

A Green Childhood: Sustainability

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Introduction

I am currently a student in Wales studying Early Childhood. This article is going to be critically evaluating the opportunities and challenges of integrating education for sustainable development in to the early years practice. It will firstly discuss Education for sustainable development and global citizenship and look at other countries to see what they have in place. For this article the two main countries that will be focused on is Wales and Australia. Secondly it will discuss the Foundation phase in Wales and the Australian Early Years Learning Framework. It will also look at Estyn inspection and how now they inspect schools on ESDGC. It will then focus on what good practice is and also if there are challenges in practitioners delivering ESDGC and EFS in the early years setting. It will also see if there are any organisations that are available to support practitioners to gain a better understanding of the importance of ESDGC and EFS. The article will then move on to looking at different theorists to see if their theory is similar to the ESDGC and EFS. Lastly it will see if there is anything in place for the future to make the world a more sustainable planet.

Education for Sustainable Development and Global Citizenship.

In 2006, the Welsh Government launched Education for Sustainable Development and Global Citizenship (ESDGC) and in 2008 launched a document to deliver ESDGC in to schools (Sustainable development, no date). ESDGC is about giving learners at all stages of education an understanding on the different impacts that their choices have on other people, the economy and the environment (Welsh Government, 2017). ESDGC is about the things that we do on a daily basis and also on the bigger issues in the world. Some examples of these are climate change, human rights, trade, conflict and democracy (Welsh Assembly Government, 2008a). ESDGC is about preparing learners for the challenges that are facing the planet earth and how we all have a part to play on how we treat the earth and how we treat others, no matter how far apart we live and it's aim is to teach everyone on how they can contribute to the lives of theirs (ESDGC, no date; Welsh Assembly Government,

2008a; Welsh Government, 2017). The ESDGC also aims to build an awareness and help to gain knowledge of sustainability issues and to also help schools and students to think critically to provide solutions towards more sustainable patterns of living (Sustainability in Schools, 2016). The ESDGC has seven themes which are, Wealth and Poverty, Identity and Culture, Health, Consumption and Waste, Climate Change, Natural Environment and Choices and Decisions (ESDGC, no date). Here are some examples on how practitioners can bring ESDGC can bring it in to learning:

Wealth and Poverty- Ask the children what is in their shopping trolley and to find out where all the food has come from.

Identity and Culture- Listen to different types of music from around the world, you can also discuss different celebration that different cultures celebrate.

Choices and Decisions- Use circle time for children to have opportunities to discuss topics which are important to them.

Health- Grow different vegetables within your setting or let the children take them home to grow.

Climate Change- Letting the children keep a record of the weather and compare it to different countries.

Consumption and Waste- Keep a record on how much rubbish the class/school produce each week.

Natural Environment- Show different images and tell stories about the wildlife around the world or take a visit to local woodland areas to observe the wildlife. (Welsh Assembly Government, 2008b).

Similar to this, many countries have developed Education for Sustainable Development (ESD). This is a long-standing and internationally recognised concept (EDO NSW, 2016). ESD allows everyone to gain the knowledge, skills, attitudes and values that are necessary to shape a sustainable future (University of Plymouth, no date).

In Australia they use the term Education for Sustainability (EFS). EFS is similar to the ESDGC which is used in Wales as it looks at the world that we live in and recognises the actions which support sustainability and also how it is important for future generations (Taylor et al, 2015).

The United Nation Convention on the Rights of the Child (UNCRC), Article 29, clearly states that education must develop every child's ability to the full and that

children must have respect for their parents, their own and other cultures and also respect for the environment (Unicef, no date). Both the ESDGC and EFS state the importance of the children having respect for others and the environment (ESDGC, no date; Taylor et al, 2015).

Foundation Phase Curriculum in Wales

In Wales, the foundation phase is a developmental curriculum for children aged between 3-7 years olds (Welsh Government, 2017b) and has seven areas of learning (Welsh Government, 2017b). Schools in Wales are expected to cover ESDGC through all areas of school life (Norcliffe and Bennell, 2010) and every school in Wales is required to have a whole school policy which covers all aspects of the ESDGC (Mulley, no date). The Foundation Phase encourages children to be creative whilst giving them more opportunities to explore the world around them. It emphasizes on children by doing (Wales Pre-school providers Association, 2012). This view can also be seen in Piaget's theory which will be discussed later in the article. ESDGC should not be seen as a separate subject in the curriculum, it should be embedded into each subject and the Foundation Phase Framework offers many opportunities for developing ESDGC (Welsh Assembly Government, 2008a). ESDGC must not be seen as a separate subject within the curriculum and must be incorporated into each subject (Welsh Assembly Government, 2008b). An example of this, shown in figure B, could be done through a cooking activity where the children can include all aspects of ESDGC as they can decide what kind of pizza they want, where the waste will go, how the weather affects what they have grown, is it healthy? If they have bought any ingredients, where did it come from? And do other countries eat pizza?

Within the Australian curriculum is also a mandatory requirement to carry out EFS under the National Quality Standards for Early Childhood Teachers (Education for Sustainability, no date). Schools in Australia follow the Australian Early Years Learning Framework. Within the framework there are five outcomes which all incorporate the EFS.

Both the Foundation Phase and Australian Early Years Framework look at allowing children to have experiences in the outdoor environment and both also state how practitioners must encourage children to have respect for all living things and also

how children must become aware of how peoples actions can improve or damage the environment (Curriculum for Wales, 2015; The Early Years Learning Framework for Australia, 2009).



(Source: Jones et al, no date)

Figure B: Pizza activity to include all areas of the ESDGC

Estyn Report

In 2006, Estyn conducted a survey in schools and also further education colleges in Wales regarding the ESDGC. The report found that teachers did not have an understanding of the definition, the purpose or benefits of the ESDGC. The report also found that although most schools were enthusiastic about ESDGC they were not clear on how and where they could develop their skills regarding ESDGC (Estyn, 2014) To ensure that ESDGC is being embedded in to children's education it is now part of the inspection framework which was introduced by Estyn in September 2010 (Welsh Government, 2017)

Good Practice

Children follow adults examples and not just what they say. It is important for early years settings to be a place where children can see sustainability being practiced (Davis. Et al, no date). For good practice, ESDGC needs to be addressed by the whole school community which not only involves teachers and pupils but also the parents, carers, visitors and non-teaching staff and not just the responsibility of one teacher (Welsh Assembly Government, 2008a; Welsh Assembly Government, 2008b) ESDGC should not be confined to the classroom and children should have opportunities to explore the outdoors (Welsh Assembly Government, 2008a). Whenever children are in the outdoor environment, nature learning happens

naturally, however this does not have to happen in the outdoor environment it can also be done in the indoor environment by doing activities such as growing plants from seeds (Hightscope, no date).

Children are capable of engaging and understanding issues to do with the environment (Engdahl and Rabusicova, 2010). Recent research that has been carried out shows how young children are able to respond to environment issues. An example of this is shown in figure A where young children learned about the importance of water and recognised that they were using a lot so they decided to make posters to remind others to turn the taps off when they are not being used (Davis, 2005).

Australia has committed to sustainable schools initiative using the approach which can be seen in many European schools such as the eco-school approach (Elliott and Davis, 2009). Eco-schools are a global programme which engages millions of children across 67 countries. This makes it the largest educational programme in the world (Eco-schools, 2017). Eco-schools is a project which encourages schools to address the environmental impact of their school. This is done by looking at issues such as litter and waste minimisation, healthy living, transport, energy and water efficiency and also global citizenship. This whole process is holistic and works by involving the whole school which includes teachers and non-teachers, pupils and also the local community (Bridgend County Borough Council, 2017).



(Source: Davis, 2005)

Figure A: An example of good practice in a school where children designed posters

Challenges

Although as previously stated that all schools in Wales are expected to cover ESDGC through all areas of school life this has not always been the case (Norcliffe and Bennell, 2010). One reason for this is due to some feeling that children are too young to hear messages that are associated with sustainability as it can be frightening for them. They believe that children should be protected by not exposing them to issues such as climate change and global warming (Edwards and Cutter-Mackenzie, 2013). However, other sources state that it is important for young children to gain an understanding of what sustainability actually means so that they can start taking care of the environment that they live in (Lewis et al, 2010). Also research looked at children between the ages of 4 and 5 about their hopes and fears of their future and found that they were aware of different environmental issues (Page, 2000).

Another reason is due to the lack of time within the curriculum, practitioners highlighted challenges in delivering the ESDGC (Tinney and Merriman, 2016).

Many practitioners in Australia find it easy to include EFS in some subjects compared to others, however it is possible to add sustainability into all subjects (Education for Sustainability, no date).

Organisations

Oxfam education offers a wide range of ideas, resources and support for developing global citizenship within the classroom and also with the whole school. All of the education that they provide helps children to understand their world and try to make a positive difference to it (Oxfam, no date).

The Australian Government Department of Education in 2012 recommended ways to support the alignment of Education for Sustainability learning tools and programmes within the Australian curriculum. They also recommended ways in providing better training and support services for teachers to deliver sustainability learning outcomes across the Australian Curriculum (Australian Education for Sustainability Alliance, 2014).

Theorists

Many theorists agree with the importance of children having the opportunity to experience the natural environment. Froebel believed that it was important for children to have experience in the natural world and that the reasons for this was so that they can learn to appreciate the environment around them and also begin to have an understanding of the interrelationships between all living things (Tovey, 2013; Haas and Ashman, 2014). Froebel's main ideas were that the outdoor activities should be used to encourage children to have an interest in the natural world and also believed that for children's development he felt that it was important to have a good relationship and to also be part of the community (Tassoni and Hucker, 2005). Dewey would also agree and suggested that schools should be encouraged to surround themselves with the natural environment (Elliott and Davis, 2009).

Vygotsky and Piaget both believed that children learn actively and believed that they develop their knowledge and their thinking skills through hands on experience. However, Vygotsky believed that children gain their knowledge through social and cultural interactions. Vygotsky believed that children learn more quickly by a more knowledgeable other and that this could either be from a parent, teacher or another child (Redford, 2013).

The Reggio Emilia Approach is an inspiring approach to early childhood education and recognise the environment as the third teacher (Haas and Ashman, 2014). Within their settings, when a child has a question, rather than the adult answering them they seek for the answer together. The Montessori learning environment is quite similar to the Reggio Emilia Approach as they too also help the children to find their answers within the environment (Gribble, 2017; The International Montessori Index, 2017). Throughout the Montessori learning environment, Montessori teachers avoid using plastic and use natural materials instead (The International Montessori Index, 2017)

Looking to the future

Forming our World: the 2030 Agenda for Sustainable Development- This agenda is a plan of action for people, the planet and prosperity. Some of the goals within this

agenda are to end poverty and hunger, to take action to combat climate change and the impact that it is having and to also conserve and sustainably use the oceans, sea and marine resources for sustainable development (United Nations, 2015).

Conclusion

To conclude this article it has explained what education for sustainable development and global citizenship means in Wales and also what education for sustainability means for Australia and how it is important for children to gain an understanding of the importance of having respect for themselves, other cultures and also the planet. It has also discussed the Foundation Phase in Wales and the Australian Early Years Framework which is in place in Australia and how both of these emphasise on the opportunities of letting children experience the outdoor environment. It has also looked at good practice in the early years setting and what it looks like for practitioners delivering the ESDGC to children in their setting and also given an example of good practice. It has also looked at challenges that practitioners face and how some people believe that children are too young to understand the meaning of ESDGC. The article has then looked at different organisations that are in place to help practitioners in delivering the ESDGC to children in their classroom and in the school. It then moved on to looking at different theorists such as Vygotsky, Piaget and Dewey and how all have a similar theory on the environment being important for children to gain knowledge about the world that they live in. Lastly it has looked at the 2030 agenda and how there are goals in place for a more sustainable future.

References

- Australian Education for Sustainability Alliance. (2014) 'Education for Sustainability and the Australian Curriculum Project' <http://www.ryde.nsw.gov.au/files/assets/public/environment/education-for-sustainability-and-the-australian-curriculum-project.pdf> [Accessed: 1st December 2017].
- Bridgend County Borough Council. (2017) 'Education for Sustainable Development & Global Citizenship (ESDGC)' <http://www.bridgend.gov.uk/services/sustainable-development/esdgc.aspx> [Accessed: 2nd December 2017].
- Curriculum for Wales. (2015) *Foundation Phase Framework*. Cardiff. Welsh Government.
- Davis, J, M. (2005) 'Educating for sustainability in the early years: Creating cultural change in a child care setting', *Australian Journal of Environmental Education*, Volume 21, pp. 47-55.
- Davis, J., Engdahl, I., Otieno, L., Pramling-Samuelson, I., Siraj-Blatchford, J. and Early Childhood Education and Care. (2014) 'Everyday and Natural Materials' <http://deta.qld.gov.au/earlychildhood/pdfs/tip-sheets/everyday-natural-materials.pdf> [Accessed: 28th November 2017].
- Eco-schools. (2017) 'Empowering children & young adults' <http://www.eco-schools.org.uk/> [Accessed: 2nd December 2017].
- EDO NSW. (2016) 'What is ecologically sustainable development?' http://www.edonsw.org.au/hys_what_is_ecologically_sustainable_development [Accessed: 1st December 2017].
- Education for Sustainability. (no date) 'What is Education for Sustainability?' <http://www.educationforsustainability.com.au/what-is-education-for-sustainability> [Accessed: 28th November 2017].
- Edwards, S. and Cutter-Mackenzie, A. (2013) 'Pedagogical Play Types: What Do They Suggest for Learning About Sustainability in Early Childhood Education?', *Springer Science+Business Media Dordrecht*, Volume 45, pp. 327–346.
- Elliott, S. and Davis, J. (2009) 'Exploring the resistance: An Australian perspective on educating for sustainability in early childhood', *International Journal of Early Childhood*, Volume. 41, Issue 2, pp. 65-77.

Engdahl, I. and Rabusicova, M. (2010) 'Children's Voices about the State of the Earth and Sustainable Development'

[file:///C:/Users/Laptop/Downloads/1314390_esd-congress-report-child-interviews%20\(1\).pdf](file:///C:/Users/Laptop/Downloads/1314390_esd-congress-report-child-interviews%20(1).pdf) [Accessed: 26th November 2017].

ESDGC Network. (no date) 'Education for Sustainable Development and Global Citizenship' <https://resources.hwb.wales.gov.uk/VTC/2008-09/esdgc/getting-you-going/index.html> [Accessed: 29th November 2017].

Estyn. (2014) 'ESDGC Progress in education for sustainable development and global citizenship.' <https://www.estyn.gov.wales/sites/default/files/documents/ESDGC%3A%20Progress%20in%20education%20for%20sustainable%20development%20and%20global%20citizenship%20-%20June%202014.pdf> [Accessed: 29th November 2017].

Gribble, K. (2017) 'An everyday story' <http://www.aneverydaystory.com/beginners-guide-to-reggio-emilia/main-principles/> [Accessed: 2nd December 2017].

Haas, C. and Ashman, G. (2014) 'Kindergarten children's introduction to sustainability through transformative, experiential nature play', *Australasian Journal of Early Childhood*, Volume 39, Issue 2, pp. 21-29.

HighScope. (no date) 'Nature Education in Preschools' http://www.highscope.org/file/NewsandInformation/Extensions/Ext_Vol25No2_low.pdf [Accessed: 2nd December 2017].

Jones, D., Edwards, A. and Tinney, G. (no date) 'Pizza Activity' University Saint Davids.

Lewis, E., Mansfield, C. and Baudains, C. (2010) 'Going on a turtle egg hunt and other adventures: Education for sustainability in early childhood', *Australasian Journal of Early Childhood*, Volume 35, Issue 4, pp. 95-100.

Mulley, H. (no date) 'So how will we know?' <file:///C:/Users/Laptop/Downloads/Jane%20Davidson%20article%20future-perfect.pdf> [Accessed: 1st December 2017].

Norcliffe, D. and Bennell, S. (2010) 'Analysis of Views on the Development of Education for Sustainable Development and Global Citizenship Policy in Wales', *International Journal of Development Education and Global Learning*, Volume 3, Issue 1, pp. 39-58.

Oxfam. (no date) 'Global Citizenship for Teachers'

https://www.oxfam.org.uk/education?pscid=ps_ggl_gr_oxfam_education_generic&clid=CjwKCAiA3o7RBRBfEiwAZMtSCZ5VFUM7oeJAZr0gtHAbH1_dCF-poXvJRDEOOWxFD_6jgu2haZV8wxoC2igQAvD_BwE&gclid=CLWTzY7q7tcCFYjHUQodVBQJYw [Accessed: 3rd December 2017].

Page, J. (2000) *Refraining the Early Childhood Curriculum: Educational Imperatives for the Future*. London: Routledge Falmer.

Redford, M. (2013) 'Piaget, Vygotsky and Forest School' <http://learninginthewoods.co.uk/piaget-vygotsky-forest-school/> [Accessed: 29th November 2017].

Sustainability in Schools. (2016) 'Key Sustainability Concepts' <http://www.sustainabilityinschools.edu.au/key-sustainability-concepts> [Accessed: 1st December 2017].

Sustainable Development. (no date) 'Sustainable Caerphilly County Borough' <http://your.caerphilly.gov.uk/sustainablecaerphilly/schools-and-esdgc/documents> [Accessed: 1st December 2017].

Tassoni, P and Hucker, K. (2005) *Planning Play and the Early Years*. Oxford: Heinmann.

Tassoni, P. (2007) *Child Care and Education*. Essex: Heinmann.

Taylor, N., Quinn, F. and Eames, C. (2015) *Educating for Sustainability in Primary Schools: Teaching for the Future*. The Netherlands: Sense Publishers.

The Early Years Learning Framework for Australia. (2009) 'Belonging, Being & Becoming' http://files.acecqa.gov.au/files/National-Quality-Framework-Resources-Kit/belonging_being_and_becoming_the_early_years_learning_framework_for_australia.pdf [Accessed: 30th November 2017].

The International Montessori Index. (2017) 'Montessori Materials & Learning Environments for the home and the school' <http://www.montessori.edu/prod.html> [Accessed: 3rd December 2017].

Tinney, G. and Merriman, E. (2016) *Education for Sustainability and the Early Years- different sides of the same coin*. Carmarthen: UWTSD.

Tovey, H. (2013) *Bringing the Froebel approach to your early year's practice*. Oxon: Routledge.

Unicef. (no date) 'A Summary of the UN Convention on the Rights of the Child'
https://downloads.unicef.org.uk/wp-content/uploads/2010/05/UNCRC_summary.pdf?_ga=2.238091848.973446991.1512343855-2107469489.1512343855 [Accessed: 28th November 2017].

United Nations. (2015) 'General Assembly'
http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/70/1 [Accessed: 1st December 2017].

University of Plymouth. (no date) 'What is Education for Sustainable Development?'
<https://www.plymouth.ac.uk/your-university/sustainability/sustainability-education/esd>
[Accessed: 30th November 2017].

Vallabh, P. (no date) 'Early Childhood Education for Sustainability: Recommendations for Development'
[file:///C:/Users/Laptop/Downloads/EARLY%20CHILDHOOD%20EDUCATION%20FOR%20SUSTAINABILITY%20\(1\).pdf](file:///C:/Users/Laptop/Downloads/EARLY%20CHILDHOOD%20EDUCATION%20FOR%20SUSTAINABILITY%20(1).pdf) [Accessed: 2nd December 2017].

Wales Pre-school providers Association. (2012) 'What is the Foundation Phase?'
<https://walesppa.org/about-us/what-is-the-foundation-phase/> [Accessed: 1st December 2017].

Welsh Assembly Government. (2008a) 'Education for Sustainable Development and Global Citizenship: Information for teacher trainees and new teachers in Wales.'
<http://gov.wales/docs/dcells/publications/081204infoteachertraineesen.pdf>
[Accessed: 28th November 2017].

Welsh Assembly Government. (2008b) 'Education for Sustainable Development and Global Citizenship: A Common Understanding for Schools.'
file:///C:/Users/Laptop/AppData/Local/Temp/Temp1_ESDGC%20Wales%20documents.zip/ESDGC%20Wales%20documents/ESDGC%20A%20common%20understanding%20for%20schools.pdf [Accessed: 28th November 2017].

Welsh Government (2017a) 'Education for Sustainable Development and Global Citizenship'
<http://gov.wales/topics/educationandskills/allsectorpolicies/europeanandinternational/sustainabledevelopment/?lang=en> [Accessed: 28th November 2017].

Welsh Government for Wales Curriculum. (2015) *Foundation Phase Framework*.
Cardiff: Welsh Assembly Government.

Welsh Government. (2014) *Education for Sustainable Development and Global Citizenship*. Cardiff: Welsh Government.

Welsh Government. (2017b) 'Foundation Phase'
<http://gov.wales/topics/educationandskills/foundation-phase/?lang=en> [Accessed:
27th November 2017].