

School exiting certificate: old wine in new bottles

Would a 'school exiting certificate,' which is a grade 9 school-leaving certificate as recommended by a ministerial task-team report, offers a route to career opportunities for those who do not complete a matric certificate? Perhaps, but that would depend on the way the concept is marketed, says *Andrea Juan et al.*

The introduction of a General Education and Training Certificate (GETC) at the end of compulsory schooling at the grade 9 level is intended to offer learners an 'alternative' pathway to completing a national senior certificate, or matric.

The GETC is not a new proposal. Providing school-leaving certificates to learners at the end of grade 9 was debated post-1994 and in 2003. The South African Qualifications Authority subsequently recommended a GETC policy. To implement the GETC, the then Department of Education experimented with the common tasks for assessment (CTAs) to form the basis of a standardised test to issue the GETC. Yet, concerns over both the concept and implementation of the GETC allowed the proposed policy to die a natural death.

The recent re-emergence of this debate begs the question of whether there is merit in re-examining the viability of this certificate. A Department of Basic Education ministerial task team, which assessed the quality of the National Senior Certificate, recommended this 'exiting certificate' as a response to the high dropout rate of learners after grade 9.

This debate begs the question of whether there is merit in re-examining the viability of this certificate.

The certificate is intended to firstly act as exit from grade 9 and entry credentials into traditional schooling or vocational education through technical vocational colleges (TVET) and technical secondary schools. Learners could graduate with a National Senior Certificate at the end of each of these pathways. The second intention is to act as proof of educational qualifications for entry into the labour market.

The option is not taken by many students – either because of the poor image of TVET colleges or the lack of awareness of this pathway among grade 9 learners

Viability of the GETC certificate

One of the intentions of the grade 9 schooling certificate is to encourage alternative routes to the grade 12 (or equivalent) examination. Most educational systems around the world have the traditional and the technical vocation education and training pathways, and dual streaming is a common practice internationally (Europe, Egypt, China).

The dual pathway allows a route for learners with different abilities and interests to be educated. In addition, a wide range

of skills are produced for the economy. Currently, South African learners do have the option of leaving compulsory school after grade 9 and registering at a Technical Vocational Education and Training (TVET) college. They can then complete the National Certificate Vocational (NCV). This is not an option taken by many students – either because of the poor image of TVET colleges or the lack of awareness of this pathway among grade 9 learners. Learners should be made aware of the 50 public TVET colleges in the country which offer this option.

Job security

There is no guarantee that the certificate will provide entry into the labour market. The task team report states that the certificate will provide proof of educational status, and thus grant access to employment opportunities by providing signals to the labour market about the competencies of an individual. However, research published by the Centre for Higher Education Transformation found that, on average, South Africans who complete grade 12 have earnings between 40% and 70% higher than those with less schooling. These percentages increase with higher levels of education. The Annual National Assessments (ANA) and Trends in International Mathematics and Science Study (TIMSS) results show a very poor quality of mathematics achievement at the grade 9 level. Taking this into account, the value of the certificate in the labour market is questionable.

Socially acceptability of the GETC

The government cannot allow for exiting the education system with a grade 9 certificate to become a socially acceptable choice for learners. Globally, governments and societies are encouraging higher levels of education due to the extensive benefits which it provides. The 2011 Census statistics show that only 40% of citizens 20 years and older have a grade 12 or higher education qualification. We must continue to strive to increase educational levels of the population to further promote the development of the country.

Potential to hide dropout levels

The certificate has the potential to mask the high levels of dropouts. This is because learners would have successfully exited the educational system with a qualification. Leaving school at this point would therefore technically not be considered as 'dropping out'. This is what Professor Volker Wedekind calls a 'statistical solution' to a major social issue.

The introduction of a new qualification has major cost and logistical implications. If we want to improve the quality and outcomes of our education along with other initiatives, we need to create a greater awareness of the existing technical vocational routes, and introduce a repetition policy that provides additional assistance to learners who are not passing grades 10 or 11 to help them achieve the competences required at that level. ■

This article (slightly modified) first appeared in The Mercury newspaper on 4 September 2015.

Authors: Drs Andrea Juan, post-doctoral fellow; Tia Linda Zuze, senior research specialist; Vijay Reddy, executive director; Ms Sylvia Hannan, junior researcher, Education and Skills Development research programme, HSRC

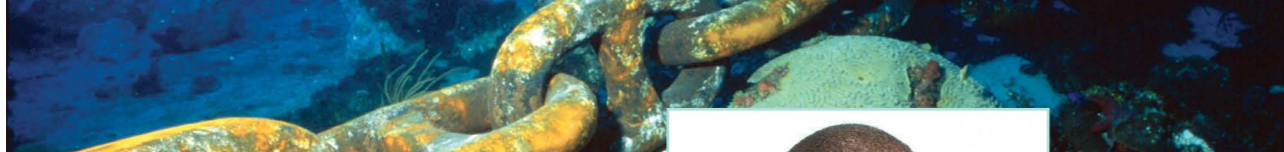
Restoring the health and prosperity of the Indian Ocean

The dead coral reefs at Pointe aux Piments as photographed from a glid-bottom boat.

In many areas ocean ecosystems are under stress. How can the ecological integrity of these areas be preserved and restored in light of a growing interest in the economic potential of sea-bed exploration, intensive fishing operations and increasing shipping activities? These are the issues explored recently at 'the first conference of the Indian Ocean Rim Association (IORA) on the blue economy,' attended by high-level officials and ministers of countries bordering the Indian Ocean. *Ina van der Linde* reports.

Step into the stretch of ocean at one of the many luxury beach resorts at Pointe aux Piments, north of Port Louis in Mauritius, the sea is dead. Here one can view the direct effect of coral bleaching of the fringing reefs: corals have turned white and died after expelling the algae that helped support them. Fringing reefs are reefs that grow directly from a shore.

On the same stretch of beach the first Indian Ocean Rim Association Ministerial Conference on the Blue Economy took place to discuss how to preserve and restore the ocean ecosystems and to promote collaboration and



cooperation between countries bordering the Indian Ocean. The blue economy is a new comprehensive concept, incorporating the 'ocean economy', environment and sustainability to provide basic human. 'Balanced economic development' was the preferred term used by senior government officials and ministers from all countries bordering the Indian Ocean – all except Somalia and Pakistan – who participated in the conference that took place from 2-3 September.

The green economy – a core aspect of the UN Conference on Sustainable Development 2012 or Rio+20 – focuses on growth in income and employment driven by public and private investments that reduce carbon emissions and pollution, boost energy and resource efficiency and prevent the loss of biodiversity and ecosystem services. The blue economy takes this concept a step further: it advocates that a green economy will not be possible unless the seas and oceans are a key part of these urgently needed transformations.

From fish farming to ballast water

The September conference had much to talk about. Consider the issues: fish farming (aquaculture) to contribute to food security; the potential of renewable ocean energy; the impact of enormous container vessels on port congestion; ballast water, which is essential for safe and efficient modern shipping operations but which poses serious economic, health and environmental risks due to the multitude of marine species carried in ships' ballast water; cooperation in security issues such as combating increasing piracy; gathering of big data to better understand the ocean economy; and sharing technology and knowledge to cooperate and to grow their economies.

From the outset IORA was not a body to lay down rules for Indian Ocean Rim countries, says secretary-general K V Bhagirath, Ambassador of the Republic of India. In the IORA Charter it expresses the principle 'to seek to build and expand understanding and mutually beneficial cooperation through a consensus-based, evolutionary and non-intrusive approach'. The Charter states that there are no laws and binding contracts. 'Compliance with consensus-based decisions remains without any rigid institutional structure to specify any rules and regulations.'

Without the option of enforcement of 'rules', it raises the question of conflicting interests of sustainability, versus economic interests, growth in income and employment.

Agreements on sea-bed mining

Dr Lyndon Llewellyn, research manager of the Australian Institute of Marine Science, is pleased with what the conference has achieved. A long list of agreements was reached that reinforced the importance of the sustainable development approach. This includes doing sustainability assessments that evaluate the environment, social capital growth in addition to economic return – a triple bottom line assessment – and clear mechanisms to ensure benefits flow to communities.

The issue of sea-bed mining for minerals, oil and gas and the threat of damage to the environment were of special concern. Participants endorsed the establishment of strong legal and governance regimes prior to engaging



Commander Tsietsi Mokhele

in seabed mineral or hydrocarbon [oil, gas] development activities.

South Africa has much to offer in terms of knowledge and expertise in the blue economy, says Commander Tsietsi Mokhele, CEO of the

South African Maritime Safety Authority. It has long years of experience in seabed mining (De Beers) and in oil and gas exploration through PetroSA, which operates the world's first gas-to-liquid (GTL) refinery at Mossel Bay, using some of the most environmentally friendly processes ever developed. Other expertise is in deep-sea fishing (think I&J) and in the repair and maintenance of ships.

Mokhele is upbeat about progress made in South Africa's plans for the blue economy, as set out in Operation Phakisa. Phakisa is a Sesotho word for 'hurry up'. A series of work sessions or laboratories, with representatives from the government, business, labour, civil society and academia, are working on projects that aim to unlock the economic potential of South Africa's oceans. According to the Presidency, the country's oceans have the potential to contribute up to R177 billion to gross domestic product by 2033.

The first implementation of Operation Phakisa is led by the Department of Environmental Affairs, and focuses on four priority sectors: marine transport and manufacturing, offshore oil and gas exploration, aquaculture, and marine protection services and governance.

Reinforcing these priorities, the IORA conference culminated in a declaration of country leaders, committing themselves to, among others, the sustainable use of marine resources; cooperation in data collection on the ocean environment; sustainable development of the ocean economy, cooperation and networking; funding of different projects; the empowerment of women and micro, small and medium enterprises; and cooperation and a favourable business environment.

And as for restoring the previously rich coral reef heritage of the northern shores of Mauritius, Dr Daniel Marie, principal research scientist at the Mauritius Oceanography Institute, holds out hope. There are concerted efforts to regenerate coral reefs in the Trou-aux-Biches lagoon on the northwest coast of Mauritius, and although the process is in its early stages, there are encouraging signs that these exquisite undersea gardens can be regenerated.

Encouraging too are efforts in creating a sustainable blue economy. It all comes down to 'joining hands' as expressed by the wise octogenarian and Mauritian prime minister, Sir Anerood Jugnauth: 'The ocean economy, due to its broad outreach, cannot be sustainably developed in isolation... Let us share our knowledge, expertise and resources in the fields of seaport and shipping, offshore hydrocarbon and minerals, fisheries and aquaculture, and marine renewable energies.' ■

Author: Ina van der Linde, science journalist and editor, Human Sciences Research Council.

The kingdom by the sea: careful steps in deep-sea exploration



Countries in the Indian Ocean are preparing for seabed mining exploration that could unlock this latent economic power and associated social benefits, but there are concerns about the destruction of habitats and ocean life. Dr Lyndon Llewellyn presented information on the state of seabed exploration in the first conference of the Indian Ocean Rim Association (IORA), held on 2-3 September in Mauritius.

The Indian Ocean blue economic growth will not happen by accident and will require concerted effort by governments, industry and the broader community planning and making decisions using the best possible scientific evidence.

Ocean seabeds already provide over 30% of the global supply of hydrocarbons with exploration expanding as technological advances bring deep untapped reserves within reach of industry. But while marine oil and gas production is a mature industry, these same technological advances are also allowing exploration for deep-sea minerals and exploration.

The International Seabed Authority, an intergovernmental body based in Kingston, Jamaica, that was established to organise, regulate and control all mineral-related activities in the international seabed area beyond the limits of national jurisdiction, has now awarded exploitation leases in the Indian Ocean.

Demand for these new mineral resources is being driven by depleting accessible terrestrial resources and demand for rarer minerals for high-technology manufacturing. While there are no extraction projects currently operating in deep-sea mining, the starting date for commercial operations is getting closer.

Risks, regulations and opportunities

The current lack of information about seabed ecosystems, uncertainty about the risks associated with mining and internationally approved standards all provide hurdles to future development of deep-sea and nearshore minerals.

This is new territory for governments and industries alike who are now having to focus on the risks and benefits of building capability and driving investment in mining but also

offshore oil and gas exploitation for those countries new to this industry, weighing the costs and benefits of the forecast economic development, environmental management needs, social return, and required legal certainty and governance.

In an earlier workshop of member state representatives and technical experts convened to examine the opportunity presented by seabed mining in Indian Ocean and synergies with oil and gas discovery and extraction. The workshop participants identified four key principles that should be adopted in any regional effort to develop this sector: sustainability, strong legal and governance frameworks, regional cooperation and community engagement. This was endorsed by the IORA conference.

Sustainability: there are ongoing challenges to healthy oceans and their importance to environmental health, economy and livelihoods of the countries of the Indian Ocean Rim and reinforced the importance of the sustainable development approach as agreed in the IORA Economic Declaration. Sustainability assessments should include valuation of the environment and social capital growth in addition to economic return – a triple bottom line assessment – and clear mechanisms to ensure benefits flow to communities.

Strong legal and governance regimes prior to engaging in seabed mineral or hydrocarbon development activities. In noting the importance of public-private partnerships it was further agreed that a robust and transparent regulatory framework provides improved certainty for both government and industry, enabling private sector participation and facilitating investment.

Regional cooperation was recognised as important in the creation of long-term and large scale information to