SOMETHING OLD AND SOMETHING NEW: MEANINGFUL COMMUNITY EDUCATION IN THE TWENTY-FIRST CENTURY

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Introduction

In the twenty-first century, advances in technology have created a myriad of new ways to communicate. The rapid uptake of Facebook, YouTube, Twitter, and LinkedIn are all testaments to the continued evolution of human interactions through online media. Whilst these innovations undoubtedly present us with new and exciting opportunities for coastal education, many lessons from the past are worth remembering. The Gold Coast City Council Engineering Assets and Planning Branch embraces its responsibility for relevant and timely communication with the community, aiming to facilitate meaningful participation in the management of our coast across the community. It is through balancing old and new that Gold Coast City Council seeks to effectively educate the Gold Coast community and inspire participation in best practice coastal management.

Recently, an in-service review (health-check) of Gold Coast Coastal Community Engagement Programs was undertaken. The purpose of this review was to assess the performance of the programs against their objectives and clarify future directions. This paper presents some of the key findings of this review.

Background

> Ultimately, healthy coastal and marine ecosystems depend on long-term best management practice by every single person connected to that system. And best management practice – regardless of on ground works of any description – only comes from understanding and acceptance of that best management practice, which can only come from effective communication and engagement. (Maddigan 2009, p. 1)

As discussed by Maddigan (2009), values, attitudes and beliefs shape an individual's interactions with the coastal environment. Therefore, to ensure the health of the coastal environment in the future, custodians of the coastal environment need to engage with the community to cultivate participation in best practice coastal management. Participation includes public support, as well as on-the-ground works.

Gold Coast City Council has a vested interest in coastal community education. The city is highly sensitive to changes within the coastal environment (Griffith Centre for Coastal Management 2008). These changes might be brought about by large storms, development, or innovation in the way we relate to and use the coast. The Gold Coast City Council *Bold Future Vision*, established through extensive community consultation, likens the beach culture of the Gold Coast to the Great Australian Dream, suggesting that the beach has replaced the bush as the current manifestation of this dream (Wake et al. 2008). The *'Our Beaches Future'* best practice research report recommended that 'Community capacity in regard to beach issues should be increased to a level where [the community] can be actively involved in making the right decisions for our beaches'

(Wake et al. 2008). These recommendations have informed the development of the Gold Coast City Council *Corporate Plan 2009 – 2014* and are inculcated into core strategies such as the *Nature Conservation Strategy 2009 – 2014.* It is evident that coastal community education is important to the city of the Gold Coast.

Gold Coast City Council's Engineering Services Directorate is the asset custodian of beaches, canals and some tidal foreshores for the city. Within this Directorate, the Engineering Assets and Planning Branch, working with Griffith Centre for Coastal Management, have a lead role in the coordination and delivery of Coastal Community Engagement Programs. The overarching purpose of this partnership is to enhance community understanding of natural coastal processes and management strategies by bridging the gap between coastal decision makers and the wider community (Edwards & Williams 2011). Three unique programs and initiatives tackle the key elements of this objective (Table 1). This paper focuses on the CoastEd program, as the primary vehicle for coastal education on the Gold Coast.

Table 1. Gold Coast Coastal Community Engagement Programs

Name	Objective	Approach
CoastEd	Educate the local community on the importance of sustainable management of our coastal and environmental systems	School visits, group sessions, information resources
BeachCare	Provide an opportunity for community members to participate in caring for their local beach, while gaining important information about coastal management and the future of Gold Coast beaches and foreshores	Dune planting with the community and community groups
Clean Beaches	Encourage local groups and schools to celebrate the high quality of Gold Coast beaches and tidal waterways	Nominating Gold Coast beaches in the Keep Australia Beautiful Clean Beaches competition

Current State Analysis: Gold Coast Coastal Community Engagement Programs

Over the past twelve months, a substantial investment has been made into the development of online materials to support the CoastEd program. The rapid uptake of new social and online media in recent years has been paralleled by an unprecedented increase in expectations for quick and easy access to information (Mandarano et al. 2010). In Engineering Assets and Planning, this has been found true. The number of online enquiries that have been received in relation to coastal management has markedly increased in recent years (S Hunt 2011, pers. comm., 25 May). To cater for this growing demand, Council primarily use the World Wide Web to disseminate new information sheets, *Our Coast* multimedia videos and the Griffith Centre for Coastal Management Public Library.

Information sheets

In the last twelve months — in reaction to a number of frequently asked questions — Gold Coast City Council and Griffith Centre for Coastal Management have produced

two series of information sheets. The first series, *Discovering our Coast*, includes information about the coastal environment of the Gold Coast. *Caring for our Coast* comprises information about how Gold Coast City Council and the community manage the city's coastal environment. Between these two series, there are now 49 information sheets in circulation. Topics are listed in Figure 1.

Discovering our Coast	Caring for our Coast
• Beach culture on the Gold Coast	• BeachCare and CoastEd
• Beach erosion	• Beach Protection Authority
• Currumbin Creek coastal processes	• Broadwater Parklands coastal management initiatives
• Cyclones	• Broadwater Parklands water sensitive urban design (WSUD)
• Dugongs	• Coastal monitoring
• Dunes of the Gold Coast	• Currumbin Creek dredging
• East Australian Current	• Delft Report: Key recommendations
• Ecological response to storms	• Gold Coast beach nourishment
• Fauna in the dunes	• Gold Coast Seaway
• Gold Coast Seaway: A marine lovers' paradise	• Introduction to the Waterfront Development Control (WDC) Program
• History of coastal storms on the Gold Coast	• Looking after our dunes
• Longshore drift	• Narrowneck Artificial Reef: Construction
• Mangroves of the Gold Coast	• Northern Gold Coast Beach Protection Strategy: Improving beach width
• Narrowneck Artificial Reef: Ecology	• Northern Gold Coast Beach Protection Strategy: Recreational benefits
• Our coastal zone	• Pontoons and jetties
• Palm Beach Reef	• Revetment walls
• Reefs of the Gold Coast	• Shoreline position monitoring
• Rocky shores of the Gold Coast	• Tallebudgera Creek dredging
• Sandy beach ecology: The hidden world	• The A-Line Seawall
• Seagrass of the Gold Coast	• The Delft Report
• Sea turtles of the Gold Coast	• Water quality in Currumbin Creek
• Shorebirds of the Gold Coast	• Wave Break Island
• South Stradbroke Island: Ecology and beach management	
• Storm surges	
• The Broadwater: A dynamic estuarine environment	
• Tidal exchange on the Gold Coast	
• Tsunamis	

Figure 1. List of information sheets (October 2011)

'Our Coast' multimedia

This year, an opportunity to add a new dimension to CoastEd's online resources was identified. A series of short video clips have been produced that offer insight into the management of the city's coastal environment (Table 2). About 25 minutes of video is spread across seven topics, targeting 'digital citizens' within the community, who regularly engage with YouTube and online videos. This series is complimentary to the

collection of information sheets available online, presenting material at a more detailed resolution, with a historical focus. It was developed based on interviews with four coastal management experts, who were able to collectively present a first-hand account of living and working on Gold Coast beaches spanning sixty years (1950s to today):

- Frank Goetsch (Gold Coast City Council Surveyor 1964-2005);
- Brian McGrath (former Engineer, Queensland Office of the Coordinator General);
- Angus Jackson (Managing Director of International Coastal Management); and
- Rodger Tomlinson (Director of the Griffith Centre for Coastal Management).

One of the advantages of using social media such as YouTube clips for education is that it invites individuals within the community to take on some of the responsibility for education, by distributing content and engaging in online dialogue (Interactive Advertising Bureau 2009). Additionally, online media is a very flexible mode of delivery that is accommodating of busy schedules, as opposed to a face-to-face presentation. It is anticipated that this new dimension will reach out to additional members of the Gold Coast community.

Table 2. Outline of 'Our Coast' videos

Topic of video	Duration
Coastal Management on the Gold Coast (summary)	4 min
Longshore drift	4 min
Onshore/offshore movement of sand	4 min
Surveying on the Gold Coast	3 min
Gold Coast Seawall	3 min
Dredging and sand nourishment	3 min
Narrowneck artificial reef	3 min

Online library

This year, Gold Coast City Council and Griffith Centre for Coastal Management have added another dimension to the CoastEd resource collection. After nearly a decade of operation, CoastEd has engaged thousands of community members on the Gold Coast, particularly school students. Today, these individuals (as well as many surfers, lifeguards and regular Gold Coast beach users) have a pre-existing knowledge base to draw from. This audience sometimes seeks more detailed, scientific information to further enhance their understanding.

An online public library containing scientific papers and historic research reports has been developed, accessible from the Griffith Centre for Coastal Management's website. It is anticipated that this will increase transparency and empower individuals to more meaningfully participate in coastal management (Fisher 2009). It facilitates learning from the many lessons of coastal management pioneers on the Gold Coast, such as Sam Smith, who wisely recorded three decades worth of research and observations. There are 266 reports of this nature, all now available through the Griffith Centre for Coastal Management Online Public Library. Additionally, this library includes some of the latest research conducted on the Gold Coast, so that the public can keep abreast of current coastal science. Initial feedback received suggests that this new

dimension to the CoastEd program will better cater for the community's information needs.

CoastEd sessions

It is recognised that interactions on a human scale still benefit from face-to-face contact, access to personal experience and local knowledge. Online educational resources are not a panacea, but rather facilitate reaching out to a wider community (Mandarano et al. 2010). In-person education sessions are still the mainstay of CoastEd, which is set to deliver 70 sessions this financial year to the Gold Coast community.

Lessons learnt, future directions

There are challenges associated with communicating and promoting the latest scientific research at several resolutions using multiple platforms. For instance, without a large existing online social media presence to draw upon, dissemination of these resources in the community has been slow. Secondly, feedback on these resources has been limited, in the absence of established mechanisms for evaluating performance. Finally, the in-service review has identified a need to better demonstrate the strong link between science and management at Gold Coast City Council. Each of these challenges is discussed further in this section.

Challenge 1: Raising social capital

Putnam (1995) defines social capital as 'the connections among individuals, social networks and the roles of reciprocity and trustworthiness that arise from them…that enable participants to act more effectively to pursue shared objectives' (p. 664-5). Social capital facilitates knowledge sharing and dialogue, which can help to educate and empower a community. The literature suggests that the Internet is the ideal tool to facilitate this constantly evolving dialogue, for several reasons (Dykes et al. 2011):
- Online tools can facilitate direct communication with decision-makers (Innes et al. 1994).
- There is a positive correlation between Internet use and community engagement (Shah, et al. 2001).
- Online engagement is arguably more purposeful and goal-oriented (Zúñiga and Valenzuela 2010).
- The Internet facilitates flexible, remote participation on a large scale.

Gold Coast City Council is undertaking a large web platform refresh project, whereby the website's architecture is revised to be more user-friendly and linked in with social media, such as YouTube and Twitter. This new website will be launched in February, and will help to raise the social capital that can help disseminate the materials into the digital Gold Coast community.

Challenge 2: Capturing feedback

There is little doubt that community education should be measured with the same standards as other areas of business (Hansen and Spitzeck 2011). It is essential to

regularly assess how relevant and timely (meaningful) community education is, to avoid engaging in what Mandarano et al. (2010) describes as an 'empty ritual' (p. 123). A database will be developed next year to record any feedback and requests for information received from the community across the media collateral employed by coastal community engagement programs. Output reports from this database will be consulted on a biannual basis that will inform forward planning for these activities. This kind of data is extremely important in demonstrating the value of these programs through their ability to meet demand within the Gold Coast community (Dykes et al. 2011).

Challenge 3: Linking Science and Management

One of the greatest attributes of the Gold Coast City Council−Griffith Centre for Coastal Management partnership in delivering coastal community engagement programs is that it puts researchers, educators and managers of the coastal environment in the same room, to communicate directly with the community. This close relationship reinforces Gold Coast City Council's integrated approach to shoreline management planning. Gold Coast City Council is a very large organisation in its own right—the second largest local government in Australia. There are several areas that are involved in managing the coastal environment, including Engineering Assets and Planning, Catchment Management Unit, and Environmental Planning and Conservation. It is an ongoing challenge to ensure that the community benefits from a clear understanding of this integration. For example, the Environmental Planning and Conservation team are in the midst of completing an ecological inventory of the Gold Coast. It will be a priority of future CoastEd initiatives to ensure that any key findings of projects such as these are disseminated effectively to the community.

Conclusions

In the last 12 months, Gold Coast City Council has made a substantial investment into the development of educational material for the community in order to increase awareness of the coastal environment and how it is managed. This paper has outlined some of the key initiatives that have been undertaken, including the development of information sheets, videos and an online library. It is contended that community engagement is 'an ongoing interactive process characterised by commitment to ever-changing community needs and interests' (Ramirez et al. 2005, p. 261). The Internet is an outstanding tool to facilitate this constantly evolving dialogue. At the same time, the value of face-to-face education is recognised by Gold Coast City Council and Griffith Centre for Coastal Management. An estimated 70 sessions will be delivered to groups across the Gold Coast this financial year. The in-service review that was undertaken has identified three main areas to improve upon in future years: raising social capital, capturing feedback and strengthening the link between science and management. It is anticipated that this will increase the effectiveness of the CoastEd program and lead to an increased appreciation of the Gold Coast coastal environment and its management.

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