digital learning, modern languages, and a broader arts education as emerging priorities. We believe the most significant emerging priority is the destruction of the natural world and overuse of earth's resources. Climate Change and biodiversity loss will have far reaching consequences for the physical, mental, and social wellbeing of our children and needs to be addressed by society as a whole.

Key Competencies

From our extensive work with schools over the past 25 years, a substantial number of children are already aware of the environmental challenges facing our society and it is a source of anxiety for many. We welcome the key competency, *being an active citizen* as this is very important in relation to the above i.e it can help foster a sense of ownership and action, which leads to empowerment, in the local and global context. Many of the

environmental problems facing us stem from a lack of connection to our local and global environment and awareness of our role in limiting the effects of climate change.

To ensure a better future for our children, we need to re-establish the lost connection with nature, local place and community. This can be very simply done by building in a requirement for more time outside the classroom. The school grounds and local environment can be a very rich learning setting. Outdoor education has the benefit of promoting physical and mental wellbeing, increasing attention span in children and improving the learning experience.

Since schools re-opened in September 2020, we have noticed a significant increase in outdoor learning. To ensure this occurs in all schools there should be a specific reference to it in the curriculum so that a portion of curriculum time is set aside for education in the outdoors. While all curriculum areas can be enhanced by outdoor learning, it should be mandatory in the areas of Mathematics, Science and Technology; Social and Environmental and Wellbeing.

There are also opportunities to incorporate sustainability and environmental education into the other competencies so that the topic is overarching throughout a child's primary education. We expand on these themes later in the submission.

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.

Agency and flexibility are very important in schools and the allocation of flexible time and the focus on monthly blocks of time for some curriculum areas are very positive. We are aware of the issue of curriculum overload, however, due to the urgency of the climate crisis sustainability/environmental education should not be an add on but can and should be integrated throughout all areas of learning.

Outdoor learning is a must have not a nice to have www.edenproject/education quoted by Jackie Curley, Knocknacarra National School in her presentation "Opening the door to learning outside", NCCA webinar 03.12.20. To instil a love of nature in every child, all schools must have a requirement of a minimum of 5 hrs per week spent outdoors during class time (not break time). This requirement would be a very valuable addition as it is a vital area which unfortunately is overlooked in many schools. The term *nature-deficit disorder* was coined by author and childhood advocacy expert Richard Louv in his book "Last Child in the Woods". Children are *less alive* according to Louv and to overcome this he suggests we need to develop nature-rich schools where children will become alive – he asks *What teacher wants their students to be less alive?*

Forest schools is a prime example where teaching of all subjects can occur outside in a meaningful way with many benefits www.irishforestschoollassociation.ie

- improved relationships with and understanding of the outdoors;
- improve concentration, language and communication skills;
- co-operating as part of a team teaches the child to be aware of others;
- improved language and communication skills;

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- enhanced numeracy and literacy skills;
- improved physical skills;
- increased self-esteem and confidence and motivation for learning.

These benefits are backed by much research, both Irish* and international which shows that providing safe, outdoor spaces for children to play and explore is linked to good physical and mental health.

We regularly hear about the barriers which exist for schools to embrace outdoor learning however, many schools have overcome these. Mary Brosnan, Principal at Tralee Educate Together commented at a recent webinar “*We include wellington boots on our book lists*”. By making outdoor gear as normal as books for children, going out to learn becomes the norm. In addition to suitable footwear, children’s uniform must be appropriate for the weather i.e warm track suits during the winter and shorts and polo shirts for the summer months to replace outdated skirts/ flannel trousers, shirts, and ties.

There are many opportunities to involve groups from the local community to help and support schools accessing the outdoors education e.g. Tidy Towns, Sustainable Energy Communities. Siobhan Fitzgerald, Principal at Eglis National School spoke, at the NCCA webinar 03.12.20, about working with their local Tidy Towns group which resulted in a prize at the national competition, something she and her pupils is very proud of.

***Children and the Outdoors** *Contact with the outdoors and natural heritage among Children aged 5 to 12: Current trends, benefits, barriers, and research requirements. Commissioned Report by the Heritage Council*
https://www.heritagecouncil.ie/content/files/children_%20outdoors_commissioned_report_26mb.pdf

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.

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Environmental sustainability should be a common thread throughout the curriculum in the same way that it is prioritised in the new Junior Cycle Framework. Since 2017, when SEAI was invited to join as a partner in the Junior Cycle for Teachers' STE(A)M initiative, we have become very familiar with the various specifications. Through this initiative we have carried out extensive CPD with teachers of many disciplines giving us an insight into how sustainability is across all specifications. NCCA have demonstrated that this is possible at Junior Cycle level, we now need to see it at primary level. There is an obvious fit in Mathematics, Science and Technology Education, Physical and Health Education, Social, Personal and Values Education and Social and Environmental Education.

There are also links with literacy such as the role of language, drama and music in raising awareness of environmental issues and effecting behavioural change. Arts education also provides opportunity for links with sustainability, for example in the materials used. Use of recycled items from the green bin and elimination of polluting microplastics found in glitter and soft plastics is a very real way of introducing a discussion with children on the issues of waste and the need to move from a linear to a circular economy.

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.

While the focus on emerging priorities is good, there needs to be more emphasis on the biggest challenge facing humanity today. There is an overwhelming consensus among the world's scientific community, that we are facing into a very challenging future with rising sea levels and widescale

climate disruption. We are also in the midst of a mass extinction event with catastrophic biodiversity loss.

These are priorities which young people have highlighted, as was evident from several climate related events during 2019: the children's climate marches, an international meeting of young people in Lausanne, Switzerland and RTE on Climate Youth Assembly. It is imperative that we, as adults listen and support our children by facilitating discussion and investigation of the issues. Ten recommendations came out of the Youth Parliament, one of these is:

- Mandatory "sustainability" education from primary level to the workplace including a new compulsory Junior Cycle and optional Leaving Certificate subject".

It is important to note that 29 primary school children attended the Youth Assembly, it wasn't limited to post primary children.

If we are to provide a liveable future for our children society needs to change and vastly reduce our consumption habits and work towards a more sustainable lifestyle. While we recognise that wellbeing, digital learning and technology are important, the top priority needs to be educating children on environmental sustainability within a nature rich school. We note that the word sustainability is used several times in the draft framework, the focus seems to be more on the social aspects. Sustainability has 3 main pillars: social, economic and environmental. To be truly sustainable we need to ensure we are not just focusing on one aspect of sustainability but all three. Teaching children to respect the earth we live on, to have respect for other species and to reduce our consumption of energy is extremely important and there should be a clear emphasis on this.

The United Nation's Sustainable Development Goals provide an excellent framework for schools to ensure sustainability is embedded into the school ethos, from teaching the curriculum to school infrastructure (building and grounds) to purchasing to awareness, behaviour and knowledge of all school personnel (Principal, Deputy Principal, Teachers, caretaker, pupils, Board of Management).

While many schools are using An Taisce's Green-Schools programme which is also a very good example of how to incorporate environmental education and management into the school ethos, it is optional. Only some children and some teachers are involved. To ensure all school personnel have the same aim of sustainability, it must be mainstream and for this to happen it must be written into the curriculum.

Suggested additions to key competencies

Key competency *Being an Active Citizen*, we suggest the following addition:

- Understanding the challenges of Climate Change and Biodiversity loss on a local, national, and global scale and the importance of individual action.

Regarding the attribute in this key competency "Developing capacity to make choices for a sustainable future" many teachers will likely include teaching about food as one of these choices.

From our experience children are given very short time to eat their lunch. This doesn't allow for discussion about food and ultimately developing a healthy relationship with food. To facilitate this, we suggest an extension of or a reorganised lunchtime, where children can learn about food, where it comes from, the benefits of healthy eating and the sustainability issues associated with food eg. locally grown, in season fruit & vegetables versus food imported and the associated food miles. Children can examine the energy used to produce, package, refrigerate and transport food. Having a school garden can teach a broad range of sustainability issues from food waste to excess packaging, the negative impacts of pesticides on biodiversity and the energy use in production and transportation. It also gives children the opportunity to develop a real connection to nature and learn an important life skill.

SEAI and the Department of Education & Skills commenced the National Energy Efficiency Upgrade programme (NEEUP) in 2017 which links extremely well to this competency *Being an active citizen*. The programme aims to upgrade all schools to a B energy rating by 2028 using a variety of technologies to improve the building eg. insulating walls and roofs, replacing windows and doors, moving to energy efficient lighting, installing renewables such as solar pv and heat pumps. The programme provides an ideal opportunity for real world, experiential learning. Children can see the solutions to our energy problems and the lower CO₂ emissions due to the measures in their own school and learn about how this can benefit not just their school but their homes. As all children will likely be homeowners at some stage this learning is essential for their future lives. In addition, schools will have energy management systems installed, with a digital display in a prominent place showing how much energy is being used in the various areas (heat, light, IT etc) and the correlation between this and CO₂ emissions. This data allows for rich learning not only in this competency but also for the key competency of *Being mathematical* and *Being a digital learner*.

Key competency of *Fostering Wellbeing*, we suggest the following addition:

- Developing connections with the local natural environment and developing awareness of how interaction with nature is essential for wellbeing

The addition of the above attribute offers huge opportunities to explore issues around energy use at home, in school, in the community and associated with travel, ideally with learning taking place in the outdoors. Again, it is a key life skill that children should learn from an early age. It would allow children to investigate the impact of fossil fuels, how and why we need to reduce our energy waste and the need for renewable energy in all aspects of our lives. Connections can be made between individual energy use and the global problem of climate change while linking it to nature and biodiversity.

Key competency *Being mathematical*

Within this competency is mention of the use of "real-world information presented mathematically" which we believe is important to experiential learning. We have already mentioned the NEEUP above which SEAI and the Department of Education & Skills are managing.

Both agencies have also developed resources that support learning about energy efficiency in the school building through involving children in gathering energy data from energy used in the school. Training is also available for schools to support these resources www.seai.ie/community-energy/schools/save-energy-at-school/

Key competency *Communicating and using language*

DCU St Patrick's College developed a range of resources for SEAI in 2014, aligned to the primary curriculum. The resources support inquiry based education and through discussing and reflecting on the different scenarios children will be applying and developing a range of skills not just "working scientifically skills" but communicating and language skills

<https://www.seai.ie/community-energy/schools/primary-school/resources-for-teachers/>

All of this can form a solid basis for continuing these themes into Junior Cycle.

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*.

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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 proposed structure and layout are good. It allows the school and teachers flexibility on how best to manage the timetable and how they teach. As we have mentioned already, it provides many opportunities to use the outdoors as a valuable teaching and learning environment in all the 5 curriculum areas.

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.

It is very encouraging that an emphasis is being placed on active, experiential learning and on integration where the teacher and the curriculum should take note of children's own interests. As has been seen from the climate strikes many children have an interest in environmental issues. By integrating environmental, sustainability and outdoor education throughout the curriculum we are supporting their interests. This includes how we use our natural resources, consumption of good and energy use.

School policy must also support and encourage children's interests. Children learn by example and so there is an onus on all staff (Principal, Deputy Principal, Teachers, Caretakers and BOM) to lead by example. Staff are role models for our young people. We have noticed the high number of children who chose to do projects on plastics for SEAI's annual competition. Children need to be supported when they raise these issues eg all schools have a plastic free policy to include school lunches, art materials and supplies, prizes, sports day refreshments etc which is supported by all school staff and parents.

More of an emphasis should be placed on teachers to be environmental & citizenship role models for their pupils and this should be evident during their time at ITE colleges, with environmental education mandatory and not just an elective. If it is embedded throughout the curriculum this will happen.

It is very welcoming that the draft Primary Curriculum Framework proposes that the redeveloped curriculum will:

- Promote high quality teaching, learning and assessment
- Encourage teachers to make meaningful connections with children's interests and experiences.

From our experience experiential learning far outweighs learning from textbooks. While this is true for many subjects it is particularly the case for lessons in the SESE curriculum. For example, learning about renewable energy or living things is best conducted in the school ground or local natural environments. Plants and animals can be observed in their own space and renewables can be examined rather than reading about them in a textbook or worksheets.

Although removing tadpole spawn is against the law in Ireland, an exemption to this has been allowed for all primary and post primary teachers by the National Parks and Wildlife Service*. The benefits of children working scientifically with nature is viewed highly by the authorities and this exemption was specifically put in place for this reason. While many children do great project work on animals such as polar bears in the Arctic facing extinction, very few can name or even recognise local native trees, flowers, and insects. Likewise, some schools will look at rainforest destruction in the Amazon or drought and poverty in some African countries, but teachers and pupils are unaware of how our own overuse of energy and overconsumption of resources directly contributes to some of these global issues.

Children learn best with hands-on, inquiry-based education. To ensure this can occur the school environment needs to be conducive to high quality learning. To support high quality teaching and learning and encourage meaningful connection with nature new builds must have school gardens, planted with native trees & shrubs and have ban on use of herbicides & pesticides. The majority of schools have ample car parking and hard surface concrete yards, while a lot less space is given over to natural surfaces. In addition, secure and covered cycle sheds must be provided as part of

all school infrastructure to encourage and support children and parents to opt for the healthy and sustainable way to get to school. Traffic free zones around schools must also be mandatory to reduce air pollution and safer routes to enter and exit school.

* <https://www.npws.ie/legislation/irish-law/doe-frog-licence>

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 proposed changes to the curriculum are broadly welcomed. The flexibility for the timetable should make it easier for teachers to balance various aspects of the curriculum with flexible time to work on projects and other activities with the pupils. While this was a feature of the 1999 curriculum, it wasn't explicit enough and there was too much of an opportunity for teachers to opt out of experiential learning and inquiry-based education. While still allowing flexibility, the new curriculum should specify minimum requirements for experiential learning in the outdoors.

While an emphasis on new technologies and the use of digital learning is obviously important, there needs to be balance. Care needs to be taken to ensure that children are not being subjected to too

much screen time as a result. Clear guidance and training should be given on the appropriate use of technology such as whiteboards. Through our work with schools, we have noted that in many primary classrooms interactive whiteboards are left on permanently in classrooms, whether they are in use or not. As a result, classroom blinds are closed to reduce glare and classroom lights turned on to compensate for blinds being closed. This not only leads to an increase in unnecessary energy use in schools but will impact negatively on children’s wellbeing and their ability to learn. It can increase their screen time and exposure to artificial light sources and reduces their exposure to natural daylight. Schools should lead by example in their energy use: if we are teaching pupils to be energy efficient then the same should happen in the classroom.

Use of technology needs to be balanced with activity-based learning and outdoor learning to ensure children are given breaks from screens. This will increase their exposure to natural environments, fresh air and natural daylight.

Data Protection

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Thank you for your submission.