# Staff Papers

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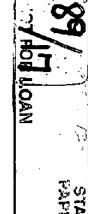
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## GREAT BARRIER REEF MARINE PARK AUTHORITY: THE AUTHORITY'S RELATIONSHIP WITH AUSTRALIAN EDUCATION

R.J.Neale, Assistant Executive Officer Education / Information 14 Nov 1989

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The Authority's Relationship With Australian Education
R.J.Neale, Assistant Executive Officer, Education/Information
14 Nov. 89.

#### Introduction

There is no formal education system requirement for schools to teach anything about the Great Barrier Reef (GBR) specifically but a huge number of schools and individual teachers at all levels of the education system do use the GBR as a source of stimulation, ideas, and materials for teaching in all areas of the curriculum.

Since the Authority's goal is "To provide for the protection, wise use, understanding, and enjoyment of the Great Barrier Reef in perpetuity through the care and development of the Great Barrier Reef Marine Park" it is clear that it should provide assistance and make materials available to all levels of the education system. The Education/Information Section takes specific direction out of the Authority's goal and aims and has the objective to "assist and encourage educators and educational institutions to undertake activities that help students use and enjoy the Marine Park in ways which will conserve it for future generations".

The Authority has set a target of providing to all Australian school students some significant GBRMP material at least twice in their primary school years and at least once in their secondary schooling. We regard this timing as being critical to developing empathy with the Reef and conservation values. The Authority also has significant input to tertiary education principally by encouraging and providing for research which will be of management value. It has also had significant input into the development of some tertiary planning and management curricula.

#### **Education Directions**

This assistance and encouragement takes two principal directions:

1. Ad hoc or opportunistic help and support in the form of providing topical articles, information leaflets, activity ideas and suggestions, answering inquiries from teachers and students (over 1,200 per year), providing editorial and media materials, and encouraging teacher organisations such as the Marine Educators

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Society of Australia (MESA) to utilise the wonderful resource of the GBR. We provide up to 10 work experience placements each year for various students at secondary and tertiary levels.

2. Curriculum based help and materials support. This support is usually in the form of resources or methods that are deliberately constructed to fit into the education system's general curriculum or into a specific institution's curriculum. These projects are usually developed jointly with practicing educators and involve extensive formative evaluation and trialling of the materials.

## Opportunistic support

We take a particular interest in targeting educators as this is the most efficient way of influencing the students. For example, by having one teacher use Reef materials, we have been able to influence many students and perhaps their parents as well. GBRMPA organised the 1988 national conference of MESA and acted as editor producing its newsletter for the first two years. A major activity of an opportunistic nature was our developing an education program to accompany the opening pageant for the North Queensland Games .This program involved diverse activity in 30 schools and involved about 9,000 students directly and indirectly.

Authority staff and our Ranger staff also talk to schools and class groups both at school and out on the Reef wherever this is the most practical approach. Talks are labour intensive but are an important element of our educational program in the field.

The Authority now writes specifically targeted articles for national student publications, one of which won a national award for communication excellence. These are usually single topic specialty items such as "Coral Moon Magic" which discussed the annual coral spawning event. We have published three childrens books with a Reef theme and produce a regular newsletter of our own that is mailed out to over 5,000 recipients. These and television items are important aspects of a mass communication effort with the education system in mind..

We have also been unsuccessful in some efforts; for example, a student /teacher newsletter we produced at one time not only declined from 2,500 to 1,480 units per mailout but became a most difficult item for which to obtain copy. It was a teacher resource but new and stimulating ideas became just too difficult to get as the

Authority became busier. We ceased production in favour of a more cost effective option of providing educational items to student magazines such as EYESPY, COMET, and PURSUIT thus utilising a commercial distribution network reaching over 250,000 students.

### Curriculum based Support

The Authority has taken important initiatives in developing educational materials that are tailored to specific curricula such as the science, geography, or arts frameworks. Teachers and Education departments have told us that they want materials tailored to their curriculum requirements; that is something that will "fit in and be acceptable" to established educational policy and curriculum guidelines. We have prepared materials for just that purpose but they are characterised by complex, joint development between the Authority and the relevant school or Education Ministry, and usually considerable expense. The products have been of exceptionally high quality because they have been very carefully planned, and because the Reef is such an exceptional resource visually the video or paper product has been beautifully illustrated.

Three examples are: PROJECT REEF ED, which is a most comprehensive guide to field and classroom activities that covers principally the upper secondary curriculum areas of biology, marine science, environmental studies, and some geography. It is a 400 page teacher resource that contains activities, program planning, and curriculum guidance, and sells for under Aust\$20.

ENCOUNTERS WITH THE REEF is an audiovisual presentation in two formats, a video with graphics and movie footage, and a 35mm transparency/audiotape with teacher notes. "Encounters With The Reef" is also based on the secondary school science curriculum and covers the topic of the structure and evolution of the Great Barrier Reef.

POLYP AND FRIENDS, currently being developed, is a short work program (5 to 7 days) of across-curriculum or multi-focus activities that concentrates on the arts, science, and language curriculum frameworks, Its purpose is to provide teachers and schools with a complete kit that contains curriculum guidance, activities, appropriate audiovisual resources parent notes, student work sheets, and follow-up activities. This innovative approach to providing theme based material will also be adapted to Australia's unusual distance education program which is a form of "School of the air" where the work will be mailed out to students who work at home and relate to their teacher by radio.

Teacher training takes the form of provision of materials, ideas, and expertise to tertiary institutions as requested but the Authority also has a program of short courses in Reef Awareness which it has operated specifically to better equip teachers in the Reef region. Teachers enrol in these courses which are presented by Authority staff and are usually centerd at the main population centres along the Reef coast.

The GBR Aquarium is the principal educational facility of the Authority and, as it houses a living coral reef ecosystem surrounded by a full interpretive facility including touch-tanks and a teaching discovery space, it is ideal for tour groups and local teachers/classes alike to learn about the Marine Park and Reef conservation under exceptionally fine surroundings. Tours, and curriculum based work can be tailored to individual needs by our interpretive staff, or they can select from especially prepared activity guides and operate either alone or with their teacher.

The Aquarium is unique and presents an educational opportunity that is without peer because it is as natural a situation as is currently practicable and is presented superbly with huge viewing windows, and a 17metre long acrylic viewing tunnel through which visitors can walk and examine the reef's living complexity at their leisure.

#### Conclusion

The review presented does not cover all of our activities and describes only some of the products, but it does stress that we take seriously the commission to conserve the magical world of the Great Barrier Reef. We believe that our young people, regardless of where they live, can share in the knowledge, understanding, and enjoyment of the Reef and that because of this opportunity, perhaps initiated at school, they will have the right attitudes and motivation to ensure the Reef's survival into the future.