#### Wondai State School P-10, Australia

# Learning to see the big picture with the Earth Charter!



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# Introduction

Wondai is a small rural town situated in the South Burnett region of Queensland, Australia. We live within the Burnett Catchment<sup>36</sup> in an agricultural area that grows a wide variety of crops throughout the year. Wondai's timber industry is as old as the town itself, and the local sawmill is one of the biggest employers. Water is a critically important resource for our community, and we are currently feeling the strain of an ongoing drought and its negative effects on the local economy.

Our school is situated in a spacious setting in the south-eastern corner of town with forests on two sides and the town's show grounds on another. The school motto is "Deeds not Words." It caters to 270 students from prep (6 years old) to 10<sup>th</sup> grade (15 years old) that allows for sharing and learning across grades. Wondai State School P-10 has a sustainability ethos, and is part of the Reef Guardians programme, the Green and Healthy Schools programme, and the Sustainable Living Challenge.

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<sup>&</sup>lt;sup>36</sup> A catchment, or basin, is an area of land within which water eventually runs to one point.

#### **Teaching about sustainability**

The process of incorporating sustainability into our curriculum began in 2004 when the Curriculum Implementation Committee recognized the potential of student-directed, action-oriented learning as a means of engaging students in real-life learning. This decision was influenced on the success of a 9th grade trial science unit in 2003 that used an action-research model to investigate the issue of our local water's increasing salinity level. This unit was so successful in engaging learners, we decided to develop a secondary elective subject, called Action Science, based on the model. This commenced in 2004 and ran in the first semester of each year until 2007, when we decided to offer Action Science throughout the school year. Students investigate local environmental issues and formulate action plans aimed at making a positive difference in the community. From this simple start, increasing our students' awareness of local environmental issues became a focus for the school; our sustainability journey had begun.

The next significant stage in our journey was having a teacher and two of our students attend the Earth Dialogues International Conference in Brisbane in July 2006 as part of the Education Queensland Student Delegation. This involvement fuelled our recognition that, although what we were doing in our own little corner of the world was very valid and important; we were missing the big picture! To be educating young people about truly sustainable living we also needed to be tackling issues of poverty, peace and politics, on a global scale.

In order to expand our approach to teaching about sustainability to include social, economic, and political issues, as well as incorporating a global focus, we decided to use the Earth Charter as the underlying philosophy of our curriculum decision-making and to underpin our unit planning. After discussing these ideas with our principal, and with other teachers at a staff meeting, we decided to use a simplified version of the Earth Charter (from a Dutch children's poster) that outlines **the four pillars of the Earth Charter as** 

#### follows:

- Be kind to each other, animals and plants (Respect and care for the community of life)
- Take good care of the environment (Ecological integrity)
- We are all equal (Social and economic justice)
- Say 'yes' to peace and 'no' to violence (Democracy, non-violence and peace)

The implications for a school community, if all members upheld these four simple principles, are both exciting and challenging. We think that the understanding of, and adherence to, these principles could significantly increase the potential for engaging students in real-life learning and improving student outcomes.



Learning about our place in the world.

# Methodology

The decision to implement the Earth Charter's four basic principles was straightforward because they mesh well with our existing school vision "Grow Together – Produce the Best," which is supported by our school values: Respect, Academia, Participation and Pride (RAPP). We have a whole-school approach to supporting the positive mental health of our children, and this has led to the primary school's involvement as one of fifty schools in the National trial for Kidsmatter (an effort lead by the Australian Principals' Association, Federal Government, Beyond Blue and the Australian Psychologists Association). Through Kidsmatter we have endorsed "Programme Achieve/You can do it" as a major focus for the development of positive social and emotional learning for our primary students. This programme focuses on five keys to success: Confidence, Persistence, Organization, Getting Along, and Resilience. Our secondary school's skill-building programme focuses on Goals, Relationships, Attitudes and Beliefs (GRAB), and we ensure that the key concepts from the primary grades are extended through secondary. We believe that this approach to developing the skills our children need to be confident and capable members of society matches perfectly with our RAPP and the Earth Charter values.

#### Our Earth Charter methodology is simple:

- Embed the Earth Charter principles in unit planning and school decision-making
- Refer to the Earth Charter whenever possible in daily classrooom life
- Act as role models, and persevere, persevere, persevere!

The first step in the process was putting teachers into planning teams to map out how the Earth Charter could be used as an underpinning philosophy for current and future units of work. Teachers examined available Earth Charter resources (DVD, posters, web resources) and were each given an Earth Charter poster to put up in their classrooms. The result of this day was the development of our 2007 Sustainability Action Plan,



Learning about the diversity of life.

which encompasses the curriculum, the management of our school grounds, our environment and resources. We have found this method of planning for the year positive and beneficial. It provides an overall picture of where the school should be heading, and acts as a tracking tool throughout the year to see how well we are achieving the targets we have set.

In some units, the Earth Charter itself is a major theme, and in others it is an underlying thread. An example of the former is our second term of  $8^{th}$  grade GRAB unit (1 x 70 minute lesson per week for 10 weeks). This unit explored the theme of 'interconnectedness' and how it linked to the Earth Charter. **This unit investigated three authentic learning questions:** 

- 1. How will a more sustainable world help me?
- 2. How can we use the resources in our environment and maintain biodiversity?
- 3. How can our water resources be used more sustainably?

Students began this unit by investigating how children live in other parts of the world by getting on the Internet and researching issues through online resources. Their findings culminated in the creation of a PowerPoint presentation about the Earth Charter, sustainability, and ways to build a sustainable world.

During this unit, students also brainstormed actions they could take as a class to 'live out' the values and principles they were learning about in class. These actions include organizing a "walk to school" day to combat greenhouse gas emissions, making and displaying banners and posters, adding an Earth Charter stall at the school fete, having a "multicultural cooking day," and organizing Earth Charter wristbands for staff, students and the community to wear. While some of these actions have yet to be organized, the most rewarding aspect of this unit has been seeing the students so enthusiastically engaged in discussions and decision-making, rather than sitting back as passive learners. In addition to creating a list of action ideas, the students have written an Earth Charter song for the school (see below).

## Box 2: Wondai State School Earth Charter Song

This is our future, this is our home We need to care for This great biome Respect each other, our planet too Enough for us, enough for you.

#### Chorus

This is the Earth Charter of Wondai School It's how we want to live and it's pretty cool We have enough for us, plenty more to share We want the whole wide world to know we care.

This is our vision, a sky of blue Clean air to breathe, for us for you Healthy forests, water that's clean Sparkling oceans, paddocks of green

#### Chorus

Care for each other, respect all life We want world peace, not war and strife No threatened species, habitats for all We need to plant trees, not make them fall Chorus

We are all equal, we all have needs Care for our Earth, we'll take the lead Respect our planet, each other too Enough for us, enough for you

Units with the Earth Charter as an underlying thread occur across disciplines and grade levels. Our 6<sup>th</sup> grade class takes a unit entitled "Threatened Species" in which they take on the role of wildlife rangers. They investigate threatened species with the 'job assignment' of designing sustainable habitats for these species, and then they must present their findings to an audience. Students have completed research reports on their species and built models of the habitats they have designed. They are also organizing a "Threatened Species Day," to be held at the school in the fall. This

unit is designed so that the learning approach is studentcentred, within an active, real-life scenario – being wildlife rangers and designing habitats – rather than simply being taught about threatened species. The unit is also based on the Earth Charter principles within the bigger picture; respecting those with whom we share this Earth and living in a way that doesn't negatively impact their wellbeing and our environment.

Another example of students learning in an active, reallife scenario occurs in our 5<sup>th</sup> grade class. They have been conducting an electricity audit of our school and are developing a plan to reduce our energy consumption. Students have been actively investigating the numbers and types of school appliances and the impact their use has on our resource management. They have also produced wonderful clay animations to promote sustainable energy use.

Our emphasis is on learning *for* sustainability and not learning *about* sustainability, with a focus on students developing knowledge and skills for life-long learning and taking action. The teacher is a facilitator of learning rather than simply a teacher of content. The students' activities and assignments are developed to encompass the global picture, as well as to have a local impact. In so doing, students consider the following questions:

- Why are we concerned about our school energy use?
- How does our energy use affect us locally?
- What does our Earth Charter say?
- How will reducing our energy use here help our Earth and others living elsewhere?
- How can we teach others about sustainable energy use?

Action Science is a lead Middle Phase of Learning strategy at Wondai P10 State School and is one of our curriculum success stories. It is an environmental science elective that investigates local issues using the action-research model. This is being achieved through the delivery of a practical, real-life learning model for students.



Tree planting day.

Our approach embraces our young people's initial abstract thinking about global issues by linking them directly to everyday local environmental problems. Action Science has indeed always been underpinned by the principles of the Earth Charter, even though we didn't formally recognize this. Our implementation of the Earth Charter into our school curriculum has added another positive dimension to Action Science; students are able to see the importance of their local work more clearly in terms of its global impact. It reinforces the idea that we all have a role in creating a sustainable future and that each positive action contributes to the wellbeing of our planet and its inhabitants.

# The key features of Action Science are the development of:

- Enterprising, life-long learners, who regularly and actively participate in our local catchment issues and therefore the global environment
- Learners as investigators of local area sustainability issues through the adoption of the Action Research model
- Partnerships with local landholders, private businesses, government departments (including Department of Natural Resources, Kingaroy), Burnett Mary Regional Group (BMRG), and the Burnett branch of the Queensland Rural Women's Network

The Action Science elective is available to all students from grades 8-10 (13-15 years old). The programme

format allows students to choose to join a work team based on their interests and skills, which helps ensure inclusiveness and maximum participation of all students, regardless of their academic or behavioural history. In 2006, for example, students brainstormed topics and then formed four teams – Stormwater, Litter, Water Use and Energy – to address the issue of resource management within our school. **Examples of activities carried out by the Stormwater team include:** 

- Liaising with the school groundsman to map out the stormwater drains within the school and to take photos to be used in a display
- Cleaning school drains which were full of leaf litter from the building gutters
- Designing and painting "Clean Seas for Me" signs next to the stormwater drains to emphasize the school's Reef Guardian status and to encourage students not to litter
- Liaising with school principal and Head of Department for the painting of signs
- Writing Thank You letters to the Wondai Shire Council for assisting with guest speakers
- Writing and publishing an action plan

In 2007, Action Science targeted the school's scrap paper usage as the area of investigation. Students put a scrap paper box in every classroom, collected the paper once a week, and weighed it to see how much each class had collected. The paper was then sorted into two piles: paper used on both sides, and paper used on one side. Then the scrap paper was re-used to create useful products such as notepads. Some scrap paper and newspaper were used to make carry bags that students hope to sell. Students also asked students in other classes to consider reducing the amount of paper they used. One Action Science student's comment perhaps says it best, and supports the curriculum model of student-centred action learning:

We believe our project is important because it reduced the amount of waste going into landfill and it increased awareness about the amount of paper waste in the school. It was great to recycle the paper into something that could be used again.

## Lessons learned

So far, we have not experienced major problems with our efforts to integrate the sustainability principles of the Earth Charter into our school life. The staff of Wondai State School embraced the four Earth Charter principles as very positive and important values for students to develop in their own lives.

From the beginning, it was stressed to staff that the idea wasn't to work harder and change everything we were already doing. Instead, it was to look for opportunities to incorporate the Earth Charter into the great work already being done in classrooms throughout the school and to use it as an underpinning philosophy for future planning. New Earth Charter and sustainability initiatives are discussed with our administration team first, and then with teachers, to ascertain whether there is enough support from the staff to ensure the initiative's success. Positive support from the school community as a whole is vital to moving forward on our sustainability journey.

Because we have taken a multi-faceted approach students regularly encounter the principles in their daily activities. We also try to reach beyond class and into the community through newsletter articles, notice board signs, and through our school choir. The choir, for example, will be performing a number of environmental songs by recording artist Rosie Emery (co-producer of "The Little Earth Charter")<sup>37</sup> at our upcoming school fete.

Our biggest challenge is exploring how to write the Earth Charter into our school plan, which is currently being reviewed. We are particularly interested in using studentcentred action-oriented learning approaches to engage learners in the curriculum, as well as to provide improved student outcomes that can be assessed and provide staff with concrete data. For example, we believe that there will be a positive correlation between increased engagement and improved behaviour outcomes in some students. We've found that by encouraging students to develop plans and carry out activities that use the skills they have to offer, the engagement level is extremely high, particularly with students who do not engage with the curriculum in other areas.

Will we experience spectacular results in the short term from this initiative? We doubt it. However, we consider our sustainability efforts a great work in progress. Every time a student bounces up on the playground and says "I put all my rubbish in the bin," or "I turned off a tap that was left running," or "We are recycling our washing machine water at home," we know we are on the right track and making progress.

Our youngest students are among our most enthusiastic sustainability ambassadors, and as they move through school grades we believe we will achieve greater outcomes. We still struggle with typical school issues, such as litter, but there are students working to overcome these problems, including three environmental action groups which operate on school grounds during students' own free time.

Our vision is that in years to come our entire school community will be operating in a way that respects those with whom we share this Earth, and doesn't impact negatively on their wellbeing and our environment. We hope that we will be producing zero waste by reducing, recycling and reusing, and that the school will be powered by renewable energy. "One hand can make a difference, and many hands can change the world;" we believe we are in the business of teaching many little hands that will make a world of difference!

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<sup>&</sup>lt;sup>37</sup> For more information go to: http://www.littleearthcharter.org