

CATHOLIC EDUCATION WESTERN AUSTRALIA LIMITED

Submission to the Western Australian Government Education and Health Standing Committee on 'Inquiry into the response of Western Australian schools to climate change'

PREAMBLE

Catholic Education Western Australia Limited (CEWA) currently consists of 164 schools spread across four dioceses with enrolments of about 78,000 students, including many from non-metropolitan and remote areas.

This submission is as representative as possible of all schools, noting that specific action within school communities varies, some of which, particularly in agricultural areas, have been potentially impacted economically more than others.

It is noted that the Inquiry Terms of Reference apply to a large extent, on the practical effects of climate change on schools and how schools are implementing actions to mitigate the known effects of this change. Terms such as 'undertaking climate action' and 'benefits...of actions' can by themselves, narrow the focus to an economic utilitarian approach to the role of schools in the broad area of climate change. In this submission, CEWA will outline some of the practical steps that are being undertaken, noting however the social responsibility that schools assume in educating students and families more widely so that they are in a position to make informed decisions outside the school setting. Actions in schools are only as relevant as this wider educative process to support informed decision making in the community.

BROAD THEMES OF THIS SUBMISSION

This submission is underpinned by the following broad themes;

1. CEWA holds an unequivocal position that the impact of climate change is real and that significant action is required.
2. Care of the earth is a well-embedded theme and calling in Catholic schools, as outlined in strategic planning and system school improvement frameworks as well as Church doctrine.
3. The need to care for the earth is foremost in the minds of all students and young people globally and they show concern for this.
4. The impacts of climate change are felt most by vulnerable families and communities; these groups command our support as they are often least able to adapt.
5. Activities in schools to reduce the impact of climate change fall under two broad but overlapping categories; firstly, practical measures that may effect cost savings or impact reductions; and secondly providing students with reliable information and experiences which enable them to make informed decisions. Both elements are important.

6. Climate change mitigation strategies can be very difficult for schools in terms of a cost-benefit analysis, particularly the vulnerable school communities which need most help
7. Government funding and collaborative approaches will be required to assist schools to make a difference.

THE IMPORTANCE OF CLIMATE CHANGE IN CEWA SCHOOLS

Catholic Education Commission of Western Australia's (CECWA's) 'Strategic Directions 2019 – 2023' is a key system planning document; this contains a section on 'Stewardship' which articulates the importance of an accessible, affordable and sustainable system of schools. Care of resources is one element of this. Further, 'Quality Catholic Education', the system school improvement framework, contains an element on the natural environment with specific mention that 'we commit to fulfilling and promoting Christian responsibility for care of the Earth as our common home'. CEWA schools are therefore mandated to implement practices which are environmentally sustainable.

Like all Catholic systems globally, CEWA schools are informed by the second encyclical from Pope Francis in 2015 – *Laudato Si'* – On Care for Our Common Home. In this encyclical, Pope Francis provides commentary on excessive consumerism and less responsible global development; negative impacts on the environment and the effects of global warming; the particular impacts on less resourced countries and communities; and makes the call for our world to take swift and unified action. The seven goals of *Laudato Si'* are understanding the cry of the earth; recognising the cry of the poor; ecological economics; working towards more simple lifestyles; improving ecological education; developing ecological spirituality; and galvanising community involvement and active participation.

Laudato Si' – and the role of schools – is to educate children and provide them with the insight to adapt to the existing global emergency through informed decision making. CEWA submits to the Standing Committee, that while practical steps that are undertaken in schools to address the impacts of climate change are important, particularly in terms of sustainability, it is the educative aspect that will ultimately determine global success.

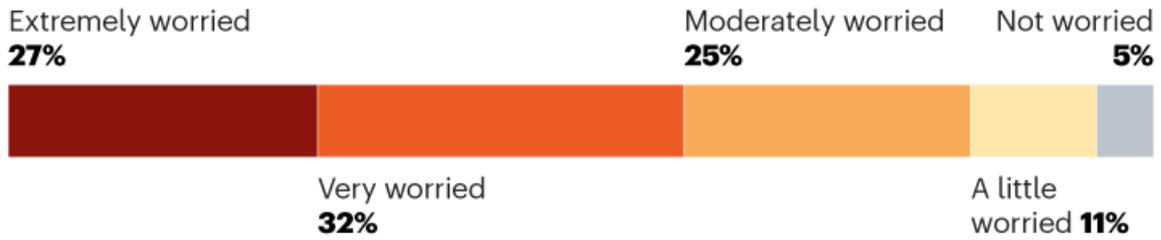
THE VOICE OF THE CHILD AND CLIMATE CHANGE

The impact of climate change is a strongly held concern by young people. The following table shows results of a survey based on a sample of 10,000 students across ten countries and administered on 22 September 2021. Eighty four percent of respondents are moderately concerned or worse, with in excess of 60% showing anxiety, fear or sadness regarding the impacts of climate change.

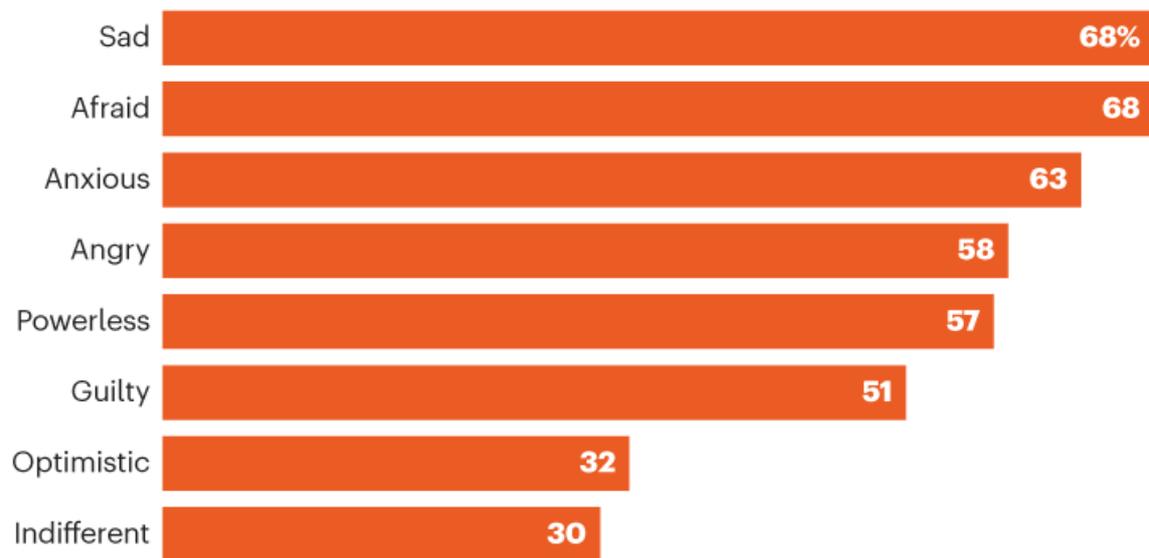
CLIMATE ANXIETY

A survey of 10,000 young people shows that negative feelings about climate change can cause psychological distress.

How worried are you about climate change?



Climate change makes me feel...



©nature

The full article can be found at;

Nature **597**, 605 (2021)

: <https://doi.org/10.1038/d41586-021-02582-8>

Similar levels of concern have emerged in surveys of Australian children and the wider adult society. The concerns of children and young adults legitimises the role of schools in providing them with accurate information and practical experiences that empowers their decision making.

SPECIFIC INFORMATION ADDRESSING THE TERMS OF REFERENCE

This section will address the four terms of reference provided, noting also the action areas which the Standing Committee is also intending to consider as part of their recommendations.

Term of Reference (a) -The co-benefits of climate action in schools

The particular actions by schools are likely to be more obvious in coming generations and are often difficult to measure in terms of short-term school benefit. In many cases, the economic benefits are problematic and climate action can often be more costly than doing nothing – in the short term. This is particularly so in infrastructure and capital investments.

Student learning – learning activities involved with climate change are usually inquiry-based and involve strong student participation and practical learning experiences. For example, schools will typically have a sustainability program which can be embedded within the curriculum, as a cross-curriculum priority consistent with the Australian Curriculum and/or as a separate co-curricular activity. These activities typically involve underpinning research and an inquiry-based, practical application.

Some examples include, but are not limited to;

- Participation in solar car development challenges, often as part of STEM activities
- Solar energy projects
- Sustainability reviews of the school and student recommendations for cost savings and lessening environmental impacts
- Recycling initiatives, including paper, cans and bottles, food waste
- Vegetable gardens which focus on sustainability, composting etc; some schools sell produce to parents or provide for free to families in need; some schools, with council permission, have chicken coups for egg collection
- Bee keeping activities, particularly addressing pollination and biodiversity
- Worm farms
- Waterway protection and regeneration in local water habitats – wetlands, rivers etc
- Recycling activities involving household and school items e.g. batteries; mobile phones; plastics; clothes, shoes, metallic items
- Revegetation activities using waterwise and regenerative vegetation; tree planting in the school grounds and where appropriate, environments near the school; seed propagation especially in Indigenous communities
- Fauna protection programs, particularly endangered species
- Healthy food initiatives
- Reduction/elimination of non-reusable plastics
- Paper usage reduction strategies
- Fund raising for environmental organisations, local and overseas

There are sometimes partnerships between schools such as the Bunbury and Geraldton dioceses where there was collaboration between schools to participate in the STEM MAD (Make A Difference) competition focusing on local and global sustainability and change. Eight CEWA schools participated in total.

An example of schools involved in Aboriginal cultural project Christ the King Catholic School situated in Lombadina/Djarindjin communities have an On-Country Culture and Language program. They work in collaboration with the local Bardi/Jawi Rangers, communities and elders to cover topics such as seasons, seasonal changes, kinship, caring for country, hunting and gathering, and language. Schools in Balgo, Billiluna and Ringer Soak have started

participating in on-country learning and are beginning to collaborate with local rangers and community elders.

Activities such as the above involve a number of important learning skills as well as contributing to an awareness of climate change and sustainability. These include linking theory/research to practice; problem solving; collaboration and teamwork; adaptability; social and civic responsibility; cross-learning area approaches; and the development of general capabilities.

In terms of student learning in the more formal curriculum, climate change and related concepts are covered in a number of science subjects as well as society and environment, particularly geography-related studies. This occurs from years 1 to 12. STEM offers opportunities for integrated studies of climate change and the underpinning concepts.

Overall, learning has moved from text books and excessive use of paper, to a greater use of online learning which while mainly an outcome of changing pedagogies, nevertheless has less impact on the environment.

Student and staff physical health - it is difficult to isolate the impact of climate change on the physical health of children and staff, and even more so over the past 18 months, with the impact of COVID-19. Climate change, and the onset of higher daytime temperatures has meant that schools continue to be vigilant regarding students' exposure to the sun. This precaution has been in place for some time and involves students being required to wear head protection, sunscreen where applicable and has also led to the continuing erection of shade structures both permanently (e.g. over play equipment and similar) and on a temporary basis (e.g. sporting events and similar). This has added additional cost burdens on schools.

The use of more sustainable food sources, in conjunction with canteen and healthy food policies in schools, has contributed to more healthy eating.

Outdoor activities such as those described above, have also contributed to healthy exercise.

Student and staff mental health - for the past two or so years it is difficult to attribute mental health impacts ascribed to students and teachers as a consequence of climate change – particularly with the impact of COVID-19 – and also the negative impacts of social media, particularly on students.

For students, wellbeing issues have increased dramatically, largely through short-term isolation in WA lockdowns; impacts where family interstate cannot visit; no possibilities for overseas travel; and the negative impacts of social media. In addition to these factors, the survey of young people internationally referred to earlier – with results likely to be very similar in Australia – demonstrated that climate change overall creates a number of additional stresses for them – anxiety, deep concern and fear. It is clear that these anxieties remain with students well after they complete their schooling.

In terms of staff, it is difficult to isolate the impact of climate change on mental health and wellbeing other than to note a general trend in adults of increasing concern about the impacts of climate change; the general stressors impacting on teachers currently make it impossible to quantify those attributable to climate change. Stresses on students also translate to stresses on teachers.

Cost savings in the education system - this can be difficult to assess and depends on factors such as school versus community benefits; long term versus short term; and human capital versus other capital. There is also some overlap between this consideration and

discussions under Term of Reference (b) which covers benefits from mitigation and adaptation practices.

Students – climate change increases costs at every level for students. Increases in power generation, particularly in cooling in hotter climates can impact through higher fees, although other costs such as staffing are higher. Increasing levels of stress and anxiety amongst students – which may be partly due to climate change – require additional services such as psychologists, social workers and other wrap around services. From a curriculum viewpoint, co-curricular and out of school activities associated with sustainability type activities can often cost more due to transport, materials and supervision costs.

Facilities and recurrent costs – adaptations such as waterwise vegetation and solar panels/batteries involve substantial upfront costs which are typically recovered over a longer period. Eco-responderent and sustainable building practices have been implemented over the past few years. These can lead to marginal savings in recurrent costs. Green spaces typically require additional land which is an opportunity cost in new school construction considerations – especially given the high cost of land acquisition and building for new schools. For established schools, modifications are often not viable and for established schools with a limited land area, the creation of green spaces is not possible.

For schools located in hot climates, such as the Pilbara, eastern Goldfields and Kimberley regions, climate change has a greater impact through higher temperatures and extreme weather conditions such as tropical cyclones. This represents significant additional costs in terms of building types; fences, under cover structures, cooling systems and power costs as well as damage caused by extreme weather such as Tropical Cyclone Seroja in the mid-west. Unseasonal rains and flooding, which are becoming more common, increase land transport costs and reduce land access for a substantial proportion of the year. This leads to significantly higher operating costs for schools in these regions.

Policies such as waste recycling provide little financial benefit to the school; rather there is a contribution to the community wellbeing and sustainability. Regulatory changes such as the banning of non-reusable plastic items represent no immediate saving to the specific school; rather this is part of a community and global initiative. The adoption of non-plastic alternatives is likely to be more expensive in the short term.

Overall, the focus implied in this Term of Reference appears to be on economic costs/co-benefits to the school or a group of schools. While it is not always easy to quantify the so-called costs/benefits, an additional and equally important consideration is the wider community and global assessment and the costs of not implementing certain strategies to mitigate, or adapt to, climate change. This is the real and ultimate cost to society.

Effects on the community - it is difficult to comment on the economic and other effects on the community as a whole; specific situations can be identified as examples;

- Effects of extreme weather events such as the catastrophic floods at Warmun in 2011 and tropical Cyclones such as Seroja in 2021 – damage to homes and other infrastructure; economic losses; short term displacement; loss of employment; disruption to schooling; psychological and related impact.
- Changing patterns of climate have had negative impacts on agricultural practices and therefore on the livelihoods of parents who are impacted directly or indirectly.
- Changing patterns of climate have had a significant impact on Aboriginal communities, particularly in remote areas, where extremes have affected living conditions, health, movement and school attendance and employment. This can directly influence the engagement of the parents and their child/ren in education and post-school training.

Term of Reference (b) – Climate change mitigation and adaptation actions currently being undertaken in schools and the benefits they are achieving

There are a number of examples of wider initiatives and specific case studies which have been implemented to address climate change. Broad reference to these has been made in preceding sections.

Some examples include, but are not limited to;

School building design - school design over the past few years reflects sustainability factors to be considered. Every school capital works requires a Capital Development Plan. In the scoping of projects, school and architects are requested to articulate their proposed plans based on nine key planning principles.

Principle 3 establishes “The basic fundamentals of healthy school design should be evident in the built environment, maximising the physical comfort and wellbeing of students and staff. This requires design priority be given to:

- use of natural daylight
- appropriate heating, cooling and ventilation
- appropriate acoustic treatments
- dispersed provision of toilets
- ready access to food and drink
- staff spaces for gathering and individual quiet work
- spaces that encourage student-teacher interaction and foster community
- design considerations for outdoor and recreation play spaces and learning areas”

This is documented page 2 of the ‘Building Quality Catholic Schools Framework’ (6th Ed, 2013) and is available here.

<https://cewaedu.sharepoint.com/sites/8445-CapitalProjects/Shared%20Documents/Forms/AllItems.aspx?id=%2Fsites%2F8445%2DCapitalProjects%2FShared%20Documents%2FBuilding%20Quality%20Catholic%20Schools%20%2D%20Sixth%20Edition%202014%2Epdf&parent=%2Fsites%2F8445%2DCapitalProjects%2FShared%20Documents>

The revised ‘Building Quality [Catholic Schools Framework’ (7th Ed) to be published this year, provides further insights into efficient buildings.

- More recently, in relation to energy reduction, schools are increasingly moving to solar, and CEWA is considering a coordinated approach to solar power through CEWA Procurement.
- Waterwise: schools are increasingly conscious of irrigation needs are resorting to landscaping that reduces the need of water.
- Through architects, CEWA articulates ecological building footprints that makes efficient use of light and heating, etc through suitable orientation, choice of materials, etc.

CEWA’s Leederville office, despite being a 100 plus year-old building has instigated a number of sustainability measures in the areas of food wastage; removal of disposable drink cups;

waterwise plants; more effective irrigation systems; LED lighting and a fleet of hybrid motor vehicles.

Green spaces and vegetation - this can be difficult for metropolitan locations where land is typically scarce and the built environment surrounding the school. Where possible, schools allocate land for these spaces but there can be a high opportunity cost involved.

Recycling projects in schools - nearly every CEWA school has some form of material recycling sustainability or similar project operating. The particular models depend on the size of the school; its geolocation including the surrounding natural environment; primary or secondary; links to the community and other organisations and available finances.

Some examples are; short term projects built into curriculum subjects such as social sciences and physical and biological sciences; clubs or the equivalent running a project with a part of the student cohort; all of school initiatives which may be embedded in school practice; and partnership projects where the school works with an outside organisation or local community onsite or offsite.

Apart from, and often in partnership with, student activities, schools have a range of recycling activities and waste disposal practices.

The benefits of school initiatives such as those described above can be attributed in three areas. Firstly, over time, the initiatives can lead to cost savings in the school, especially those related to energy consumption. Secondly, many projects contribute to community sustainability. Thirdly, all such initiatives provide student, parents and schools with the education and awareness to act as global citizens to address the impacts of climate change.

Towards paperless schools - schools are actively reducing the use of paper and paper products as part of the teaching and learning process. This includes notes, handouts, student communications and more resources/textbooks being provided online. Similarly, most communication processes with parents now occur online. Most schools report substantial reductions in the use of paper, and consequently, associated savings in photocopying and printing costs – which were once extreme in most schools.

An irony is that for ATAR students, examination papers continue to be hard copy and student responses are typically pencil/ biro and paper. With answer booklets typically being 16 pages, exam papers averaging 20 pages, students typically undertaking 5 exams and approximately 15,000 ATAR students, this amounts to 2.7 million pages of paper, not to mention millions more for school exams and tests several times a year in years 11 and 12 in order to provide practice for the ATAR exams. Where schools require students to undertake written exams in years 7 to 10 as well, the state figure could approach 100 million pages. CEWA understands the associated difficulties of running external examinations online – particularly security and associated invigilation processes. Notwithstanding, this practice has an absolute and trickle down effect on sustainability in schools.

Energy efficiencies - all schools have instituted energy saving practices such as solar panels; more efficient heating and cooling systems (which are real issues in extreme climates and high-cost non-metropolitan centres); movement from wood burning; energy efficient globes and timer switches; insulation; glass tinting; and more effective building designs as previously outlined. While most schools have implemented these strategies as a reaction to rapidly increasing energy costs, climate change has undoubtedly exacerbated the situation. Schools in extreme climatic zones, particularly hotter environments, are worst affected; these schools are already faced with higher energy costs. Power/battery driven tools, gardening equipment and light machinery such as carts are purchased by an increasing number of schools as well as lower emission machinery.

System procurement practices - CEWA is progressively implementing a more centralised procurement system although at this stage, it is limited to a smaller range of products and schools. CEWA is aware of the procurement system in government schools. Economies of scale will result in lower prices. Other key considerations when dealing with providers and suppliers will include quality; reputation; reliability; continuity; modern slavery compliance; local content/origin; Aboriginal and Torres Strait Islander providers; as well as a range of sustainability practices such as impact on soil and waterways; re-cyclable materials used in the product and the extent to which the product can be recycled; disposal considerations including ongoing replaceable parts such as filters and batteries; low emission devices etc.

As the procurement initiative continues to be rolled out, there will be an increasing focus on these issues related to climate change, not only through cost savings, but also local and global sustainability – which will ultimately reflect a cost saving.

Term of Reference c - Barriers that schools encounter in undertaking climate action and how these can be addressed

Costs - providing resources for student activities and initiatives is expensive both in terms of purchase and also ongoing maintenance and support, sometimes during holiday periods where watering and feeding might be required. Building practices that reflect sustainable practice are often more expensive due to the cost of materials and a more restricted range. In cyclone-affected areas, there are building guidelines which often prevent the use of more sustainable building practices. There are usually significant difficulties with older buildings in terms of replacement and modifications.

Energy saving practices help mitigate costs. However, practices such as the installation of solar panels and/or batteries can be extremely expensive in terms of the establishment costs of a commercially viable system and the cost savings which often take more than a decade for capital recovery.

A particular issue exists for CEWA schools servicing vulnerable communities, as well as for many smaller country schools. Building costs are already high in these areas, energy costs are similarly disproportionately high for both electricity and gas (which is typically bottled/tank) and many of these schools support poorer communities which have very limited capacity to contribute to the costs of education. CEWA schools receive no concessions on utility costs nor subsidies for energy efficient equipment other than through school finances or supplementation from CEWA allocations. Every CEWA country school is more than 20 years old except for Australind.

The issues faced by Aboriginal families are of particular concern. These families in harsher environments, already face significant hardship. Increasing climatic extremes affect all aspects of their life. Targeted funding to these groups, especially in more remote areas, will need to increase if equity is to be maintained.

As discussed earlier, modifying existing schools to be more responsive to the effects of climate change is more expensive. Provision of government support, as discussed under Term of Reference (d) needs to be considered.

Extreme views – a number of divergent views regarding the impact of climate change exist - on both sides of the argument. An ongoing challenge for schools is to filter information and present balanced information and encourage balanced responses from students. While the current resources are adequate, section interests and social medias tend to have significant influences on children and young people.

Challenges in teaching practice - the availability of teachers with the necessary subject expertise in STEM content and pedagogy can be an issue in some schools. Notwithstanding, professional learning in this area is increasing and resource production also more expansive. Cost of materials can be a challenge for some schools. Content knowledge may be deemed not appropriate for younger students. Labelling may potentially underplay the real efforts in this area as many schools are working in this space but not acknowledging programs and actions from a “Climate Change/Action” lens.

Term of Reference (d) – What more can be done to support schools to respond to climate change?

Government support - current Australian Government and State Government support to schools is directed to the recurrent costs of the school – an approximate figure of 80% of actual costs. CEWA schools are responsible for funding the gap. CEWA schools are responsible for all capital expenditure involved in building new schools and for capital improvements which may be required. Schools are responsible for debt servicing of any loans associated with capital development. Schools are also responsible for repairs and maintenance.

The State Government makes available Low Interest Loans to the system - \$30.3 million in 2021. While this is appreciated, it needs to be contextualised against the total approximate cost of land acquisition and building an outer suburban K – 12 school of up to \$100 million. This funding needs to be substantively increased.

As mentioned previously, schools are required to meet all energy costs.

CEWA submits that if schools are going to be more actively involved in addressing the impacts of climate change – and in many cases they will have no choice – then additional funding for that purpose will be required. This could involve a mixture of low interest loans, capital grants and government subsidies of energy costs or funded initiatives such as solar panels. Worse impacted and vulnerable communities could be prioritised. In the Kimberley for example, CEWA operates six sole provider schools which represent a significant cost saving to the government.

System initiatives; local action - CEWA will continue to coordinate building and capital development in schools which will enable energy efficiencies and appropriate sustainability practices to occur. A system procurement initiative will also assist schools. Notwithstanding this, CEWA understands the importance of working with the local community and their needs. The real impact of climate change action is likely to be greatest when community-driven approaches are implemented, particularly in non-metropolitan areas.

Local Council Bylaws - while government schools are not subject to the Local Council building and planning requirements that apply to CEWA schools, the variation in approaches of local governments can be an issue. These can apply to building types, approved materials and contributions to green space. CEWA submits that the State Government should work with local government to establish a more equitable approach to school establishment and building extensions.

Developing partnerships - some schools have already established smaller scale partnerships with businesses in areas of sustainability. CEWA sees an opportunity to continue to leverage such partnerships, particularly in rural and mining communities. These partnerships have a number of benefits such as resources for schools; local expertise to assist; whole of community approaches; and for older students, work experience or VET

qualifications. Partnerships with local Aboriginal peoples also need to be developed further; First Nations Peoples have a strong tradition of land management and sustainability.

Multi use of schools and sharing facilities - schools will continue to examine the possibilities for multi-use of facilities by other organisations, typically out of school hours. Such arrangements will result in more effective use of facilities over the year and would help to reduce the duplication of resources. Many schools undertake similar activities by hiring outside venue for activities. The reverse situation is less common but is one way of maximising resource use and sustainability. Wider sharing of school resources is far more common in overseas jurisdictions.

Collaborative education approaches - education systems need to collaborate to provide Professional Learning and resources for staff to upskill themselves about climate change and actions. In country centres, where schools from all systems exist, there is a case for encouraging collaboration to address wider community needs in the areas of climate change and sustainability initiatives. It is possible that such initiatives could be supported by local or state government. Large businesses, particularly in mining and agricultural areas could also be incentivised to become involved, as many currently do.

Promotion of competitions and initiatives schools can participate in could also be further encouraged in a more cross sectoral way. Investment by government and private enterprise not only provides potential resources for school initiatives, but provides encouragement and a sense of purpose.

More focussed support by government and business – a theme of this submission has been the need for a more focussed approach on communities that are most affected by the impacts of climate change, and in particular, the less resourced and more vulnerable communities. While climate change mitigation and minimisation are the social responsibility of all communities – including schools – it is very clear that both short and long-term impacts will be most felt by a range of vulnerable communities, particularly Aboriginal peoples. While schools can assist in promoting and supporting these communities, more government support across all levels of government and government agencies is required. Climate change is an issue that transcends private and public schooling and requires a more holistic mindset and approach to the issues. Isolated initiatives, as useful as they are, will have less impact than a coordinated approach in say, a country location, where students and families will see greater purpose in their effort.

FURTHER INFORMATION

This submission is made by Dr Debra Sayce, Executive Director, Catholic Education Western Australia. For any queries, please address to