

Development of the Dyfi Biosphere Education Group 2018



Report of a consultancy carried out in January to July 2018 by Jane Powell.

This project has received funding through the Welsh Government Rural Communities – Rural Development Programme 2014-2020, which is funded by the European Agricultural Fund for Rural Development and the Welsh Government.

Background and aims

The Dyfi Biosphere Education Group (DBEG) was set up in 2009 with six founding members: RSPB Ynys-hir, Natural Resources Wales Ynyslas, Dyfi Woodlands, the Montgomeryshire Wildlife Trust, the Centre for Alternative Technology and FACE (now LEAF Education). During the first few years, members of the group were funded to produce new teaching materials and to trial them in schools, with input from teachers and support from the education advisory agency Cynnal. This allowed education providers who under other circumstances might have competed with each other to collaborate instead, and to test a model of place-based education.

After 2013 there were no funded projects, but the group continued to meet occasionally for networking and occasional joint projects, such as Science Week. Over the years though, for various reasons, several members drew back from active involvement in the group, and its last official meeting was a session for teachers in March 2017. This had been organized by Ecodyfi as part of a project supported by Natural Resources Wales through a Joint Working Partnership.

Meanwhile, the educational and political context has changed since DBEG began. On the down side, teachers now have less time to attend training events, DBEG members are on tighter budgets and funding generally is harder to come by. On the positive side, the incoming school curriculum *Successful Futures* allows teachers greater freedom to plan their activities and provides strong encouragement for out-of-classroom teaching and links to the local community.

Meanwhile, the arrival of the Well-being of Future Generations Act creates new structures for communities to shape their own futures. This links neatly to the school curriculum area of Health and Well-being, which is a new 'subject' that is being developed by teachers.

More recently, the Rural Development Programme Local Action Groups for Ceredigion, Powys and Gwynedd, with Ecodyfi, established a Development Project for the Dyfi Biosphere. This project has received funding through the Welsh Government Rural Communities – Rural Development Programme 2014-2020, which is funded by the European Agricultural Fund for Rural Development and the Welsh Government. One of its priorities is to engage children and young people in the UNESCO Biosphere.

This project's Steering Group decided to progress the educational aspect of the Dyfi Biosphere through using the LEADER funding to commission a facilitation role that aspired to reinvigorate DBEG. Its specific aims were as follows:

- Undertake a facilitation/animation role to support the DBEG members to strengthen the capacity of the group in order that the Members understand their common objectives and assist them to plan how to achieve these objectives.
- Carry out appropriate and meaningful engagement and facilitation with target groups using the 'bottom up' LEADER approach, to identify future actions.

- Build links with organisations and young people in the Dyfi Biosphere areas e.g. schools, Young Farmers Clubs (YFC's), other local organisations to develop a better understanding of the characteristics and role of the Dyfi Biosphere.
- Support DBEG Members to develop and implement activities for example identifying opportunities within specific curriculum and programmes in schools (including promoting opportunities for the Biosphere in the Welsh Bac.)
- Help DBEG Members explore how Visioning can be used to engage young people in considering their futures in the context of the Dyfi Biosphere, in school and out of school settings.
- Explore further opportunities for DBEG to share expertise and knowledge between members and external organisations, including how to pay for members' services and ensure provision of education for sustainable development and global citizenship, sufficient to meet the Dyfi Biosphere's aims.
- Identify continuation or expansion opportunities for DBEG and any spin off project ideas stemming from the group.
- To work with and feed into the ongoing project evaluation in terms of any learning related to the process and any outcomes.

Specific deliverables were to be achieved as part of the commission.

| Indicator | Total | Achieved |
|---|--------------|-----------------|
| Number of DBEG Cluster meetings | 3 | 3 |
| Number of information dissemination actions/promotional activities and/or marketing activities to raise awareness | 6 | 9 |
| Number of Stakeholders/ Participants engaged | 40 | 86 |
| Attend at a minimum 3 (including inception meetings) to report back to Steering Group/other relevant partners. | 3 | 3 |
| Produce final summary closure report including an analysis of how DBEG can help schools use DBEG members, and the resources of the Dyfi Biosphere, in developing and delivering the new curriculum. To include a plan for the use of Visioning. | 1 | 1 |

This report describes progress against these objectives. My approach was to hold meetings and organize events that would support the aims above, while answering the question:

How can we use the possibilities created by the new curriculum and the Well-being of Future Generations Act, plus our Biosphere status, to support our young people to vision a vibrant future?

Activities

1. Meetings with education providers

One-to-one interviews were held with staff of the original DBEG member organizations, plus a number of other providers and interested people in the area, in January and February. From that it became clear that DBEG could not be considered as a functioning group, but that some individuals and organizations saw themselves as actively shaping education in the Biosphere. This set of education providers will be referred to as 'the education cluster' but it should be understood that they are not a coherent group. Their first meeting on 27 February 2018 identified the following possible strands of work:

- Develop a Charter or Pledge for Biosphere schools
- Plan a Continuing Professional Development (CPD) event for teachers in the spring
- Develop a concept for a funded project centred around the Dyfi river
- Investigate the feasibility of freelance education provision linked to Natural Resources Wales
- Develop activities linked to the Welsh Baccalaureate
- Develop Welsh cultural activities

A second cluster meeting held at CAT on 17 April reported on progress. The Charter idea was put to one side when its champion later withdrew from the cluster, but other activities were still on the agenda and plans were made for various events in the summer term.

The final meeting on 1 August 2018 reviewed progress and made recommendations for the academic year 2018/2019. These are discussed at the end of this report.

[Minutes of the three meetings are available on request]

Other education providers were consulted, including Ceredigion Museum, Outward Bound, IBERS/Aberystwyth University and Mach Maethlon. These all wish to be involved, and two of them contributed artefacts for a schools' 'mystery box'. They did not wish to attend cluster meetings because of the priorities they have set for limited staff resources.

In addition, Size of Wales and Aber Food Surplus have come forward as new providers of education and joined in several activities.

2. Meetings with other organizations

It was important to meet a range of other organizations locally, regionally and nationally, in order to establish (a) what resources Biosphere education could draw on, and (b) what a Biosphere education group could give schools that would not duplicate other offers. A brief summary of these meetings is given below.

- Jacqueline Jones, Careers Wales: Recruiting members for an Education Business Exchange which will be an online resource for teachers to find businesses with which to link. A form is available for all businesses, including education providers and farms.
- Neil Storkey and Alison Kinsey, Fisheries Local Action Group: Organize public events linked to fisheries and operate in the Biosphere area; they were looking for advice on educational activities.
- Hannah Scrase, Summit to Sea: Important new biodiversity project starts in November 2018 and will have many overlaps with the Biosphere.
- Nia Llywelyn, Menter Maldwyn: Nia led with the organization of Children's Literature Festival in June, which drew in one cluster member, CAT, and laid a foundation for further Welsh language work. I assisted with planning and delivery of the event.
- Diana Davies, Ceredigion County Council: schools, like everyone else, will be able to interact with the Public Services Boards in Ceredigion, Powys and Gwynedd. This is a new opportunity for Biosphere educators. A letter from the Future Generations Office encourages us to see what can be done.
- Hwb, the Welsh Government website for teachers: they are happy to work with us to revamp the Dyfi Biosphere section on the site.
- Wales Council for Outdoor Learning: The Biosphere has a role here, and also with the Dyfi Outdoor Learning Wales group, which is yet to be clarified.
- Iestyn Pritchard, NFU: Interested in an event to encourage farmers to work with schools, initially planned for May but now put back to November 2018.
- Ruth Stevenson, Graduate School, CAT: Interested in the Biosphere as an area for study on their postgraduate courses.

Conversations were also held with the Isle of Man Biosphere, who shared their schools Charter, Wester Ross Biosphere, who do not have a school programme but could set up school links if required, and Galloway and Southern Ayrshire, also interested in linking with Dyfi Biosphere schools. These conversations identified possibilities for sharing best practice, setting up schools links and exchanging teaching materials.

3. Contact with teachers

A teacher training event held in April was attended by only one teacher, while two schools sent apologies. This might reflect a low level of interest in the Biosphere or it might simply reflect the time pressures that teachers work with. Following up with these and other schools led to further conversations, as follows.

- Ysgol Penglais, Aberystwyth: Head of geography Dan Johnson responded positively and we delivered two sessions, to Year 7 and sixth form, with more planned for December. *[See case study]*
- Ysgol Bro Hyddgen, Machynlleth: Teacher Tomi Rowlands and deputy head Anwen Pughe Jones spoke about their thematic approach in Key Stage 3, which draws in external experts. With Careers Wales, we held a visioning event there in July for Year 9. *[See case study]*
- St Padarn's RC School, Aberystwyth: The school invited five cluster members to present at a staff meeting on 13 June, leading to a request for a Biosphere Week on 22-26 October 2018. The staff have since visited CAT and the school held a surplus food meal with Aber Food Surplus on 19 July. Biosphere Week is under preparation at the time of writing and is expected to generate materials which will be shared with other schools in the Biosphere, and maybe with other Biospheres.
- The Ysgol Glantwymyn/Llanbrynmair/Carno federation of schools invited me to present at their staff meeting in May. They agreed to host a taster event for farmers interested in schools work, now postponed until November 2018.
- Informal conversations have since been held with Ysgol Plascrug and Ysgol Corris/Pennal who are interested in Biosphere work. Further meetings are planning for this autumn.

The general finding is that some teachers are very interested in working with the Biosphere. They are aware of the importance of working with their local communities and are inspired by the freedom the new curriculum gives them. Their active engagement with a few providers could be the nucleus around which an effective education cluster forms.

4. Public events

As opportunities to work directly with schools and cluster members were limited, and as it was important to understand the wider context of the Biosphere, I also engaged in some general public events in order to meet people and gauge the possibilities for future work. Here is a summary.

Dyfi Biosphere AGM, 12 June 2018: This included a discussion about plastics as a focus for Biosphere activity, and an inspiring report from Naomi Davis who had attended a Biosphere Youth Forum in Italy. Both of these are relevant to work with schools.

Children's Literary Festival, 23 June 2018. Several local primary schools took part in this enjoyable weekend event, organized by Menter Maldwyn with support from me. CAT and I were present to lead a workshop centred on *The Lost Words*, a popular book which aims to reconnect children with nature, through language. The event was attended by Sam Hicks from south Wales, who is coordinating a campaign to get the book into every school in Wales. It was an opportunity to explore the role of storytelling, language and the arts in Biosphere education, something which could be developed further.

Day at the Quay, Aberdyfi, 21 July 2018. I worked with the Fisheries Local Action Group to help organize this event and attended with a stand and the Aberdyfi aerial photography mat. Talks with both providers and the public suggested that there could be a role for the Biosphere to attend such events with a message of nature conservation combined with sustainable development. This event was outside the schools remit that DBEG had previously assumed and it shows a possible role for a Biosphere education group in advising on public events.

5. Plans for autumn 2018 and beyond

By the end of the process, education providers and teachers had between them come up with some tentative plans for the new school year. These are:

1. To hold a Biosphere Week at St Padarn's School in October. This will include visioning, and several members are expected to take part.

2. To create a data repository. This would be a shared online resource which would support education providers and teachers to develop materials and could stimulate the gathering of further data. It could include datasets on water quality and biodiversity, oral histories, photographs, student dissertations and so on. It could also have a physical counterpart, including leaflets on the area and mystery objects supplied by DBEG members.

3. To agree a way of working with the Dyfi Outdoor Learning Wales (OLW) group and the Wales Council for Outdoor Learning (WCOL): This would enable a flow of ideas between local, regional and national organizations. The exact relationship between a Biosphere education group and OLW Dyfi is problematic however, as OLW Dyfi's remit is specifically for outdoor learning, and it functions as an outpost of NRW. As cluster members have pointed out, Biosphere education needs to include other aspects such as culture and language, and it could be working with other national networks, such as the Welsh Alliance for Global Learning and the Urdd.

4. To organize a joint teacher training event: Working with the Wales Council for Outdoor Learning, the final cluster meeting (in effect, RSPB, CAT and LEAF) agreed to host a conference for teachers and providers in late spring term 2019, at CAT.

5. To set up a Professional Learning Community for teachers: The active involvement of teachers is crucial for Biosphere education and could be the driving force behind an effective education group. At least two teachers have so far shown interest in this, and the starting points will be Biosphere Week at St Padarn's and lessons at Penglais.

6. To collaborate more effectively on hosting out-of-area schools: CAT, Outward Bound and RSPB will discuss how they can work together to encourage schools on residential visits to go to each other's sites.

Other ideas

The project identified many possibilities for an education cluster to develop new activities, as follows:

A funded project: there was interest in seeking funding for a project centred around the Dyfi, including for instance fish hatching, ecological surveys, oral histories and renewable energy. A document is being developed.

The arts: the experience of the Children's Literary Festival suggested more of a role for the arts, including storytelling, in the Biosphere education group. This could especially help with sensitive areas such as bilingualism and cultural relationships, supporting the UNESCO mission to build peace.

Freelance education provision: Cluster members could between them support a pool of freelance providers who could work for more than one organization. The starting point for this is NRW's 'alternative provider' model to be trialled at Ynyslas.

Political engagement: The Biosphere, through the education cluster, could give a voice to young people by allowing them to investigate local conditions (for instance, surveying plastic waste or water quality) and putting their concerns to Public Services Boards. It could also be a testing ground for policy consultations.

Visioning: This theme could run through all the activities, and the Bro Hyddgen experiment suggests it would be worth developing it further.

Conclusions

The narrative above describes how the project was carried out and the main outcomes. In this final section I share my thoughts on the current state and future of education in the Dyfi Biosphere.

1. There is at present no coherent education group. There are several reasons for this, but a major one is that in a tough financial climate, the original cluster members are allocating fewer

resources to Biosphere work. This means that although they are all delivering education in the area, they do not have time to attend cluster meetings or coordinate their activities in a meaningful way.

2. Support for regional collaboration on education is poor. Both NRW and RSPB, which are perhaps the strongest organizations represented in the Biosphere, have a policy of centralizing education at a national level, and working with freelancers and/or local community groups who have very little power. There is apparently no role in this system for regional collaboration, and the policies of these two organizations have contributed to the weakening of the original DBEG.

3. Communicating the message of the Biosphere is challenging. Although there is a fairly simple message – The Biosphere is a special place, it's our home, how do we look after it? – awareness is low, and there is even some scepticism about whether it is a useful context for action. The low priority given to it by some key education providers reinforces this perception. Unless there is a widespread and concerted effort to raise the profile of the Biosphere, it is hard to see how this will change. Schools can be part of this, but their efforts need to be matched by other organizations.

4. Schools have the potential to revitalize the Biosphere. Despite all of the above factors, which made the project a challenge, there was one big sign of hope. That was the enthusiasm of the teachers who welcome the opportunities that the Biosphere provides, and the enlivening effect their interest had on cluster members.

5. The LEADER process has allowed new initiatives to emerge and shown the challenges of the context in which education providers are working. Undertaking the animation role and engaging with providers and others in the Dyfi Biosphere area has been challenging. Much of the activity came about through talks with teachers and cluster members who were working without any extra funding, as part of their already very demanding jobs or in some cases as volunteers. Many meetings were held in cafes, in people's homes or in busy workplaces with interruptions. A lot of time and energy went into organizing events that were poorly attended and crafting group e-mails that nobody replied to – even the draft version of this present report sent out for comments received only two responses, both from cluster members working in a voluntary capacity.

6. The Dyfi Biosphere can act as a focus point that brings the three local authorities together. Activities were held in all three counties, specifically Aberystwyth, Machynlleth and Aberdyfi, with more planned for Glantwymyn. There is potential to share school resources across all three counties and to run a Professional Learning Community that will draw teachers together. The fact that this project was organized as a collaboration between the three counties provided a good basis for this, with ready access to the three local authorities.

7. Animation work takes time to bear fruit. Six months was a tight timescale for this work. It was only possible really to scratch the surface, identifying the potential and the barriers, and

sowing some seeds for further work. Much will depend on how this report is received by those with an interest in education and the Biosphere.

Final thoughts

The project has shown the potential for Biosphere education and a map for where it could go next, but no certainty that it will succeed. That will depend on whether it stimulates wider engagement.

The role of regional education partnerships

The Biosphere is important because it allows schools and therefore the public to collaborate over a regional area, that is more than merely local but which is still small enough to be manageable. It is about the same size as a historic county, and so a new Biosphere education group could compare itself with models such as the Pembrokeshire Outdoor Schools Scheme or the Pembrokeshire Sustainable Schools Scheme. It could also work with other Biospheres, especially the relatively nearby ones of the Isle of Man, Galloway and South Ayrshire, and Wester Ross.

At a national level meanwhile it can collaborate with the Wales Council for Outdoor Learning, the Wales Alliance for Global Learning, RCE Cymru (a university-led network using the framework of the Well-being of Future Generations Act to drive education in Wales) and other networks, and Welsh Government itself. Several of its members, such as NRW, RSPB and LEAF Education, are of course national organizations in their own right, allowing the learning from the Biosphere to be shared through their networks. The Biosphere could thus benefit the rest of Wales by becoming a model of regional self-determination.

I believe that the Biosphere is worth supporting because it could benefit the area by generating public interest which leads to actual change. This could mean for instance residents supporting local businesses, volunteering for environmental activities and organizing community events. This in turn could strengthen local governance in exactly the way that the Well-being of Future Generations Act and the Environment Act propose.

The intangible nature of education outcomes

The LEADER principles of the “bottom-up” approach, networking and cooperation have provided a basis for starting discussions and fostering relationships. This could lead to future partnership working, if Biosphere education is properly supported. This requires a proper understanding of what education is.

It is in the nature of education that much of its benefits are intangible, and the things that can be measured are not necessarily the ones that matter most. The present project has revealed a

complex network of relationships which have been central to the success or otherwise of the project. It is through the quirks of individual personalities, the unpredictable moments of inspiration in schools and the happy coincidences of random encounters that things tend to happen, and that in turn requires a culture of friendship and support.

For this living quality of cooperation to emerge, there needs to be genuine human engagement from all involved. The work of schools and education providers deserves much wider support from the various organizations involved, if our young people are to create a vibrant future in the Dyfi Biosphere.

This engagement is at present lacking. This is partly due to various policy changes in the organizations whose role it would be to support Biosphere education. Funding is tight, and priorities have understandably shifted.

In this report I have shown how I met the delivery targets that were set and indicated some lessons that I draw from the work. However, little will have been achieved if the discussion ends here. I would like to call for a meeting of the key people involved with Biosphere education, including the Partnership and the LAG, to consider the findings of this report and explore future courses of action. Only then can we really assimilate the learning from this project and decide on a shared course of action.