

Capacity building in coastal communities – The CoastEd Program

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ABSTRACT

Capacity building on the Gold Coast is often challenging due to the transient nature of this coastal community. Awareness and understanding of the coastal environment encourages the community to participate in coastal related decision making and assists local government in the management of the coastal zone. Griffith University's Centre for Coastal Management has developed the Coastal Community Engagement Program to assist in developing awareness of coastal issues within the local community. Gold Coast City Council, the major supporters of the program, recognised the need for the dissemination of local information and sees the program as a conduit for the transfer of this valuable information.

The CoastEd Program is a key component of the Coastal Community Engagement Program and provides a means of raising awareness of coastal issues within targeted community groups. CoastEd provides free information, resources, presentations and sessions for schools and community groups.

Formally commencing in 2001, CoastEd was a small program that targeted local schools. In 2006 the program has grown to four times its original size, providing information to over 2,800 students and delivering 69 free sessions. Participating schools are from the Gold Coast and Brisbane as well as south-west Queensland (including Charleville, Warwick and Toowoomba) and New South Wales (including Ballina and Sydney). The program aligns closely to the senior school curriculum in several subjects including geography and marine studies. Participants often express sincere gratitude for the program as the materials provided can often be difficult to access.

INTRODUCTION

Since the Tbilisi Declaration in 1977, increasing focus has been placed on environmental education. Learning of environment issues has not only increased within the formal school setting but also within everyday life through informal education such as media and community events. The importance of education is paramount in the bid to improve sustainability and protect the environment for future generations.

Education and awareness of our local coastal environment and the impacts of people, is a first step in developing an active, environmentally conscience community. In light of increasing coastal populations and climate change, there is a need for the provision of education regarding the environment. The Gold Coast population is constantly increasing with a current estimated at over 497,500 and an estimated increase to 683,500 by 2021 (GCCC, 2007a). Tourism is also an important part of the Gold Coast economy with an estimated 10,365,000 visitors during 2006 (inc. overnight and day visitors) (GCCC, 2007b). Programs aimed at protecting our coastal environment have never been more important.

Gold Coast City Council provides programs for managing and understanding the local beach environment, through capital works, asset management and research. There are identified limitations in the provision of this valuable information to the local

community. Such information is also often difficult to locate without trawling through search engines on the internet or contacting different Government departments. To bridge this gap, Gold Coast Council (GCCC) and Griffith University's Centre for Coastal Management (GCCM) have developed the Coastal Community Engagement Program and an integral component of this is the CoastEd Program.

COASTED

CoastEd is an initiative of both GCCC and GCCM. The program formally commenced in 2001 with funding provided by the then Beaches and Waters Unit (Engineering Services), Gold Coast City Council. There was an obvious need for the program as both local teachers and community members often contacted GCCC with questions regarding the management of the beaches. Council staff were often requested to visit schools and started to develop a series of information sheets to address these inquiries. It was decided that a formal program was needed.

CoastEd has initially focused on delivering this education program to schools, as there was a strong interest from teachers. School classes are an easily accessible and variable audience and the importance of educating the young has been highlighted throughout the environmental education literature.

Aim

The CoastEd program seeks to increase the capacity of the Gold Coast community to participate in coastal decision making by informing and educating on the importance of sustainable management in our coastal and environmental systems. The program achieves this mission statement through delivering free presentations and education sessions to both schools and community groups.

The aim of the program is to provide a link between coastal research, local Council and the local community. This 'bridge', as such, is often missing due to inaccessibility of information, technical language and difficulty in interpretation, awareness of information available and limited time to source resources. Valuable information often remains shelved and unavailable to local educators and teachers. Many teachers have commented on the difficulties in sourcing relevant, local information and the frustration of being passed through different departments when contacting Government authorities. The development of the internet and improving level of web access for teachers has greatly enhanced the dissemination of information and CoastEd provides a focal point for local coastal issues.

EDUCATION SESSIONS

Funding allows for one free hour session per school each year, although often more than one session is offered to accommodate for large class sizes and year levels or for different subject requirements. As the program is provided at no cost, it is accessible by all schools within the region. It also provides an affordable activity for school excursions. A major hurdle for school teachers in planning excursions is the costs involved particularly through hiring buses. When additional costs are involved excursions are often cancelled.

CoastEd sessions can be held on location at a local beach, providing a unique hands-on learning experience for students (Figure 1). This is a useful approach in environmental education as it gives the students a sense of reality and relevance (Fien and Gough, 1996). CoastEd officers will also visit schools and provide either a PowerPoint presentation or a series of activities, depending on the required outcome

for the session. Presentations include a variety of photographs, both historical and recent, which provide a visual enhancement for the session. Sessions have also been held at Griffith University within the lecture theatre facilities and CoastEd has also organised tours through the engineering facilities with an opportunity to speak to post graduate students studying within coastal engineering. Teachers are also invited to actively participate in the session to ensure that key messages are understood by the students. Sessions can be used as an introduction to the topic or as a reinforcement of the classroom teaching.

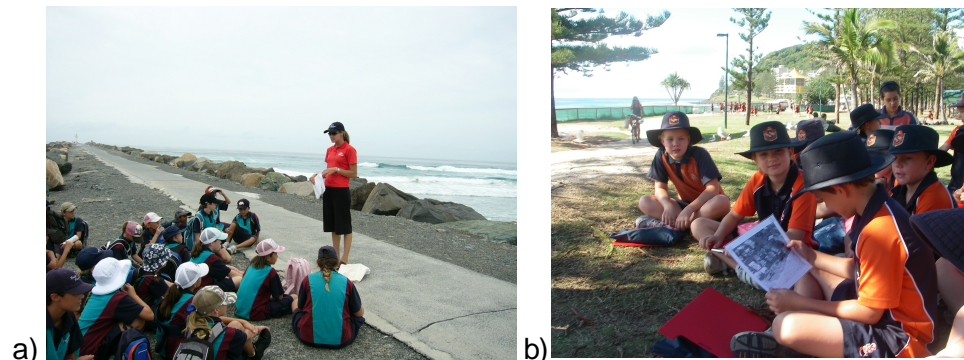


Figure 1. Students from Pacific Pines State School (a) and St Stephens College (b) participating in a CoastEd session.

Topics

The topics offered by CoastEd align closely with the Coastal Management Unit studied by both secondary school geography and marine studies students. The subject matter can also be closely related to the primary schools Local Studies Unit within SOSE (Studies of Society and Environment).

Table 1 provides a list of the current topics available. The topics are flexible and can be designed to meet the requirements of the teachers and curriculum.

Table 1. List of CoastEd topics

General coastal processes
History of the management of Gold Coast's beaches
Information about dune plants and weeds
Planning issues near beaches
Gold Coast Seaway and Wave Break Island
Northern Gold Coast Beach Protection Strategy
Palm Beach Protection Strategy
Tweed River Entrance Sand Bypassing Project
Burleigh Beach Protection Strategy
Beach clean-up and litter information
Stormwater disposal
Environmental health and visual pollution

Activities

CoastEd also facilitates activities and can assist teachers in developing field work for students. Examples of activities include dune plant identification, dune planting, litter audits and beach profiles, wave and beach condition assessments (Figures 2 and 3).



Figure 2. Students from Pacific Pines State School participating in a dune planting activity



Figure 3. Students from St Stephens College drawing a dune profile as part of their CoastEd activities.

Participation

A small marketing campaign directed at principals of local schools in late 2001 led to the participation of 28 schools in 2002 and 29 schools in 2003. An increase in funding from Gold Coast City Council saw a much wider targeted campaign directed to heads of departments at local secondary schools and deputy principals at local primary schools. This resulted in 44 schools participating throughout 2004. Further funding from SEQ Catchments (formally NRMSEQ) provided an opportunity to market the program to secondary schools in Brisbane. As a result, 2006 has been our most successful year with 59 schools participating in 69 free sessions. It has also become evident that word of mouth has been an important means of the program information reaching teachers. The number of students participating has grown from approximately 1,223 in 2002 to 2,836 in 2006. At this stage, the session numbers have reached capacity for growth within the current structure and management of the program.

Class sizes are variable ranging from small groups of just 8-10 students up to entire grades with 180 students. The larger groups are accommodated through the assistance of staff from both GCCM and GCCC.

Approximately half of the participating schools are from the local Gold Coast region with a small percentage (~4%) from south-west Queensland and New South Wales and the remaining schools from the Brisbane area. Schools travel from as far as Charleville, Warwick, Toowoomba, Sydney and Ballina to undertake an excursion on the Gold Coast, during which they participate in a CoastEd session. CoastEd is able

to provide these schools with local knowledge regarding the Gold Coast coastal environment.

Resources

Through funding provided by SEQ Catchments (formally NRMSEQ), a series of lesson plans related directly to the coastal environment were developed and included as part of the Gold Coast City Council's Ready Set Teach initiative. A lesson plan has been developed for each grade (1-12) and provides teacher information that includes core learning outcomes, a student activity and an assessment criterion. The lesson plans are available on both the GCCC and GCCM websites and were distributed as part of GCCC's program to all local Gold Coast schools.

An educational resource called "Managing Our Coastline" is also currently in development from funding through the Griffith University's Community Partnership Fund. The aim of this book is to compile all the information gathered throughout the years by CoastEd and tailor it into a useful resource for both teachers and local community members.

COASTACT

A branch of the CoastEd Program is a project titled CoastAct which focuses on the active involvement of students in managing their coastline. An example of this program is the Harley Park Project. Several years ago, CoastEd was approached to assist in developing a long term, monitoring program with a local high school, AB Paterson College. The school was looking for a project in the field that was more 'real life' than usual classroom activities. A local natural swimming lagoon and park area, Harley Park, Labrador, was selected as a suitable site. A program was developed for year 10 and 11 students from biology, chemistry, physics and geography. A monitoring program was developed that included water quality monitoring, community surveys, mapping, assessing facilities, biological processes and physical sand movement (basic surveying) (Figure 4). Students undertake these activities through excursions to the lagoon once per term and write a full major report which is submitted at the end of the school year. The project is currently in its fourth year. CoastEd provided support for the teachers throughout the development of the program and currently assists during the excursions. Much of the responsibility is placed on the students to undertake the project.

The project is valuable to the school as it provides an outlook for students to understand the world outside of the school environment. It is also valuable to the local Council and community as it can provide triggers illustrating changes within the local environment, where these triggers alert Council to a need for further inquiry.



Figure 4. Students from AB Paterson College undertaking activities as part of the CoastAct program.

CONCLUSION

CoastEd is a successful coastal education program initiated by Gold Coast City Council and delivered through Griffith University's Centre for Coastal Management. The program is delivered to schools from both south-east and south-west Queensland and even New South Wales. The program provides a link between research, coastal management, local council and the local community through the dissemination of valuable information. The program aims to develop an environmentally aware coastal community with the ability to participate in coastal decision making. The program receives positive feedback from both teachers and students alike.

Take Home Messages

Given the current growing population of the coastal region there is a need for environmental education that focuses on coastal issues.

CoastEd provides a link between research, coastal management, local council and the local community through the dissemination of valuable, sometimes inaccessible, information.

CoastEd delivered 69 free education sessions to 59 schools during 2006, with over 2,800 student participants.

Acknowledgements

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