

EnviroWinBlog 04. Promoting the successes of the three large-scale environmental wins

Introduction

Three large-scale environmental wins involving firstly, acid rain, then secondly, the hole in the ozone layer, and thirdly, the Crown of Thorns starfish are described in previous EnviroWinBlogs 01 to 03. This EnviroWinBlog 04 identifies lessons-learnt, rationale and opportunities for actions, arising from these environmental wins.

Citation references, Paragraph and Section references are those contained in the PhD Thesis “Values and science in contemporary education: The study and impact of student orientation”. The Thesis document is available in the University of Newcastle repository, here: <http://hdl.handle.net/1959.13/1501410> (and then by clicking on Attachment01).

3.1.4 Promoting the successes of the three large-scale environmental wins

What are the lessons from the three environmental wins?

The lesson learnt from the acid rain story was that international governance e.g., the Helsinki Protocol, and the dismantling of partisanship together with community-wide support, have been effective in protecting the Earth’s climate (Ogden, 2019). The lesson learnt from the hole in the ozone layer was that perseverance is required, in addition to international governance (the Montreal Protocol) together with industry and consumer co-operation. Acceptance of the relatively long-term elimination period (2060-2080) requires the quality of perseverance. The lesson from the Crown-of-Thorns Starfish (COTS) threat was that a spirit of co-operation by learned institutions and local communities is required, in addition to the qualities learnt from the acid rain and COTS scenarios. In summary, the world community has persevered and has learnt how to cooperate and succeed in environmental action against difficult circumstances.

Why we should apply the lessons from the environmental wins

The current environmental debate is complicated by adversarial and dogmatic interactions between opposing factions at global, national and local levels. This confrontational approach has obstructed efforts to achieve a widespread successful coordinated management of the environment (Brown et al., 2019). It is hoped that improved coordinated environmental action

will result from the application of the lessons learnt from environmental wins. The following beneficial outcomes may result in:

- i. Improved community attitude to the environment
- ii. Reduced students' pessimism regarding the future of the environment
- iii. An enhanced sense of our humanity

Improved community attitude to the environment

In the Australian context, in an eighteen-nation study, Gifford et al. (2009) reported that Australians are the most pessimistic nation regarding the current and expected future state of the environment. The pessimism of Australian students has been introduced in Section 1.2.2 and elaborated in Section 2.1.1, revealing that 65% (or approximately 170,000) of students are pessimistic regarding the future of the environment. As the Great Barrier Reef (GBR) and the Crown-of-thorns starfish (COTS) threat are primarily Australian in nature, and the hills and valleys around Queenstown represent one of the most graphic examples of the impact of acid rain, it can be expected that success in this domain should contribute to a reduction in pessimistic environmental attitudes within the Australian community, and by extension, within the world community.

An enhanced sense of our humanity

Dewey (1934) posited that we are now part of a humanity that has interacted with nature, and that we share the responsibility for conserving, transmitting, rectifying and expanding this heritage. Humanity can be considered as a relation of soul and body in a synchronistic relationship of psychic and physical processes, rather than as a causal relation (Jung, 1950). Scenarios involving humanity with technology, teaching and religion were discussed, respectively, in Sections 2.3.6.3, 2.3.7.8 and 2.4.1. Therefore, it is suggested that a focus on the achievement of environmental wins may result in an enhanced community sense of humanity.

How we can apply the lessons of environmental wins: upholding a high standard of values and ethics

In an attempt to understand the underlying reasons for environmental pessimism, it would be advantageous to gain insight into the values and ethics held by students. However, a qualitative inspection of the approximately 600 items of the PISA 2015 data set regarding each

respondent reveals the absence of data which directly assess the respondent's values or ethics. The large number of pessimistic students and the lack of visibility of values and ethics are a situation of grave impact to the well-being of future Australian society inhabited by today's students. It is quite feasible that many students conclude that the community management of contemporary environmental issues does not adhere to the positive values espoused in the school curricula. This conclusion can be moderated by promoting the environmental wins as examples of upholding high community values.

Where do we apply the lessons from environmental wins?

We have seen that the threat posed by major environmental issues can be effectively managed through a comprehensive process of objective technical analysis combined with sincere participation of major stakeholders, both government and private, delivered in a spirit of humanity. In this manner, the northern hemisphere-wide threat posed by acid rain has been significantly mitigated. Similarly, the hole in the ozone layer is on track for resolution during this century. Additionally, on the Great Barrier Reef (GBR), the long-standing Crown-of-Thorns Starfish (COTS) threat is under control and enduring programs are in place to continue the effective management of this threat.

It is suggested that the above-described co-operative techniques can be applied to the resolution of other compelling environmental sustainability issues, whether these issues be at an international, national or local level. Examples of such issues are plastics in oceans (Schmaltz et al., 2020) and orbital debris in outer space (NASA, 2018), amongst others. In addition to saving the environment, sincere international cooperation in the resolution of these issues may contribute in the diffusion of geopolitical tensions. At an individual level, the promotion of these wins may alleviate tendencies for susceptible members of society to despair regarding the perceived parlous state of the environment (Hicks, 1998).

Summary and conclusion

The adversarial and dogmatic interactions between opposing factions in the current environmental debate can be mitigated by celebrating recent wins in environmental actions as described in EnviroWinBlogs 01 to 03, then applying the lessons learnt. Where can these lessons be applied? This EnviroWinBlog 04 identifies that the lessons-learnt can be applied towards the resolution of gaps in the environmental narrative and in current environmental actions. Some of these gaps are detailed in the separate EnviroConvergeBlogs blog series.

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