Attracting and retaining appropriately qualified staff at seafarer training institutions: the case of South Africa

Douglas Dyers
ATTRACTING AND RETAINING APPROPRIATELY QUALIFIED STAFF AT SEAFARER TRAINING INSTITUTIONS:

The case of South Africa

By

DOUGLAS DYERS
South Africa

A dissertation submitted to the World Maritime University in partial fulfilment of the requirement for the award of the degree of

MASTER OF SCIENCE
In
MARITIME AFFAIRS

(MARITIME EDUCATION & TRAINING)

2020

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Declaration

I certify that all the material in this dissertation that is not my own work has been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this dissertation reflect my own personal views, and are not necessarily endorsed by the University.

(Signature): ..................................................

(Date):       24 September 2020

Supervised by: Associate Professor: Momoko Kitada

Supervisor’s affiliation:

Maritime Education & Training
World Maritime University

Co-supervised by: Professor: Itumeleng Mosala

Co-supervisor’s affiliation:

Research Chair
JLD Institute
University of Kwazulu Natal
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Thank you.

Douglas Dyers
Cape Town, 24 September 2020
Abstract

Title of Dissertation: Attracting and retaining appropriately qualified staff at seafarer training institutions: The case of South Africa

Degree: Master of Science

The dissertation emphasises and provide a clear view of the continuous challenge experienced by METI’s in South Africa with regards to academic and instructional recruitment and retention. The main aim and objective of the study identifies human resource practices currently used in South African MET institutions and recognise pitfalls such as the long standing high staff turnover, succession planning and retention as well as marketing and recruitment strategies. A triangulation method was used for the data collection, which included the questionnaires, interviews and secondary data which provided a detailed description of the qualitative and quantitative research methods that were executed. The results indicate that remuneration, job interest, job satisfaction, ability to teach and country specific traditions, laws and policy either prohibit or allow that a career as an MET academic or instructor is a career of choice. High staff turnover creates the notion that available positions being advertised and re-advertised which creates a time gap between the recruitment process and the appointment and result to seasonal and short contractual appointments. Lastly, marketing together with appropriate career development opportunities and tools for young prospective seafarers can create a positive influence towards teaching and learning. As the demand for seafarers globally are indicated as a deficit annually. South Africa strategically situated in the most southern point of Africa can positively contribute to the demand. This can only be achieved if more attention be given to the development of the METI’s and more importantly a sustainably amount of highly skilled and appropriately qualified instruction and academic staff.

Keywords: Maritime Education & Training, Seafarer, Academics, Instructors, Seafarer Training Institutions, Human Resources
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<thead>
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<th>Full Form</th>
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</thead>
<tbody>
<tr>
<td>MET</td>
<td>Maritime Education &amp; Training</td>
</tr>
<tr>
<td>METI</td>
<td>Maritime Education &amp; Training Institutions</td>
</tr>
<tr>
<td>STCW</td>
<td>Standards of Training, Certification and Watchkeeping for Seafarers</td>
</tr>
<tr>
<td>IMO</td>
<td>International Maritime Organization</td>
</tr>
<tr>
<td>SAMSA</td>
<td>South African Maritime Safety Authority</td>
</tr>
<tr>
<td>SAIMI</td>
<td>South African International Maritime Institute</td>
</tr>
<tr>
<td>SAMTRA</td>
<td>South African Maritime Training Academy</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade &amp; Development</td>
</tr>
<tr>
<td>SAQA</td>
<td>South African Qualifications Authority</td>
</tr>
<tr>
<td>NQF</td>
<td>National Qualifications Framework</td>
</tr>
<tr>
<td>ETQA</td>
<td>Educational Training &amp; Quality Assurance</td>
</tr>
<tr>
<td>TVET</td>
<td>Technical &amp; Vocational Education &amp; Training</td>
</tr>
<tr>
<td>CoC</td>
<td>Certificate of Competence</td>
</tr>
<tr>
<td>FET</td>
<td>Further Education &amp; Training</td>
</tr>
<tr>
<td>ICT</td>
<td>Information &amp; Communications Technology</td>
</tr>
</tbody>
</table>
Chapter 1: Introduction

1.1 Background of the study

The STCW78 convention as amended in 2010 makes specific reference to competency based and more towards skills training outcomes focused on mandatory requirements for qualifications of seafarers (IMO, 2011). In South Africa seafarer training is placed both at vocational as well as higher education to fulfill the requirements as stipulated in the STCW2010 convention. However, the specific qualification requirements are not only important for seafarers but also more so for the instructional and academic staff. According to Manuel (2017) to make the maritime profession attractive and competitive with the likes of other professions the importance of structured academic qualifications to contribute to a dominant social trend is pertinent. Seafarer qualifications are largely aligned to psychomotor outcomes however Kutsenko (2018) describes seafarer training as a way to acquire applicable knowledge, skills and competencies. Therefore the increase of modern technology has a tremendous impact on modern seafarers and the future of seafarer training which place the emphasis on attracting suitable instructors and academics to maritime education and training institutions (METI’s).

The forth industrial revolution also known as industry 4.0 has been on the forefront of the world economy in recent years introducing new emerging technologies and digitization, ranging from among others, Blockchain Technology, Artificial intelligence and the Internet of things. The use of these technologies allows industries to apply digitization to former manual day to day processes into a global phenomenon. As described by Mori, (2014), it is utmost important that MET institutions should meet the technology requirements used by the maritime industry to ensure for quality education and training. This rapidly changing environment does not only affect the greater economy with regards to trade and industry but also, educational practices and curricula. The impact of industry 4.0 has tremendous implications towards education as it is the main source of preparing the current and future workforce towards sustainable economies worldwide.
According to Santos (2019) a country such as South Africa already represents the epicenter for the implementation of emerging technologies and therefore allows the rest of the African continent can exploit from its best practice. Furthermore, the focus on implementation of best practices can only materialize once the policy formation both regionally and nationally has been implemented and adapted to transform current curricula at educational institutions to comply with international standards. These include the transformation of the current qualifications framework at institutions to allow students to progress smoothly and effectively from one qualification to the next and between institutions. A capacity building initiative implemented in 2014 through the government project Operation Pakhisa\(^1\) by recruiting suitable candidates from the South African maritime industry for further postgraduate studies at the World Maritime University.

The maritime industry has been exposed tremendously to rapid changes towards digitalization and emerging new technologies in the last decade. These includes among others newly improved business models towards innovation and technology, ship structural changes and most importantly more and more smart digital elements onboard international vessels. Foncesca, et al (2019) claims that despite the vast increase of automation onboard modern vessels, the growing demand of seafarers will not decrease in the next decade at least. This will provide Maritime Education & Training (MET) Institutions with great opportunities to investigate their curricula and adapt for future seafarers. However, one might argue that most governmental educational institutions significantly lack infrastructure, funding, specialized skills and knowledge in order to form a balanced equilibrium to keep up with the demand.

### 1.2 Problem Statement

Seafarer training has been regulated and guided via international standardization and practices under the auspices of the International Maritime Organization (IMO).

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\(^1\) Operation Phakisa; “is an innovative and pioneering approach to translate detailed plans into concrete results through dedicated delivery and collaboration in the oceans Economy”
The Standards of Training and Certification and Watchkeeping for Seafarers (STCW) convention implemented in 1978 with reference to promote safety of life and property at sea as well as the protection of the marine environment also later amended in 1995 and 2010 has been the mouthpiece to international standards in at least 164 countries worldwide according to the (IMO, 2011).

The convention refers in Regulation A1/6; training and assessment to the “methods and the media of the delivery and procedures of course material”, furthermore reference is made to achieve the standard of competence. However, the code does not directly point out specific contemporary ways in educational practices to be used in order to deliver curricula through the means of educational technology other than simulators. Neither does it specify direct qualification needs for academic and instructional staff, but rather refers to appropriately qualified. In South Africa the Maritime Administration, South African Maritime Safety Authority (SAMSA) are the custodian as to what is known as the SAMSA code of qualifications which ensure complete compliance with the STCW Convention and code, as directly refer to the exact wording as noted in the STCW, SAMSA (2019).

The onus therefore lies on the academic or private institution to ensure that academic or instructional staff are appropriately qualified in accordance of the IMO/STCW international standards. The private service providers by law and unit standards must foremost comply with the SAMSA code of qualifications, which in most cases expect instructional staff to hold an appropriate certificate of competence rather than a post graduate qualification. Educational institutions offering artisan and skills orientated qualifications, requires a certificate of competence as well as only a minimum academic undergraduate qualification. Higher Educational institutions requires a minimum of a postgraduate master’s degree together with the certificate of competence with a strong focus on research expertise and development.

Ngcobo (2018), found that South Africa should invest in building more training resources with more MET technology infrastructure to attract the enough human resources to produce world class seafarers. However, within the South African workforce context international market base remuneration becomes key and as the main attraction for highly skilled former seafarers.
Private institutions in most instances manages to attract most of these seafarers due to higher course pricing as well as sovereign remuneration packages which in some cases equal onboard salaries. Further and Higher Educational institutions by law has to offer remuneration in line with institutional policies and therefore finds that it’s much harder to attract these former seafarers. In the midst of building and growing the national ship registry in the years to come, shipowners are entitled to demand a highly skilled workforce, especially technologically advanced seafarers from our MET institutions.

The year 2020 has seen indeed a paradigm shift in delivering of education and training around the world as institutions has become victim to an unknown phenomenon called the Covid-19 pandemic. Restructuring of academic calendars and the shift to mobility education and the use of Information and Communications Technology (ICT) to capacity has been on the forefront of the first term of the academic year. MET institutions in South Africa has a major role to play in the transitioning from traditional content delivery to e-learning.

As emerging technology and innovation, introduction of high technological systems onboard ships and in ports rapidly changes, so are the paradigms of education. In order to keep abreast with these changes, a government such as South Africa must completely invest in a paradigm shift focusing on retaining good quality academics and instructors in order to produce high quality contemporary seafarers to compete with the global market.

1.3 Objectives and aims

The aim of this study is to identify human resource management practices in the MET institutions in South Africa, with regards to marketing and possible staff recruiting strategies. The research aims to investigate possible pitfalls such as high staff turnover and succession planning. By means of comparing with best practice examples from countries that has improve strategy towards funding models or recruitment.
1.4 Research questions

The main research question which this study poses is: Do South African Maritime Educational Institutions manage to attract highly qualified and dedicated instructors?

- What is the target labour market for recruitment from both private and public MET institutions?
- What is the current turnover ratio of academic and instructional staff at MET institutions in South Africa?
- How can METI’s in South Africa make an instructional or academic career attractive to young motivated and highly qualified and skilled individuals?
- What can METI’s in South Africa learn from best practice from other institutions on a similar or even higher level?

1.5 Methodology

The aim of the study is to gain knowledge with regards to recruitment, appointment and retention of suitable qualified staff at the identified seafarer institutions in South Africa. The literature identifies theories that stem from the historic contexts of colonial, post-colonial and followed apartheid education systems, all which accounted for political, economic, historical and the social impact based on a Eurocentric rule (Bolt, et al, 2009). Since the end of the oppressive apartheid system that continued ideologies based on the former colonialist system in 1994, epistemologies and knowledge as described by Heleta (2016) has not changed and remained considerably rooted to the previous oppressed systems.

However, in 2015 a movement to decolonise higher education was launched to dismantle the Eurocentric and Apartheid beliefs and ideologies in higher education. This provide for an open platform where academia and government could work together to rethink, reframe and reconstruct higher education to place South Africa in the centre of teaching and learning, research and development. Chambers (2019) described South Africa to be the epicentre of technology and innovation and a front runner of Industry 4.0 developments in the whole of Africa.
This allows for government, academia and especially seafarer training institutions to create opportunities to address the epistemologies to empower its diverse communities, especially those previously disadvantaged by these systems. The study employed a mixed of qualitative and quantitative methods to meet the objectives successfully. The use of the following triangulation method for the collection of the primary data will be used to substitute the research questions and outcomes.

1.6 Data Collection: Triangulation method

According to Sherif (2019) the use of a triangulation method (Figure 1) in research is defined as a mix method of data collection. This blended method allows the researcher to validate the different claims aimed the topic and research questions. Using this technique give the researcher the opportunity to evaluate the same data from different groups in order to test the reliability of the data.

Figure 1: Data collection method: Triangulation  (Source: Author)
1.7 Triangulation Data Collection

- The primary data collection through the triangulation method will include two questionnaire surveys for the academics/instructors or teachers and for the seafarer training provider.
- Unstructured interviews were conducted with members in the Maritime Administration.
- Unstructured interviews were conducted with WMU alumni from south Africa who successfully graduated between 2014 and 2018. The number of candidates and training providers has been identified in Table 1:

**Figure 2: Identified Participation Seafarer Training Institutions (Source: Author)**

<table>
<thead>
<tr>
<th>Organization</th>
<th>Number of candidates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maritime Administration (SAMSA)</td>
<td>3 Members</td>
</tr>
<tr>
<td>Cape Peninsula University of Technology</td>
<td>5 Lecturers</td>
</tr>
<tr>
<td>Durban University of Technology</td>
<td>5 Lecturers</td>
</tr>
<tr>
<td>Nelson Mandela University</td>
<td>3 Lecturers</td>
</tr>
<tr>
<td>Sea Safety Training</td>
<td>2 Training staff + CEO</td>
</tr>
<tr>
<td>Project Maritime Training</td>
<td>2 Training staff + CEO</td>
</tr>
<tr>
<td>STC – Cape Town</td>
<td>2 Training staff</td>
</tr>
<tr>
<td>SAMTRA</td>
<td>2 Training staff</td>
</tr>
<tr>
<td>WMU: Alumni</td>
<td>5 Members</td>
</tr>
</tbody>
</table>

Out of the 30 participants identified 25 took part in the study with a further 5 candidates identified by the researcher as experts. All candidates were subjects to the ethical clearance as stipulated by the university’s research ethics committee.
1.8 Significance of this research

The purpose of the study is to undertake that MET Institutions suffer tremendously from attracting and retaining well skilled and suitable qualified young instructional and academic staff. This has been a phenomenon to METI’s around the world and South Africa for years. This can be largely due to among others, key employment requirements such as the possession of either an Operations or Management certificate of competency in addition to the required academic qualifications.

The primary requirement at METI’s in South Africa includes a post graduate qualification together with a Management CoC for higher educational institutions, whereas private and TVET institutions require much lower qualifications. Another challenge is that prospective candidates, former seafarers interested in teaching positions however are currently in all probability remunerated much higher than what’s on offer at the METI’s. On the other hand, it can also be assumed the private institutions in many cases can attract these seafarers as they might have the ability to equal these salaries due to them perhaps have higher costs for courses and does not require the high level of academic qualifications. Hence public METI’s have been in agony to equal these salaries due to policy, regulation and perhaps the required higher post graduate qualifications needed. Governmental movements such as the introduction of the Operation Phakisa in 2014 and the establishment of an International Maritime Institute through international collaboration, funding and possible solutions should address this shortage and problem. This study will address the following challenges in the South African context.

- Identifying the gaps in the recruitment and selection strategies for current METI’s for academic and instructional staff to ensure top quality teaching and learning.
- Identify possible strategies and ways to make academia and instruction a career of choice not only for retired seafarers but for young highly skilled and energetic individuals with a flair for education and training.
- Identify and introduce possible best practice scenarios and strategic models from international METI’s.
- Identify possible means to ensure strategies for succession planning of older staff to retain the explicit knowledge and learn from the tacit knowledge.
Summary

This chapter provided a clear indication on the background of the research area, the importance and relevance of the study. It is quite clear that a systematic mitigation of a homogeneous human capital approach towards the successful recruitment and retention of suitable qualified individuals for academic and instructional staff at MET institutions is needed. The successful future of the current and new and prospective institutions can benefit by ensuring that the quality of Maritime Education and Training within South Africa is sustainable. The following Chapter will give a background and relatable literature with regards to the attraction and the retention of suitable qualified members of the Maritime Education industry within South Africa.
Chapter 2: Literature Review

2.1 Introduction

The role of education and training has been on the front position of the central activities in societies as well as a matter of national importance to many governments and jurisdictions around the world. In September 2015 the United Nations (UN) introduced the 17 sustainable development goals at their General Assembly. An interconnected blueprint that focuses on addressing global challenges of international concern, with a principle to leave no one behind to be achieved by 2030 (Spröte, 2019). According to the 2020 United Nation Social council report, Secretary General, (2020) reported that a large number of inequalities with regards to educational opportunities were still a big concern in many regions around the world but among others in particularly sub-Saharan Africa.

Due to this disparity a large number of students in all levels of education are not fully prepared for the high and complex global economies. South Africa with a rich history of inequalities in education and furthermore for decades had no national system of education and training. In a study conducted by Bolt, et al, (2009) on the colonial education systems in Africa back dated as far as the early 1900’s the effect of the colonial era was based on limited education and was based on varies variables which include among others inequality, oppression and no involvement in governmental structures. Shizha (2011) describes that colonial education based on the middle-class European education systems had a paramount focus to dehumanise Africans through both their inner and outer colonised ways and means. This disastrous colonial bondage to the South African society also contributed to the birth of the post-colonial era which allowed for apartheid in the late 1940’s, characterised by the colonial system which had a dominant focus on the displacement of the indigenous people of colour. Apartheid fell in the early 1990’s when South Africa became a democracy in 1994 which allowed for restructuring and decolonised educational curriculums.

A year later after the country has become a democratic Republic Corey & Soewarno (1995), reported that a white paper on Education & Training was passed by Parliament as a supplement to the Education & Training Act of 1994.
The paper stipulated that more reform is needed with regards to the reconstruction and development of Education and Training to cultivate and liberate all talents within the new democratic South African Society.

Maritime Education and Training (MET) is considered as part of secondary, further, higher and ancillary education systems in South Africa. In 2019 at the at the World Congress, the secretary general on the International Maritime Organization (IMO), placed high emphases on Maritime Education & Training in his keynote address on the stance of the organisation and mandate to train and inspire the next generation to be well trained to enter a maritime career (Chambers, 2019).

Today the role of seafarers has been of greater importance than ever before and will continue to thrive in the years to come (Secretary General, 2020). The lack of quality Education & training includes, equality, access to basic, secondary & tertiary education, but it does not make detailed reference to also a very important aspect which is qualified and skilled educational workforce. According Aksentijević & Ježić, (2019) for the seafarer the certificate of competence (CoC) and the technical training does not guarantee actual competence, varies aspects including on board training, social sciences and human behaviour contribute largely to the competency of seafarers instead.

### 2.2 A historical & contemporary view of MET in South Africa

South Africa has a double geopolitical identity not yet widely known that it is a maritime nation, with a coastline of 3924 kilometers and a “sea-land” zone that is more than three times bigger than its land size (Commission & Education, 2017). The country is situated in the most southern tip of the Southern hemisphere where the Atlantic and the Indian oceans meet.
With a population of more the 58 million people and a GDP 58%. A third of the population lives in coastal areas. These coastal areas are the host of eight commercial ports which are testimony to 98% of the country’s trade that is moved by ships. Kituyi, (2019) made reference to the 2019 United Nations Conference on Trade and Development (UNCTAD) report with the following statistics, South Africa generates 3.5% of the world seaborne trade in volume, positioned in one of the major shipping routes “south to south” which is also become more and more attractive again today.
In 2014 the former South African president shifted one of the most important economic reforms to the Maritime Economy as the use of the ocean and vast coastline has been hugely underutilised. Project Phakisa that means “hurry up” in Zulu, was launched with the focus on the blue economy. The author would like to argue that the oceans economy should also be referred to as a red economy as it was an established economy only with more investment opportunities after the launch of the project. Operation Phakisa was launched with the main focus on unlocking the countries potential as key priorities in the following areas: Marine Transport & Manufacturing, Tourism, Offshore Oil & Gas, Construction, Renewable Energy, Fisheries & Aquaculture, Communications, Desalination and Marine Protection Services (Kituyi, 2019).

South Africa has a vast number of maritime institutions that offers maritime & marine related education & training. Training are also offered at secondary level which offered subject choices in Nautical & Marine Science as well as Maritime Economics. These institutions are either autonomous or would be departmentalised to various public and private vocation and higher educational institutions.
The focus of this research are limited only to seafarer training institutions or service providers. According to a report done by NDoT, (2011) the national department of transport the following institutions are responsible for seafarer training most of these courses has to be accredited by the South African Maritime Safety Authority where others are linked to the oil & gas industry and require other accreditations such as OPITO:

**Table 1: Selected Maritime Training Institutions for Seafarers (Source: Author)**

<table>
<thead>
<tr>
<th>Institution</th>
<th>Public/Private</th>
<th>Main Course Offerings</th>
<th>Accreditation Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cape Peninsula University of Technology</td>
<td>Public</td>
<td>Deck (Ops &amp; Man) Engine (Ops &amp; Man) Ancillary short courses</td>
<td>Higher Education SAMSA</td>
</tr>
<tr>
<td>Durban University of Technology</td>
<td>Public</td>
<td>Deck (Ops &amp; Man) Engine (Ops &amp; Man) Ancillary short courses</td>
<td>Higher Education SAMSA</td>
</tr>
<tr>
<td>Nelson Mandela University</td>
<td>Public</td>
<td>Engine (Ops &amp; Man) Ancillary short courses</td>
<td>Higher Education SAMSA</td>
</tr>
<tr>
<td>South African International Maritime Institute</td>
<td>Public</td>
<td>Maritime &amp; Marine Research &amp; Projects</td>
<td>Higher Education</td>
</tr>
<tr>
<td>Project Maritime Training</td>
<td>Private</td>
<td>Deck (Ops) Ancillary short courses Oil &amp; Gas STCWF</td>
<td>SAMSA OPITO</td>
</tr>
<tr>
<td>Sea Safety Training</td>
<td>Private</td>
<td>Deck (Ops &amp; Ratings) Engine (Ops &amp; Ratings) Ancillary short courses Oil &amp; Gas STCWF</td>
<td>SAMSA OPITO</td>
</tr>
<tr>
<td>South African Maritime Training Academy</td>
<td>Private</td>
<td>Ancillary short courses Simulator Training</td>
<td>SAMSA</td>
</tr>
</tbody>
</table>
These institutions form the backbone of seafarer training in the country. All private institutions are dependent on direct funding through training whereas the public training institutes depend on government funding models. According to Manuel (2017), the STCW as amended in 2010 was designed with a strong focus on vocational training, however within the last decade a demand from prospective students as well as METI’s saw a trend in the development of formal undergraduate and post graduate degrees. MET in South Africa stems from training academies in the 1980’s that was incorporated into higher educational institutions in the early 1990’s, however seafarer training was always offered on a Non-Diploma or undergraduate basis. In 2016 the Department of Higher Education and Training (DHET) in South Africa reformed the higher education sector by introducing single unified qualifications, which meant that MET incorporated institutions went into recirculation (SATN, 2016). As indicated in (Table 2) above, South Africa has 3 Higher Educational Institutions offering seafarer training. One is linked to traditional university training and another institution opted for the tradition degree route, whereas another opted for the new comprehensive diploma route.

Private and vocational institutions were not part of the recirculation process. Snyders, (2014) explained that the reason for recirculating towards traditional degree programs for some institutions is to empower graduates towards postgraduate and research options as well as to make seafarers more credit secure for financial institutions. Which will also lead to graduates opting for careers in instruction and academia when transitioning from seagoing employment to research and teaching.
2.3 Talent Management

Seafarer training institutions within South Africa are key to promote lifelong learning and professional development through various modes of teaching and learning due to technology and innovation. Kagola (2017) explained that to have a strong human capital, and even an stronger education and training sector are fundamental to innovate and to ensure that seafarers are exposed to various educational possibilities and opportunities while at sea. This will therefore make it much easier for METI-‘s to recruit suitable qualified prospective instructional and academic staff. A number of scholars such as Taleo (2011), has defined talent management in various ways with most referring to the strategies for the recruitment attraction and retention and the development of the retained workforce (Schieman, 2014). A book published by the International Labour Organization (ILO) in 2006 explains theories that dates two centuries back, that the governing economic theory at the time was mercantilism, a theory developed when the dominant trade was gold and silver, exports were encouraged and imports discouraged (Fong, 2012). Furthermore, a strong discouragement was enforced on emigration in order to keep wages low and trade competitive. Such theories form a drastic paradigm shift in which the economic growth of countries has been placed on the importance of human capital as well as knowledge based economies instead. With special focus on most circumstances where countries use the latter to increase their stock and brainpower through immigration.

Not all countries have placed an emphasis on the recruitment of non-nationals. Emanating from knowledge economies, Talent Management in the early 90’s was seen as a branch of human resource management and staff development as explained by Iles (2010) when making reference to Michaels, et al (2001). Michaels, et al (2001), who explained that the ‘war on talent” rooted from two main assumptions that where the human talent was seen as a competitive advantage and renewable source that cannot easily be copied or taken from competitors. Tucker, (2005) explained that the attraction and the retention of people has become increasingly difficult especially due to their specific demographics and psychological trends.
Van Rooyen, (2011), described that the focus of business, agility and alignment of talent management should be strengthened by the general principles of the following:

- To support the organizations strategy a different multi-level talent pool should be introduced.
- Existing talent to be recognized and acknowledge.
- Ensure that the talent is optimized and the talent is suitably utilized.

Nonhlanhla, (2019) stated that the individual employee is placed on the centre stage and is given opportunities to developed self-awareness, practical learning and building individual strength, coaching and continuous support. All levels of the organisation form the talent pool.

2.4 The concept of Attraction & Retention

According to Nonhlanhla (2019), most academic scholars for talent management research has describe the way that organisations deal with management and human resource (HR) actions including, strategy, system guidelines and the management of attrition, leads to the reasons why people stay or leave organisations. Bussin et al. (2003) found in a study done on incentives and loyalty towards management in organisations that financial and non-financial facets as well as loyalty towards management contribute to the retention factor in organisations that leads to reliability. Furthermore, the quality in the performance of the employee has also contributed largely to talent management. Inclusivity, internal personal growth, pride and introductions to new and challenging projects may contribute on a social and psychological level as contributing factor to talent management.

The 2020 Global talent report made reference to the concept of organisations redefining and redirecting various variables towards for a healthier workforce as agents of change. A phenomenon which promote redirection and redesigning the responsibilities of the organisation to make it fit for tomorrow irrespective of the industry it represents (Bravery, 2020).
Focusing on reskilling the human mind and skills set within, in various fields of artificial intelligence, technology and innovation are a few of the focus points to allow the workforce sufficient access, opportunity as well as encouragement to drive change within an organisation. The report also indicated that a clear shift as indicated in the graph below positioned human resource management to be from skills infusion to skills development in order to prepare future jobs in existing and new industries taking shape.

![Figure 5: Reskilling of human resources (Source: Bravery (2020))](image)

According to Festing (2013) all retention practices differ from organisations, depending on the size, larger organisations invest heavily into various talent management and retention strategies, these include among others:

1. identifying young talent,
2. identifying the need for professional development of staff as well as
3. career and succession planning.

As indicated by Gallardo-Gallardo (2018), one of the major contributors is to go back to positive management communication and how managers and supervisors use this tool with employees. This traditional way can allow managers somewhat insight into possible career movement plans of the workforce that could lead to them establishing the gap through strategy into retaining the individual for longer. Contributions like these from management will allow for higher in individual work performance, motivation due to the proof of the organisations commitment. As a result, the latter produces better business outcomes as to the disengaged non motivated employees (Nonhlanhla, 2019).
The general trend in global homogenisation together with globalisation and information technology in the last decade has been instrumental with the regards to the increase of organisational and individual competitiveness (Shadabi, 2011). Due to this, the increase of knowledge transfer and knowledge management has become the vanguard with the regards to the retention of employees. A very important aspect thereof is to retain the individual through the strategies discussed earlier with the emphasis on retaining explicit and tacit knowledge.

Education and training within its various forms has proven to be the definitive change agent as refer to by Stephens, et al, (2008) who found that the following five critical issues are primary to the act of change including: “regional specific sustainability challenges, financial structure and independence, institutional organisation, the extend to the democratic processes and communication and interaction with society” (Stephens, et al, 2008) furthermore added that given that these challenges towards the change in higher education and training are context specific and it also depends on jurisdictional laws and policies around the world.

### 2.5 MET recruitment in South Africa

According to Anwari (2018) recruitment can be described as a process of seeking or attracting the relevant and most suitable qualified and skilled human capital to compliment a job requirement. Phago, (2014) describes the recruitment process as critical, seeking and attracting the right suitable candidates for the right positions. Recruitment for seafarers leads to various processes, procedures, documentation and various international validations due to its international nature. However, MET recruitment for instructional and academic recruitment can be seen as daunting as seafarer recruitment in the sense of suitable qualified and to attract suitable qualified former seafarers to a career where the incentives might be more but remuneration less. Recruitment in South Africa are linked to various macro and micro policies, law and regulations including the Basic Employment Equity Act of 2003.
The Act South African Department of Labour, (1994) outlines the basic conditions of employment with in South Africa for all industries to adhere to. In 2003 the government approved the Broad based Black Economic Empowerment Act with a focus on the viability to empower all black people including, women, youth, people with disabilities, people that lives in rural areas, by means of a selection of diverse but also integrated social-economic strategies which includes various aspects that disadvantaged segments of society (South African Government, 2004). The implementation of these Acts require companies including recruitment agencies and any other form of business to strictly adhere to the outlines to ensure full inclusivity. According to Langat and Ombito, (2020) in order to improve the management of talent organisations should ensure that they have recruited individuals with better skills, cognitive abilities, knowledge as well together with the potential to perform on a high level.

2.6 Quality Management

As described by Reddy et al. (2016), quality assurance is the essential tool for any organisation to compete globally in an effective, efficient and unbiased manner by building trust with users regarding a product or service offered. Chapter four of the white paper on Education and Training in South Africa makes strong reference to the various mechanisms as amended in later years to be developed on the quality assurance platform for success in the qualifications offered in South Africa. Various accreditation bodies have been established for various sectors in the economy over the past two decades to ensure the required levels of quality has been assured locally and internationally. These include among others:

- South African Qualifications Framework (SAQA) established in 1995 as a juristic entity given a legal personality by law. Also the highest accreditation body with regards to the recognition of foreign qualifications.

- Educational Training and Quality Assurance (ETQA), established in 2008 to ensure that all training providers within South Africa comply with the national requirements.

- National Qualifications Framework (NQF), established in 1995 with the main purpose to create a single integrated national framework of South African Qualifications.
These national bodies were established for the main purpose of and advisory role to the ministry of Education and Training as well as to oversee qualification implementation, quality and the achievements of its mandate. The maritime industry in South Africa has been guided under the accredited body the South African Maritime Safety Authority (SAMSA) established in 1998 in terms of section 2 of the Merchant Shipping Act of 1951 with its mandate to promote the country’s maritime interest. Among its various services, the organisation is responsible for the accreditation of training institutions, including curriculum and academic/instructional staff accreditation of all accredited institutions. These quality standard set by means of the SAMSA code has been ensured to adhere to the quality standards of international conventions and agreements.

2.7 Impact of Digitalisation on MET

Nguyet & Tran (2018), explained that one of the greatest effects of digitisation is the emergence of the era of a “me-centred” society which is a process of individuation which results in a new form of belonging, community and development based on an individual’s values and interests. Furthermore, one can recall that during the start of the 3rd Industrial revolution of the 1960’s various scenarios cased anxiety as many sectors was under the impression that the internet and computers will replace the human factor. However, as history repeats itself Nguyet & Tran (2018) indicates that the birth of artificial intelegence (AI) and machine learning caused a similar reaction with the mindset that it will replace the human within the labor market.

As for the shipping industry the UNCTAD (2019) report indicates that the global shipping industry is at the stage to itemify efforts to embrace digitization as a means to promote efficiencies and to generate greater value accross its global supply chains. On the otherhand Cicek et al. (2019) described the increase in digitization in the shipping industry of the entire value chain an interconnection of people, objects and systems, through real data exchange. This augmented pace of democratic, socio-economic and technological disruptions which are caused by industry 4.0 and the interactions between them will definitely generate new jobs and occupations.
In a study of the International Association of Maritime Universities in 2018 on the impact of Industry 4.0 on maritime industry employment, found that a radical change in the future sets of skills will trigger a pattern for highly qualified and technological skilled workforce. For this reason, to establish the future skills sets for METI’s to reform their education and training activities to educate highly skilled seafarers. The COVID-19 pandemic brought various challenges to MET to rethink this paradigm and to adapt.

2.8 Impact of COVID-19 on MET

The impact of this world wide pandemic has cause the world result into unprecedented avenues that has affected all walks of life and has brought the global economy to a standstill. The United Nations (UN) has subsequently reported that the pandemic has had a severe affect and implications on all 17 sustainability development goals. Which started as a health crisis has escalated to become one of the worse human and economic crisis’s of modern times (UN, 2020). The UNCTAD (2020) made reference to the fact that the trajectory of the pandemic has had thus far the worse effect on foreign investment which has created the worse outcome on the most vulnerable of society.

Ozili & Arun (2020) argue that the result of social distancing has had a much more destructive affect to the world economy as to confirmed infected cases. As economies has been shut down for more than six months, jobs were lost, companies closed down and government relieve funds in development nations could not fill the financial gap. Goal 4 of the UN sustainability gaols refers to the quality of education which has been so badly affected that some nations confirmed that it will take years to recover. As the severity of the pandemic quickly lead to the closure of the entire educational systems in many countries, emergency e-learning strategies was established to salvage the academic year (Murphy, 2020). The pandemic came as a wakeup call for South Africa as stated by Mhlanga et al. (2020) as it revealed the distinct margin between the rich and the poor. This has had a tremendously negative affect with regards to infrastructure and the availability of technology, connectivity and innovation. The impact of the pandemic has become the driving force towards digital transformation within various industries especially in all levels of Education.
The table below illustrates the various multimodal platforms used by the various levels of education to mitigate the possibility of a successful completion of the 2020 academic year in South Africa. These various modes have created the opportunity for the educational sector to review traditional modes of face to face learning through various ways of blended and online learning platforms in order to be prepared for future events of this kind of magnitude.
<table>
<thead>
<tr>
<th>Tools Used</th>
<th>Description</th>
<th>Connectivity</th>
<th>Platform</th>
<th>Conditions of use</th>
<th>Target Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Television (Educational Channels)</td>
<td>Live &amp; pre-recorded lessons delivered by existing teachers &amp; educational experts</td>
<td>Offline</td>
<td>Television device</td>
<td>Free</td>
<td>Primary/ Secondary/ FET</td>
</tr>
<tr>
<td>National &amp; Community Radio</td>
<td>Live &amp; pre-recorded lessons delivered by existing teachers &amp; educational experts</td>
<td>Offline</td>
<td>Radio/ cell phone device</td>
<td>Free</td>
<td>Primary/ Secondary/ FET</td>
</tr>
<tr>
<td>Mobile Platforms and applications from mobile service providers: Vodacom, Telkom, Cell C, MTN</td>
<td>Learners &amp; students access various websites and learner management systems through pre-agreed zero rated applications or websites linked to their institution.</td>
<td>Online/ zero rated &amp; or night data</td>
<td>Desktop/Laptop cell phone or other device</td>
<td>Free</td>
<td>Primary/ Secondary/ FET/Tertiary</td>
</tr>
<tr>
<td>Google Meet, Hangouts, Blackboard, Moodle, YouTube, Zoom, WebEx, MS Teams, Skype, WhatsApp, Twitter &amp; Facebook groups</td>
<td>Live &amp; pre-recorded lessons delivered by existing teachers, academics, Instructors &amp; educational experts, via discussions, meetings and lectures</td>
<td>Online</td>
<td>Desktop/Laptop cell phone or other device</td>
<td>Freemium, based on the user’s connection</td>
<td>FET/Tertiary</td>
</tr>
<tr>
<td>Hard &amp; Softcopies delivered via courier services to rural areas with no connectivity and or no electricity supply.</td>
<td>Hardcopies of course material and PowerPoint lessons printed and or softcopies saved on flash devices.</td>
<td>Offline</td>
<td>Desktop/Laptop cell phone or other device</td>
<td>Free, possible use of computer device</td>
<td>FET/Tertiary</td>
</tr>
</tbody>
</table>

*The use of zero rated applications and educational websites through platforms negotiated by various educational institutions to assist with teaching and learning to not let any learner/student behind.*

Remote & Multi Model Teaching & Learning

Table 2: Multimodal teaching & learning tools during lockdown (Source: Author adopted from (Mhlanga et al., 2020))
Summary

The reasoning behind this specific approach of focusing on the human resources, human capital including talent management up to quality assurance literature, was to give contextual approach to the areas raised in the research questions. As it exemplifies in the various topics it has become clear that the importance of recruiting the right person for the right position with the best skills is a pertinent phenomenon in every given industry. The maritime industry at large has various unique challenges including factors such as inter-nationality recruitment, consistent training, and relevant and valid certification in the case of seafarers.

MET on the other hand has brought to light many additional challenges in respect of education, training and upskilling, some of those include remuneration, qualifications, etc. This has caused many MET institutions around the world facing various challenges in producing quality maritime seafarers as a result to either highly staff turnover or other related variables. The following Chapter will focus on data analyses by means of a triangulation research method with specific focus on organisations and experts within the South African maritime industry.
Chapter 3: Methodology & Design

3.1 Introduction

This chapter shall provide the reader with detail regarding the method used for this research project. By means of a triangulation research method the data division will be discussed based on the secondary and primary data used for the study. Furthermore, the data sources and target group will be identified and the process of the participant selection will be discussed. The data collection techniques will be elaborated on and the chapter will conclude with specific limitations that occur during this process.

3.2 Data Sources

A combination of data sources in the form of a triangulation method was used to collect and analyse qualitative as well as quantitative data for the study. This method as described by Sherif (2019), provides for a blended method of various resources which in the study the use of Maritime Administration, Academia as well as the service providers whas explored in a qualitative and qualitative approach. This mixed method approach was choosen to provide a better understanding of the problem and to ensure greater reliability to the data sourced.

3.3 Target Group

The target group was selected based on the various institutions that has an active role within MET of South Africa. Since the MET sector can be assumed as quite under developed based on the number of institutions and the candidates entering a seafaring career. Therefore, the target group consist of the Maritime Administration, Maritime Higher Educational Institutions, Maritime Further Education and Training (FET) institutions, Maritime Private Institutions and WMU: South African Alumni. The chart below indicates the number of the abovementioned institutions identified and participated. These institutions were targeted as they also represent MET in South Africa in its entirety.
3.4 South Africa’s Regional Seafarer training locations

South Africa’s seafarer training institutions are strategically located within close range of at least 7 of its 8 commercial ports with the exclusion of the Port of Mossel Bay, which gives aspirant students the opportunity to explore the port environment and maritime cities while studying. The map below gives a clear indication where these institutions are situated along the South African coastline surrounded by the Atlantic and Indian oceans. The map also indicates the biggest and busiest ports where most of these institutions are located as indicated by the cities of Cape Town and Durban.
Figure 7: Location of seafarer institutions in South Africa

3.5 Participant selection

The selection of participants was based on the number of institutions and a way of purposive or else known as “convenience” sampling, as described by (Gregory, 2010). This method of sampling was used to select members of the different institutions who could provide the author with the best information based on the different areas of the study. These participants was also selected based on their expertise, years of experience, knowledge and authority within the MET sector. This simple method allowed the author to select a total of 30 participants. The number of participants from academic and instructional positions together with WMU alumni represented more than the Maritime Administration and the training institutions. This was done only because the workforce outnumbered the institutions.

3.6 Primary Data Collection

3.6.1 Online Interviews

These interviews were initially planned to be face to face but due the COVID-19 strict lockdown provisions telephonic and online interviews were conducted to get a more in-depth perspective from the participants.
This allowed the author to create various open-ended questions in order to ensure a more comprehensive understanding of the subject matter. These interviews were conducted with the Maritime Administration, maritime experts and recently retired academics from South Africa. In addition, 3 interviews were conducted to get their views and knowledge of the topic from developing countries that has more or less experienced similar challenges, from WMU- MET alumni from South East Asia (Myanmar, Vietnam and Philippines).

3.6.2 Online Questionnaires

Questionnaires were designed using the Google Docs: Forms option. This widely used option was an easy way to collect this diverse information from the selected participants in a simple and efficient way.

The questionnaires by means of an online link were directed to the participants using an email which explained the purpose and procedure of the questionnaire and the ethical clearance.

3.6.3 Data Collection Turnout

![Data Collection Turnout Graph]

*Figure 8: Number of Targeted Participants and correspondents*

The above chart illustrates the number of targeted participants and the number of correspondents through questionnaires and online interviews. The response from the various identified institutions were favourable with a lesser amount of non-responses.
This ensured for the integrity and a sufficient sample of the data collection towards the success of the study.

4. **Methods of Data Presentation**

The data was analysed using qualitative and quantitative tools for presentation. This was done by means of data beans illustrated with charts and tables, to demonstrate the data trends and relationships in the sets to be effortlessly understood by the reader. Qualitative data as described by Bhatia, (2018) are made up of words, observations, images and even symbols. This created a method of exploratory research within the study to ensure the correctness and quality of the analyses. Therefore the outcome of the results was presented through the content and narrative analyses method. The lesser part of the analyses was done by means of a qualitative analyses based on the questionnaires and online interviews conducted. These were done to determine the patterns and connections use to illustrate in the tables and graphs used.

5. **Secondary Data Collection**

5.1.1 **Desktop Research and literature**

The Author made use of various data sources which consisted of reports from the South African International Maritime Institute (SAIMI), the South African Maritime Safety Authority (SAMSA), The department of Transport as well as the National Skills Foundation. These reports were instrumental as MET has been identified as part of the priority focus areas identified by project Phakisa, a project described by SAIMI (2020), that focuses on the oceans economy and to unlock the economic potential of the South African oceans.

5.1.2 **Ethical considerations**

All participants gave their informed consent to take part in the study. The study was not of any extremely sensitive or highly confidential nature and therefore the questionnaire provided a section which informed consent before participation.
The questions were designed to be completed within a reasonable amount of time on a platform that was considered as user friendly as possible. Online interview participants were exposed via email before online interviews were conducted by means of the university’s participant consent form. Subsequent to this, participants were also notified about the WMU’s Research Ethics Committee’s granted research clearance to assure them that the study is undertaken in an ethical manner and that confidentiality or anonymity would be ensured. In addition, participants were made aware beforehand that the study was exclusively, conducted for academic purposes and that they had the right to withdraw at any time.

5.1.2 Limitations in data collection

South Africa is considered as a small maritime nation with relatively lesser MET institutions that offers seafarer training which made it demanding to create produce a significant sample. As the country went through various stages of the national lockdown due to the COVID-19 pandemic this phenomenon created various obstacles with regards to the turnaround time for the questionnaires. Due to the ongoing pandemic planned online and face to face interviews had to be cancelled or postponed due to among others, lack of connectivity. Although the topic has been well researched in various sectors including the maritime industry, in the South African context limited literature was available in the MET human resources context. The author adapted the questions asked within the interviews and questionnaires to avoid highly confidential questions that would have led to a lack of provided information from participants.

Summary

The chapter presented a clear indication of the methods used to analyse the data for the study. The triangulation method which included the questionnaires, interviews and secondary data collection were used provided a detailed description of the qualitative and quantitative research methods that were executed. The chapter also indicates the outlines and descriptive of the methods used from the various sources that were specified within the study. The motives for the use of the aforementioned methods were discussed and linked to the limitations in the collection of the data.
Chapter 4: Data Analyses

4.1 Introduction

The purpose of this chapter is analyse the data collected by the author obtained through the methods, techniques and tools such as questionnaires, interviews as well as the desktop data. The findings of the study focuses directly on the research questions that instituted the main aim of the study to be answered. The author also made use of a narrative analyses method in order to get a closer understanding of the human experience in certain areas addressed to participants in the Maritime Administration, Academia and alumni. Based on the results the following four main research questions will be answered.

1. What is the target labour market for recruitment from both private and public MET institutions?
2. What is the current turnover ratio of academic and instructional staff at MET institutions in South Africa?
3. How can METI’s in South Africa make an instructional or academic career attractive to young motivated and highly qualified and skilled individuals?
4. What can METI’s in South Africa learn from best practice from other institutions on a similar or even higher level?

In order to successfully answer the above mentioned questions the various questionnaires were specifically designed to look at certain segments; illustrated as follows:

- Areas of specialization for the institutional as well as the individual staff.
- Levels of seniority and or years of experience including academic qualifications and specialized skills.
- The rate of difficulty for institutions when recruiting new staff, which also include, attraction, retention and succession planning strategies.
- Career development and professional development that leads to capacity building and quality management.
- Future of institutions, quality of seafarers and the availability of recognized qualifications.
4.2 Demographics of all participants

As part of the triangulation data collection techniques, most of the finding has been combined indicating similar information across the various questionnaires used for the Maritime Administration, training providers, academic and instructional staff as well as alumni.

![Graph showing gender disposition of overall participants](image)

*Figure 9: Gender disposition of overall participants*

The graph gives a clear indication of the number of participants that participated during the data collection and has complete the questionnaire. A total of 30% of females completed the questionnaire and a total of 27% of males completed the questionnaire as illustrated in the three categories of the graph. Furthermore, online interviews were conducted which indicates in the graph below that a further 17% of females and 20% of males was interviewed online for their narrative view on the study. Gender has always been a topic of discussion where the maritime industry is concerned, 75% of training provider participants indicated that the increase of female staff based on the employment equity and the IMO directive is part of their recruitment strategy.
4.3 Affiliation of Participants

Participants that were targeted represented the various provinces which is important for the study as indicated within the previous chapter. A very satisfactory response from participants were received irrespective of the challenges that occur especially during this time of the international pandemic and hard lockdown rules in South Africa that did not allow participants to be at their place of employment for more than 5 months. However, the overall successful questionnaire responses are illustrated within the table below:

<table>
<thead>
<tr>
<th>Province</th>
<th>Institutions</th>
<th>Maritime Admin.</th>
<th>Academics &amp; Instructors</th>
<th>WMU: Alumni</th>
<th>Other incl. Experts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Cape</td>
<td>67%</td>
<td>50%</td>
<td>50%</td>
<td>40%</td>
<td>20%</td>
</tr>
<tr>
<td>Eastern Cape</td>
<td>16%</td>
<td>-</td>
<td>20%</td>
<td>20%</td>
<td>-</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Limpopo</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Free State</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>North West</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Kwazulu Natal</td>
<td>17%</td>
<td>-</td>
<td>30%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>Gauteng</td>
<td>-</td>
<td>50%</td>
<td>-</td>
<td>20%</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>60%</td>
</tr>
</tbody>
</table>

*Table 3: Number of successful responses per province from identified participants*
4.4 Questionnaire analyses

4.1.1 Training providers

The number of MET training providers in South Africa has been a challenge for a long time and has been on the forefront of only developmental discussions for many years. Figure 11 indicates only the number of successful responses received, however the number of institutions are well represented within the type of institution excluding the TVET colleges which forms part of new partnerships with existing institutions as an ongoing project.

![Figure 11: Number of participative training institutions](image)

The 20% indicated by other institutions reflects those whose business registrations was done in such a way that is not included within the terms of reference of public or private educational institutions. The study has indicated that these institutions have been involved in seafarer training from 2-60 years which allows the author to assume that the knowledge and skills maintain within is of a solid nature. These institutions are offering among other marine related qualifications the following seafarer course offerings, on various levels including offshore Survival as well as Oil and Gas related courses.
The study indicated that the majority of the institutions are offering various certificates and diplomas, these are offered either in accordance to the STCW for commercial shipping or OPITO\(^2\) for the oil and gas industry courses. Furthermore, all public and private and institutions in addition offers advanced diplomas, bachelor and postgraduate degrees which has to be accredited by the Maritime Administration as well as the National Departments of Further and Higher Education respectively.

The study also indicated that either academic and or instructional staff are employed by all the participated institutions. These appointments are done independently where each of the institutions set their own, job requirements, remuneration, academic qualifications, years of experience, special skills and various demographical particulars. The number of staff varies from 3-18 on a permanent full time contract, whereas 1-5 staff on a part time contract and 1-3 seasonal contract staff members are employed, which is a result of some of the following variables that plays a role:

1. Size of the Institution (number of students, infrastructure, etc.)
2. The funding model of the institution (private or subsidized)
3. Public or Private institution (is it autonomous or is it linked to a greater institution)
4. Availability of fully accredited courses that’s in demand.

\(^2\) OPITO, *Offshore Petroleum Industry Training Organisation; “the global, not-for-profit skills body for the energy industry”*
4.1.2 Required Academic & Seafarer Qualifications

The IMO (2011) stipulate within the STCW regulation 1/6.2 that “those responsible for the training and assessment of seafarers, as required under the Convention, are appropriately qualified in accordance with the provisions of section A-1/6 of the STCW Code for the type and level of training or assessment involved” However because the Code merely guides institutions, the study indicates that the participated institutions have complete autonomy with regards to job requirements and specifications. Table: 4 below indicates the different positions available at these institutions and the required academic and seagoing qualifications:

Table 4: Qualification requirements of the participative training institutions

<table>
<thead>
<tr>
<th>Position</th>
<th>Number of Participant Institutions</th>
<th>Academic Qualification Required</th>
<th>Number of Participant Institutions</th>
<th>Seagoing Qualification Required</th>
<th>Active ongoing Research Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educator</td>
<td>2</td>
<td>Diploma Bachelor Degree</td>
<td>2</td>
<td>Operations &quot;CoC Management CoC&quot;</td>
<td>No</td>
</tr>
<tr>
<td>Instructor</td>
<td>2</td>
<td>Diploma Higher Diploma Bachelor's Degree</td>
<td>2</td>
<td>Rating Cert Operations CoC Management CoC</td>
<td>No</td>
</tr>
<tr>
<td>Junior Lecturer</td>
<td>2</td>
<td>Diploma Bachelor Degree</td>
<td>2</td>
<td>Operations CoC Management CoC</td>
<td>No</td>
</tr>
<tr>
<td>Lecturer</td>
<td>1</td>
<td>Diploma Bachelor Degree</td>
<td>3</td>
<td>Operations CoC Management CoC</td>
<td>Yes</td>
</tr>
<tr>
<td>Senior Lecturer/ Associate Professor</td>
<td>2</td>
<td>Masters Degree</td>
<td>1</td>
<td>Operations CoC Management CoC</td>
<td>Yes</td>
</tr>
<tr>
<td>Professor</td>
<td>3</td>
<td>PhD/ Doctorate</td>
<td>3</td>
<td>Management CoC</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The above table provides a clear indication of the autonomy that is practised by all institutions in question. The study indicates that most private institutions makes use of positions such as “Educator” and “Instructor”, the levels of academic and seagoing is also only for operational level.

3 CoC: Certificate of Competency means a certificate issued and endorsed for masters, officers and GMDSS radio operators in accordance with the provisions of chapters II, III, IV or VII of this annex and entitling the lawful holder thereof to serve in the capacity and perform the functions involved at the level of responsibility specified herein”
Positions from Junior lecturer to Professor are used mostly in the TVET\(^4\) as well as the Higher Education sector as it represents the teaching level at postsecondary level. The table indicates that some of these institutions portray a more relaxed academic and seagoing qualification requirement than others. Research are also only required for the more academic portfolios which are linked to the TVET and Higher Education sector. The following table indicates the amount of staff members employed within the aforementioned positions as well at the positions that has become vacant within the past 5 years at the participated institutions.

**Table 5: Qualification of current staff & positions available in the participative training institutions**

<table>
<thead>
<tr>
<th>Position</th>
<th>Number of staff employed</th>
<th>Academic Qualification</th>
<th>Seagoing Qualifications</th>
<th>Number of positions available within past 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educator</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Instructor</td>
<td>3</td>
<td>Diploma</td>
<td>Operations CoC/ Combat Officer/ Management CoC</td>
<td>4</td>
</tr>
<tr>
<td>Junior Lecturer</td>
<td>2</td>
<td>Higher Diploma</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Lecturer</td>
<td>3</td>
<td>Masters Degree</td>
<td>Operations CoC/ Combat Officer/Non</td>
<td>3</td>
</tr>
<tr>
<td>Senior Lecturer/ Associate Professor</td>
<td>1</td>
<td>PhD/ Doctorate</td>
<td>Management CoC</td>
<td>4</td>
</tr>
<tr>
<td>Professor</td>
<td>1</td>
<td>Post Doc</td>
<td>Non</td>
<td>2</td>
</tr>
</tbody>
</table>

The above table indicates the number of various positions of academic and or instructional staff who participated in the study. 90% of the participants has been employed between 2 and 16 years at their institution, with 10% who are either appointed on part time or seasonal contracts. These participants indicated their combined years of industry experience that ranges from 3 to 43 years, with an average age of 36 and in the majority of institutions are employed to teach various subject portfolios instead of a specific specialisation.

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\(^4\) TVET; “Technical & Vocational Education and Training” is education and training which provides knowledge and skills for employment by means of formal, non-formal and informal learning and is recognised to be a crucial vehicle for social equity, inclusion and sustainable development.
What is notable remarkable is that number of vacant positions within the past 5 years, in some cases the number of positions available remain the same for more than 5 years, due to various ongoing challenges that will be identified within the next chapter. A further 80% of participants indicated that these vacancies are not filled successfully due to challenges such as participants that does not except the remunerated offer or the burden from institutions regarding the upgrade of their academic qualifications.

4.2 Attraction to MET as a career of choice

As the literature in the previous chapter indicate it is of the view that academia and instruction especially within MET is not seen as attractive and a career of choice. The participants were asked whether it was their first choice, what did attract them to the career and will they recommend this career to current students and seafarers. Some of the views were as follows:

Participant 1

“Economic reasons... and my passion for Maritime Education and training. Furthermore, being a young father, it was the second best option as I always enjoyed teaching cadets at sea.”

Participant 2

“The state of Maritime Education and Training in South Africa is unstructured and exclusive. It does not cater to the needs of the South African people and is currently creating a larger skills gap which has resulted in a poor output of skilled seafarers. Perpetuation of poor teaching methods, an ageing educator fraternity and the absence of symbiotic international business relationships has resulted in a massive growing pool of unskilled, unqualified and forgotten seafarers. I am here to make a difference”

Participant 3

“Necessity gave rise to intention. My intention was to speak out against the great injustices affecting seafarers, most stemming from poor policy and poor leadership at the Institutional and Authority levels. My intention now is to help drive the reform needed to make the industry flourish as it once did. My platform as a lecturer gives me the opportunity to raise awareness and instigate change simultaneously”
The study confirmed that 90% of the participated institutions offers career development for all staff members these include, free in-house skills courses, free Certificate of Competence re-validation, graduate and post graduate courses including a sabbatical leave structure. Whereas 10% of the institutions does very little to no career development and no further formal training as it is not required for their accreditation or job specifications.

Furthermore, the participants from the Maritime Administration is of the view that as long as the institution adhere to the minimum requirements as set out in the SAMSA Code under the auspices of the STCW, it is the duty of each institution to make the appropriate appointments.

It’s quite a known fact as indicated within the previous chapters that it is not easy for METI’s to find suitable an appropriately qualified staff to teach. The study revealed that 100% of participants claimed that there is an absolute great amount of difficulty when to attract, recruit and retain academic and instructional staff. When posing the question as to what can be done by institutions and the government to alleviate this problem, some of the members from the various identified participants expressed the following views:

**Participant 1 (Academics/Instructors)**

“In improve Q&A processes. In many instances funding is made available for studies, however, selection criterion and subsequent tracking of progress are lacking. Also, during marketing campaigns, a seagoing career should not be romanticised. Government should also properly reflect the success of a particular project and identify areas of improvement before allocating more funding. At times it seems that monies are thrown at a project without really understanding the challenges resulting in unrealistic targets, lastly subvention of salaries.

**Participant 2 (Academics/Instructors)**

“A better salary package, better facilities to educate the students and no discrimination in employing suitably qualified staff that have the expertise to educate the students. Furthermore, more ships should need to be registered on the SA registry, therefore creating cadetships and further employment opportunities for cadets and qualified officers.
The drive to increase the maritime foundation should be driven by passion and not forced upon the youth as their only choice as the bursary students are often not interested in the career they are studying. I have been told by many students this was not their first choice and therefore they lose interest in their studies.”

Participant 3 (Institution Providers)

“We need progressive thinkers in the administration. Growth of MET in SA can only be sustained by including the people, skills and research and knowledge at institutions. At this stage, the administration is the police and we are always waiting for the news of the crime we’ve committed. No collaborations and very little progression”

Participant 4 (WMU Alumni)

“The importance of maritime training and development outlined in the African Maritime Transport Charter (2010). Article 8 of the charter outlines the agreement on maritime education in Africa. The provisions in the charter call on member states to strengthen national and regional maritime training and institutions, and to encourage collaboration among these institutions in the region”

Participant 5 (Maritime Administration)

“The SAMSA Act provides for the Maritime Administration “to promote the Republic’s maritime interests” Where the administration sees fit to supplement the wages of academic staff in order for institutions to attract and retain academic staff, they do so”

4.3 Capacity building & Retention

As part of the Operation Phakisa mandate set by the South African government in 2014, the need for capacity building was identified as a need in order to unlock the economic potential of the oceans surrounding South Africa. The collaboration with the WMU was established and to date 152 has successfully graduated from various specialisations including Maritime Education & Training.
The study indicated some of the views of WMU alumni which participated, via questionnaire and online interviews. 80% of the participants confirmed successful employment in various maritime related positions with 10% in academia and a 20% unemployed.

The unemployed graduates either followed alternative careers or has been unemployed for a number of years, perhaps lack of experience is a contributing factor to this problem. One of the employed participants was of the view that:

“Maritime is both expansive and diverse, the problem is not having more students in MET specialisation, rather, South Africa should leverage the qualification, training skills, competencies of all WMU graduates. It is logical for Government and MET institutions to work a programme (guest lecture, curriculum developer/advisor, researcher) so at to enable graduates to interact with academia and training, irrespective of un/employed following graduation at WMU”

Due to this 20% of graduates believes that because the scholarship is not sufficiently planned and targeted will let graduates lead to unemployment and a waste of time and state funding. Whereas a further 20% of participants believe that failure of collaboration, cooperation and miscommunication between the industry partners responsible for the initiative led to the aftermath of challenges such as unemployment. However, 60% of the participants claimed that the ongoing capacity building initiative which is in its 7th year is successful opportunity and worth the time and money spend.

In addition, the study claims that teaching, instruction and or academia in MET is not being considered as a career of choice and that some participants refer to it as an option when they experience unanticipated circumstances in their seagoing careers. This does not give institutions long term security and constantly have vacant positions not filled. As this is not only bound to South Africa, the author has requested the views of some selected WMU Alumni from countries that have or had similar challenges:
Participant 1 (Myanmar)

“The MET system in Myanmar are based on the British system... a step by step system from pre-sea training to post sea training. The MET institutions forms part of the National Government which allows for the appointment of academic and instruction staff to be done on a national level. The level of difficulty to recruit sufficient academics is very low because of the long standing governmental initiative in capacity building through international education”

Participant 2 (Vietnam)

“Developing human resources for maritime institutions has been one of the most crucial challenges in MET-Vietnam. Lectures and instructors are perceived as very precious to MET, most institutions have been struggling for many years to recruit suitable qualified staff, retain them by means of constant training and opportunities, which at the end loose them to the greater Maritime Industry for more money and better opportunities”

Participant 3 (Philippines)

“The Philippines are well known to be on the forefront of supplying seafarers to the world and in order to maintain that status, the country’s MET centres are of most importance to ensure a well-trained quality seafarer. The human resources for these centres has been problematic as a career in teaching are not of such value, due to various socio-economic factors”

Summary

This chapter served as the analysed data accumulated via the triangulation method which included the analyses of the various questionnaires, some desktop data as well as personal online interviews that was conducted. The chapter gives a clear synopsis and insight of opinions and views of various selected participants, which answered the research questions. The next chapter will discuss the findings, recommendations and future study avenues as well as conclude the study.
Chapter 5: Discussion

5.1 Introduction

The main aim of the study focuses on identifying human resource practices currently used in South African MET institutions and identify possible pitfalls such as the long standing high staff turnover, succession planning and retention. Findings from the questionnaires and semi-structured interviews revealed that the recruitment process varies from different institutions. For public institutions it is quite a time consuming process which results in prospective candidates turn to other opportunities. This causes for positions having a roll over to be re-advertised which force institutions to do various short term contracts, an approach that has shown a negative effect on the success of the academic programme. On the other hand, most institutions find it difficult to retain appropriately qualified members due to the following reasons:

- Most institutions cannot compete with the salaries offered by other employment avenues a conundrum that has been around for decades.
- It is a known fact that not everybody is a teacher, being qualified academically and or seagoing at the highest level, that most appointees loose interest in their early years of the appointment.
- Lack of appropriate interest and dedication to get involved in academic/ instructional career development as making money was the initial interest.
- Strict regulation regarding affirmative action.
- The main research questions emanate from the question whether South African MET institutions manage to attract appropriately qualified and dedicated skilled training? The study answered the following main research questions through the findings.

5.2 What is the target labour market for recruitment from both private and public institutions?

The study revealed via the semi-structured interviews conducted that the nature and type of the institution plays a vital role, between private, public, TVET and Universities.
Private and public private institutions recruit directly from former seafarers including seafarers that is on retirement or with minor disabilities that prevent them from going back to their seafarer careers. In most cases depending on the course offering, the required qualifications are minimum for both academic and seagoing. TVET institutions are directly linked to the National Department of Higher Education and has to adhere to the national recruitment and selection standardized framework. The framework allows for minimal additional requirements with regards to CoC’s and seagoing experience, however the academic qualifications are standard (as indicated in Table:6, below).

Universities on the other hand have full autonomy under the auspices of the National Department of Higher Education and in most cases have standardized academic qualification requirements. However, it depends on the type of University (University of Technology, Comprehensive University or Traditional University) might require different levels for different academic positions. However, in most cases the same or similar seagoing qualifications are required. Due to the lack of suitable qualified candidates, these institutions are forced to relax the entry requirements to fill the position under the classification as scare skills.

5.3 What is the current staff turnover ratio of academic and instructional staff at Seafarer training institutions in South Africa?

The following ratios were calculated based on secondary data from the different seafarer institutions selected:

**Table 6: Staff Turnover ratio per participative institutions**

<table>
<thead>
<tr>
<th>Institution</th>
<th>Total Number of training staff</th>
<th>Number of vacant positions within the past 5 years</th>
<th>Turnover Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>*University 1</td>
<td>18</td>
<td>6</td>
<td>33.3</td>
</tr>
<tr>
<td>*University 2</td>
<td>10</td>
<td>4</td>
<td>40.0</td>
</tr>
<tr>
<td>*University 3</td>
<td>6</td>
<td>3</td>
<td>50.0</td>
</tr>
<tr>
<td>*Private Institution 1</td>
<td>12</td>
<td>9</td>
<td>75.0</td>
</tr>
<tr>
<td>Private Institution 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Private Institution 3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*The only data available.
The data used was sourced from various year end reports as well as the websites of the various institutions. Due the sensitive nature of the data only 4 institutions could be analysed. In the table above we can see the trend of available positions and the ratios against the full appointed staff. The number of training staff members are based on full time and part time positions, permanent and long-term part time contracts and exclude seasonal contracts. The high staff turnover ratio can be seen as an ongoing concern that these institutions has been dealing with over years and has been inherited from the previous generations.

5.4 How can South African Seafarer Training Institutions make an instructional or academic career attractive to young motivated and highly qualified and skilled individuals?

The study found that first of all a paradigm shift is necessary with regards to marketing campaigns at METI-’s and the government for careers within the maritime industry, especially the career as a seafarer. A more broad-based approach introducing the most exceptional career paths within the greater industry is crucial which among others include the career in instruction and academia. The maritime industry and the career as a seafarer are generally perceived as a cash cow instead of a career of choice sometimes, especially by the newer younger generations. Institutions should create great awareness with regards to the diverse opportunities within the industry pre and post successful completion of the seagoing field of study and specialization.

The career within instruction and academia should be marketed as a first choice career possibility with a strong emphasis of its importance to continue to ensure that South Africa has a sustainable ability to produce high class seafarers trained by well-equipped human resourced institutions. Introduce various soft skills subject electives that focuses on career development and planning. One of the participant institutions within the study indicated various noncredit baring subjects on their curriculum such as; career development; general and financial wellness; entrepreneurship, cultural diversity and equality, leadership and workplace wellness and values. Attract young prospective instructors and academics through promoting the career not as an option during extenuating circumstances such as injury, family planning among others, but rather a first class career to follow with as much passion as seagoing.
Allow academic and instructional staff to spend time during academic breaks to spend time onboard the South African training vessel Agulhas or a short sea opportunity to keep the spirit going and allow them to keep their CoC valid.

Furthermore, the study claims that government has a mandate to become progressive especially within the Maritime Administration to grow the Maritime industry in South Africa, including its people, skills and research and knowledge capacity at its institutions including the private education sector. A participant of the study claims that the administration currently acts as the watchdog by policing the wrongs and the non-conformities created by the lack of suitable staff and are always on the watch out when in their view a crime is committed instead of assisting with the mitigation thereof. In introduction of subsidized salaries was introduced in 2014 for public higher seafarer training institutions to assist in elevating the problem and to offer remuneration and benefits as close as possible to the seagoing norm. However, the requirements excluded instructors and academics and academics without seafarer qualifications. As a result, various members felt it was unfair but also as an opportunity to get the qualification, however due to the shortage of staff it became impossible to complete the required sea service.

The study also revealed that more collaboration between government and inter institutional should be introduced. More research opportunities in addition to the current WMU as well as Erasmus + initiatives to increase continuous research and development for staff as well as for the benefit of the country. The younger generation can be seen as the key to become at the helm of the most interested in developing the South Africa’s long standing maritime interest to continue to be a destination of choice for training as well as recruitment for the international maritime community.
### 5.5 What can South African METI’s learn from best practice from other institutions on a similar or even higher level?

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Philippines</strong></td>
<td>The Philippines as a maritime nation and with it being archipelagic with more than 7100 islands have inherited the notion of placing the career as a seafarer as one of the most common careers. The country has been known to be one of the number 1 suppliers of seafarers to the global market (BIMCO &amp; ICS, 2015) The demand for MET has been on the forefront of being a number one priority for decades The maritime administration together with the Commission on Higher Education (CHED) work in close relationship especially with monitoring the all registered and accreditation seafarer training institutions. This allow for greater assistance from either party with the development of appropriately qualified academic and instruction staff for their 82 MET higher educational institutions and 48 institutions that forms part of the Technical Education Skills Development Authority (TESDA) within the TVET sector as private and public institutions. Recruitment for academic and instructional staff remain a challenge however the country boasts with a greater pool of available candidates to be developed to become instructors and academics (TEDA, 2017).</td>
</tr>
<tr>
<td><strong>Vietnam</strong></td>
<td>With a coastline of more than 3500km, Vietnam is predominantly considered as a growing maritime nation. MET within the country has been of greater importance to develop and supply the global shipping market with quality and suitable qualified seafarers. The maritime industry has placed a mandate of priority to various niche areas towards further development, these include, tourism and maritime services, maritime economy, exploitation of oil and gas and other mineral resources, seafood harvesting, coastal industry and renewable energy (Duong &amp; Uy, 2008). The MET system has a strong determination and development strategy, with an extreme encouraging assistance from the national government and other academic institutions. The MET sector consist of two maritime universities and 2 maritime secondary institutions situated in the North and South of Vietnam. Recruitment of instructional and academic staff has been a challenge as the country produce approximately 3000 graduates in comparison with the likes of the Philippines for example (Duong &amp; Uy, 2008). The MET system together with the immense support from the government boasts with various university alliances with international institutions and especially collaborations with neighbours China, South Korea and Japan. This ensures that academic and instructional staff are suitable qualified and are expose to various development opportunities.</td>
</tr>
<tr>
<td><strong>Myanmar</strong></td>
<td>Myanmar a maritime nation that links South and Southeast Asia strategically situated in some of the busiest maritime shipping routes from the Indian and Pacific oceans. With a MET system similar to what South Africa is using. The country has 21 maritime institutions ranging from private academies to dedicated maritime colleges and</td>
</tr>
</tbody>
</table>

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Universities. These institutions are fully supported by the government and the Maritime Administration, the country shares the same sentiment with the rest of the world with regards to the difficulty to recruit and retain suitable qualified academic and instructional staff. Recruitment are done in line with national governmental regulation and therefore are subject to standard requirements with regards to academic and seafarer qualifications. With strong international ties with various renowned institutions such as the WMU, allows for continuous career development for academic and instructional staff. The government plays a very important role in the countries maritime interest as well as its educational systems. Academic and instructional staff are exposed to various scholarship programs and which is a well-known factor in Myanmar Education. From a young age students are exposed to various scholarship programs, an opportunity that allow them to pursue instruction or academia without paying additional fees for the recruitment, unlike the phenomenon that seafarers have to pay a lot of money for agency fees to be recruited for a job. This is therefore believed that students instead work hard within their studies to become eligible. However due to various social economic conditions academic and instructional careers are not listed as the preferred careers to follow (Aung, 2009).

Table 7: Views of MET institutions South East Asia

Summary

The findings in the chapter was focused on answering the 4 main research questions of the study. The discussion results indicate that remuneration, job interest, job satisfaction, ability to teach and country specific traditions laws and policy either prohibit or allow that a career as an MET academic or instructor is made as attractive as possible. High staff turnover of staff creates the notion that available positions being advertised and advertised, the gap in time between the recruitment process and the appointment allow for desperate seasonal and short contractual appointments. Lastly marketing together with appropriate career development opportunities and tools for the young prospective seafarers can create a positive influence towards teaching. Various countries share the same sentiment with regards to recruitment and retention indicated in the discussion. The next chapter will therefore focus on recommendations limitations, further research and the final conclusion.
Chapter 6: Conclusion

The study used literature and theories, such as post-colonial education theory, relevant to the context of South Africa in order to provide an appropriate background and discussion surrounding the topic. The literature in addition emphasised on various human resource and talent management practices used in the industry and academia. The methodology used by means of a triangulation of research methods and techniques provided the author to be aimed at understanding opinions and experiences of participated candidates. In this chapter we will conclude the findings and discussions clarified in all previous chapters and look at possible recommendations and further research within this topic to contribute towards the mitigation of recruitment and retention challenges that seafarer training institutions have especially in developing countries like South Africa.

The study makes reference to the standardized training under the STCW for mandatory and affiliated courses within the convention and code. However due to the autonomy practiced by seafarer training institutions within South Africa and around the world the attention is within the content delivery more than what academic qualifications are required by training staff. In addition, the STCW code make use of the phrase “appropriately qualified” when referring to the requirements. This phrase is open for discussion and allow institutions to set certain entry requirements within the various areas of seafarer training from private to further and higher education. This might raise the question with regards to whether the quality of the course delivery is affected negatively or else. However, the study claims that due to the nature of each institution the minimum requirements as set out in the STCW are met foremost and the academic credentials especially in private institutions do not determine the quality of the course delivery per se.

The study demonstrated a clear indication that seafarer training institutions within South Africa are to acquire more government interventions through the maritime administration to improve the human resource recruitment policies and strategies through best practice and more diverse capacity building initiatives.
The current capacity building initiatives through postgraduate studies at the WMU is seen as a great initiative, however the emphasis should be shifted to MET instead, which will allow for a greater pool of suitable and appropriately qualified candidates. Project Phakisa was mandated when initiated to focus on among others capacity building for the greater maritime industry including MET, however the lack of infrastructure for example for existing and future institutions was not included. Building a sustainable human resource for the shipping industry is of the essence however a lack of appropriately qualified academic and instructional staff which serve as the backbone to set the groundwork for a career that compete on a global platform. It is clear that the country does not have the means to attract appropriately qualified individuals to MET. The current recruits that either comply with the minimum requirements cannot be retained due to various socio-economic factors including, the lack of competitive and attractive remuneration, lack of advanced qualifications, lack of didactical skills and lack of research knowledge and interests. Furthermore, the study does reveal that all institutions comply with the minimum seafaring qualifications but lack academic qualifications. This allows mostly private institutions to continue offering courses on operations levels only. The South African government should place the capacity building of its MET institutions much higher on its projected plans than ever before in order to strengthen its capacity of South Africa for seafarers and compete with countries such as Russia, China and the Philippines.

6.1 Recommendations for South Africa

In light of the findings and discussions the study makes the following recommendations for South Africa to consider and be able to continue to supply the global market with highly qualified seafarers that has been trained by world class instructors or academics.

- Adapt marketing strategies to promote training careers, research opportunities and post graduate scholarship to prospective, current students and other seafarers.
- Groom students at institutions to become interested within the career of training and academia, through new generation academic programs and mentorship.
- Institutions should redesign undergraduate and post graduate course delivery either through blended or online distance learning opportunities, to include seafarers while at sea.
• Re-align the current governmental capacity building initiative for post graduate studies at WMU with a strong focus on educational institutions as a priority to increase the pool of post graduate academic qualifications.

• Make use of members who participated in government scholarship initiatives in various maritime fields to collaborate with institutions on training, mentorships and research projects.

• Allow academic and instructional staff to take part on short voyages on the dedicated training vessel and partner shipping companies to keep up with industry changes and to create contemporary subject content.

• Create closer ties with the maritime administration with regards to curriculum development, research and innovation.

• Relax regulation on subsidy for scare skills that is currently received by certain seafarer training institutions to include members with cognate Master and PhD’s that does not necessarily have a seagoing qualification.

• Increase local and international collaborations on academic and skills training initiatives such as the Erasmus+ and other initiatives.

• Decrease the length of staff recruitment periods at governmental institutions to ensure that the applicants remain interested without looking at other career avenues.

6.2 Limitations of the Study

The rise of the pandemic during early 2020, was the cause that the research sample had to be limited due to a selected group of participants. Planned site visits and personal face to face meetings prohibit the author from the traditional way of data collection. Limited data regarding staff turnover, remuneration and institution specific human resource strategies ratios could be retrieve due to the confidential nature of the data. The turnaround time for questionnaires were much longer than anticipated due to participants not at work during the hard lock down or had connectivity problems.
6.3 Suggestions for further research

Governmental impact on human resources for MET institutions in South Africa, furthermore, upskilling and career development for MET instructional and academic staff. The analyses of current and future strategies on capacity building initiatives and its effect on MET: South Africa and lastly the feasibility of international staff development strategies for METI’s in South Africa.

As the demand for seafarers globally are indicated as a deficit annually, various countries invest in MET to meet the demand. South Africa strategically situated in the most southern point of Africa can positively contribute to the demand. This can only be achieved if more attention be given to the development of the METI’s and more importantly a sustainable supply of highly skilled and appropriately qualified instructors and academic staff.
References


TEDA. (2017). *The philippine maritime industry: through the years.*


7. Annexures

7.1 Interview questions for officials Maritime Administration

Good Day, Mr/Ms.................................................................

I would like to thank you for your willingness to participate in this interview session. This is a voluntary interview based on my thesis topic “Attracting & retaining appropriately qualified instructional staff at Seafarer Training institutions: The case of South Africa” The purpose of this interview is to collect data from seafarer training institutions, the Maritime Administration and South African WMU: MET alumni, regarding the attraction of instructional or academic staff as a career of choice in the Maritime industry. The results of the interview will be used as partial fulfilment towards the degree of MSc: Maritime Affairs at World Maritime University.

All participants will answer the interview questions anonymously. The interview consists of 6 questions, it will take approximately 10 to 15 minutes to complete, and once the responses have been processed, the originals data will be destroyed. By agreeing and participating in this interview you have given the interviewee consent to use the information for the academic project only. Your participation is highly appreciated and will be extremely helpful in conducting a comprehensive research study with well-informed findings.

Questions

1. What role does the Maritime Administration play with regards to MET institutions in South Africa?

2. Does the Maritime Administration provide any input with regards to the appointment of academic and or instructional staff at seafarer training institutions in South Africa?

3. It is a well-known fact that Maritime training providers around the world find it difficult to attract and retain suitable qualified workforce. What mandate does the Maritime Administration have to assist these training providers whether financially or regarding manpower?

4. In your opinion what should seafarer training providers do to alleviate this worldwide phenomenon?
5. Does the Maritime Administration have any current or future policies that will be focusing not only on seafarer shortage, but also to assist training providers with human resources?

6. Does the lack of suitably qualified academics/ instructors and or teachers in MET have an impact on the IMO whitelist status of the country?

Thank you for your time and effort.
7.2 Questionnaire for the Training Provider

Greetings,

I would like to thank you for participating in this survey. This is a voluntary questionnaire based on the topic “Attracting & retaining appropriately qualified instructional staff at Seafarer Training institutions: The case of South Africa” The purpose of this questionnaire is to collect data from seafarer training institutions in South Africa regarding attracting instructional or academic staff as a career of choice in the Maritime industry. The results of the survey will be used as partial fulfilment for the degree of MSc: Maritime Affairs at World Maritime University and will only serve as a part of the master's thesis.

All participants will answer the questionnaire anonymously. The survey consists of 20 questions, it will take approximately 10 to 15 minutes to complete, and once the responses have been processed, the originals will be destroyed. A consent form to take part in this survey has been attached and should be completed by the participant when submitting the questionnaire. Your participation is highly appreciated and will be extremely helpful in conducting a comprehensive research study with well-informed findings.

Name of the Institution : 

________________________________

Province : 

______________________________

Type of Institution

☐ University
☐ TVET College
☐ Training Centre
☐ Maritime Academy
☐ Other

How long have your institution been offering seafarer training? : 

______________________________
Questions:

1. Does your institution offer any of the following qualifications?
   - Certificates
   - Diplomas
   - Degrees
   - Others
     Specify: ____________________________________________

2. Which of the following courses does your institution offer?
   - Deck (Operations & Management)
   - Engine (Operations & Management)
   - Offshore Survival
   - Oil & Gas
   - Shore based
   - Other
     Specify: __________________

3. How many academic/instructional staff does the institution employ as:
   - Full-Time
   - Part-Time
   - Seasonal
   - Other

4. How many of these staff members possess the following academic credentials?
   - Graduates from a MET institution
   - Graduates from a non-seafaring background
   - Holders with only seagoing qualifications CoC’s
   - Holders with both academic and seafarer Quals.
   - Other

5. Does the institution offer staff subject specializations and if so, what are these identified specialized fields?

   Comments:
6. What are the minimum academic qualifications needed for the following academic and or instructional positions at your institution?

<table>
<thead>
<tr>
<th>Position</th>
<th>Minimum Qualification</th>
<th>Years’ Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior Lecturer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecturer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Lecturer/ Assoc Prof</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. What are the number of staff members that has met these minimum qualifications and are appointed in these various positions?

<table>
<thead>
<tr>
<th>Position</th>
<th>Number of Staff</th>
<th>Position</th>
<th>Number of Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior Lecturer</td>
<td></td>
<td>Professor</td>
<td></td>
</tr>
<tr>
<td>Lecturer</td>
<td></td>
<td>Instructor</td>
<td></td>
</tr>
<tr>
<td>Senior Lecturer</td>
<td></td>
<td>Educator</td>
<td></td>
</tr>
<tr>
<td>Assoc Prof</td>
<td></td>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

8. What are the additional seagoing qualifications needed for the following positions?

<table>
<thead>
<tr>
<th>Position</th>
<th>Minimum seagoing qual. needed for the position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior Lecturer</td>
<td></td>
</tr>
<tr>
<td>Lecturer</td>
<td></td>
</tr>
<tr>
<td>Senior Lecturer / Assoc. Prof</td>
<td></td>
</tr>
<tr>
<td>Professor</td>
<td></td>
</tr>
<tr>
<td>Instructor</td>
<td></td>
</tr>
</tbody>
</table>
9. Do these positions require ongoing research structured research outputs presence from candidates?

Yes ☐ No ☐

Other: ___________________________________________________________

10. Do you have difficulty in recruiting suitably qualified academic and/or instructional staff to your institution?

Yes ☐ No ☐

Elaborate: ________________________________________________________

10.1 In line with the South African employment equity act, does the act have an impact on your recruitment strategy with regards to ethnicity?

Yes ☐ No ☐

10.2 In line with the South African employment equity act and the IMO directive on the focus of women, do these have an impact on your recruitment strategy with regards to gender?

Yes ☐ No ☐

11. On average how many of the following positions has become vacant within the past 5 years and has it been successfully filled:

<table>
<thead>
<tr>
<th>Position</th>
<th>Years of vacancies</th>
<th>Filled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior Lecturer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecturer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Lecturer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
11.1 What was the percentage of suitably qualified candidates that has applied for the above positions before appointment was made?

12. Be means of the scale below indicate whether a career in teaching, training and academia is perceived as a career of choice in South Africa?

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

13. In your opinion what can be done at governmental level to address the issue of developing a career in teaching, training and academia especially in the maritime industry as an attractive career of choice?

Comments:

14. In your opinion what can be done at institutional level to address the issue of developing a career in teaching, training and academia especially in the maritime industry as an attractive career of choice?

Comments:

15. What institutional support is offered as career development for academic and or instructional staff to improve qualifications & experience?

Comments:
16. Does your institution offer flexible study or sabbatical leave benefits to staff members for postgraduate studies and research?

Yes ☐ No ☐

17. If yes kindly explain what steps the institution takes to recruit a possible replacement in the case where leave is granted for a long time period.

Comments:

18. Does your institution have a succession planning policy to retain special skills from older staff members close to retirement age?

Yes ☐ No ☐

19. By means of the following scale, indicate the importance of MET in order to supply highly skilled and suitable qualified seafarers?

<table>
<thead>
<tr>
<th>Not Important</th>
<th>Very Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Elaborate:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Thank you for your contribution!
7.3 Questionnaire for academic and instructional staff

Greetings,

I would like to thank you for participating in this survey. This is a voluntary questionnaire based on the topic “Attracting & retaining appropriately qualified instructional staff at Seafarer Training institutions: The case of South Africa” The purpose of this questionnaire is to collect data from seafarer training institutions in South Africa regarding attracting instructional or academic staff as a career of choice in the Maritime industry. The results of the survey will be used as partial fulfilment for the degree of MSc: Maritime Affairs at World Maritime University and will only serve as a part of the master’s thesis.

All participants will answer the questionnaire anonymously. The survey consists of 20 questions, it will take approximately 10 to 15 minutes to complete, and once the responses have been processed, the originals will be destroyed. A consent form to take part in this survey has been attached and should be completed by the participant when submitting the questionnaire. Your participation is highly appreciated and will be extremely helpful in conducting a comprehensive research study with well-informed findings.

Name of the Institution : 
Province : 
Type of Institution
☐ University
☐ TVET College
☐ Training Centre
☐ Maritime Academy
☐ Other

Gender : Male ☐ Female ☐ Other ☐

Age :
20 – 29 ☐ 
30 – 39 ☐ 
40 – 49 ☐ 
50 – 59 ☐ 
60 and above ☐
Nationality : 
Number of years at the institution : 
Number of years in the Maritime Industry : 
Highest Academic Qualification : 
Highest Seagoing Qualification : 

Questions:
20. What is your position at the institution? : 

21. Which academic subjects (including ancillary subjects) do you teach?

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

22. Are you a specialist in this subject area?
   Yes ☐   No ☐

   Subject Area: _________________________________________________________

23. Which area of training below do you represent within your institution?

   Deck (Operations & Management) ☐
   Engine (Operations & Management) ☐
   Offshore Survival ☐
   Oil & Gas ☐
   Shore based ☐
   Other ☐ Specifying: ____________________________

24. What is your employment status at your institution?

   Full-Time (Permanent)
   Part-Time
   Seasonal Other
25. In your own opinion what attracted you to a position in Maritime Education and Training?
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

26. Was academia and/or instruction a first choice or did you enter this position and career by choice due to extenuating circumstances?
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

27. If you were a former seafarer what made you decide to transition from a seagoing to and onshore career?
____________________________________________________________________

28. Does your institution offer career development plans which allows you to pursue further studies?

Yes ☐ No ☐

29. If answered yes does the institution allow for long and sabbatical leave with suitable replacement?
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

30. Are you willing to improve and further your academic studies to Masters or PhD even if it may not require by your institution?

Yes ☐ No ☐
31. Are you currently involved in any type of maritime based academic research?

Yes ☐ No ☐

Type of research: _________________________________________________________

32. Would you recommend a career in training and academia as a career of choice to your students and current seafarers?

Yes ☐ No ☐

If your answer is yes in your own opinion what are the possible benefits or points of high interest that would be considered as main attractions to this career?

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

33. Based on your answer in question 13, do you consider training as one of the most important aspects to ensure safety in the maritime industry?

Yes ☐ No ☐

Elaborate:
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

34. Does your institution find it difficult to find suitable academic and or instructional staff members to recruit?

Yes ☐ No ☐

Elaborate: ___________________________________________________________________

35. In your opinion what can be done at governmental level to address the issue of developing a career in teaching, training and academia especially in the maritime industry as an attractive career of choice?
36. In your opinion what can be done at institutional level to address the issue of developing a career in teaching, training and academia especially in the maritime industry as an attractive career of choice?

Comments:

37. Does your institution have a succession planning policy to retain special skills from older staff members close to retirement age?

Yes ☐ No ☐

38. Have you been part of a succession planning during your time at the institution?

Yes ☐ No ☐

39. By means of the following scale, indicate the importance of MET in order to supply highly skilled and suitable qualified seafarers?

<table>
<thead>
<tr>
<th>Not Important</th>
<th>Very Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Elaborate: __________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

Thank you for your contribution!
7.4 Interview questions for WMU MET Alumni 2014 - 2018

Good Day, Mr/Ms.……………………………………………………………

I would like to thank you for your willingness to participate in this interview session. This is a voluntary interview based on my thesis topic “Attracting & retaining appropriately qualified instructional staff at Seafarer Training institutions: The case of South Africa” The purpose of this interview is to collect data from seafarer training institutions, the Maritime Administration and South African WMU: MET alumni, regarding the attraction of instructional or academic staff as a career of choice in the Maritime industry. The results of the interview will be used as partial fulfilment towards the degree of MSc: Maritime Affairs at World Maritime University.

All participants will answer the interview questions anonymously. The interview consists of 7 questions, it will take approximately 10 to 15 minutes to complete, and once the responses have been processed, the originals data will be destroyed. By agreeing and participating in this interview you have given the interviewer consent to use the information for the academic project only. Your participation is highly appreciated and will be extremely helpful in conducting a comprehensive research study with well-informed findings.

Questions

7. When did you graduate from the WMU?

8. Are you currently employed by a maritime training provider yes or no?

2.1 If your answer is no, at which company are you currently employed?

2.2 If your answer is no what is your current job?

9. How long have you been employed by this company since you have graduated from the WMU?

   a. If you do not have a job, how long have you been unemployed?

10. As a MET graduate are you interested in any sort of training/ academic or instructional position at a MET institution in South Africa?

11. Since the first implementation of the WMU-South African scholarship programme in 2014 for the main purpose of capacity building, only a few students have followed the
MET specialization. In your opinion should future scholarships focus more on MET to build capacity at training providers in the country or not?

12. What programs, policies and or guidelines should seafarer training providers implement to ensure continuing professional development for training staff to ensure a supply of top-class seafarers?

13. In your own opinion has the scholarship programme that has been launched 7 years ago been successful as mandated through the national government’s “Operation Phakisa” to build capacity?

Thank you for your time and effort.
8. WMU Research Ethics Committee Protocol

<table>
<thead>
<tr>
<th>Name of principal researcher:</th>
<th>Douglas Dyers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name(s) of any co-researcher(s):</td>
<td>Prof I Misoa</td>
</tr>
<tr>
<td>If applicable, for which degree is each researcher registered?</td>
<td>MSc. Maritime Affairs</td>
</tr>
<tr>
<td>Name of supervisor, if any:</td>
<td>Prof M Khulu</td>
</tr>
<tr>
<td>Title of project:</td>
<td>Attracting &amp; retaining appropriately qualified instructional staff at Seafarer Training institutions: The case of South Africa</td>
</tr>
<tr>
<td>Is the research funded externally?</td>
<td>Yes</td>
</tr>
<tr>
<td>If so, by which agency?</td>
<td>ULD Institute: University of KwaZulu-Natal, South Africa</td>
</tr>
<tr>
<td>Where will the research be carried out?</td>
<td>In South Africa</td>
</tr>
<tr>
<td>How will the participants be recruited?</td>
<td>Via contacts in the Maritime industry in South Africa</td>
</tr>
<tr>
<td>How many participants will take part?</td>
<td>Approximately 30</td>
</tr>
<tr>
<td>Will they be paid?</td>
<td>No</td>
</tr>
<tr>
<td>If so, please supply details:</td>
<td></td>
</tr>
<tr>
<td>How will the research data be collected (by interview, by questionnaires, etc.)?</td>
<td>Primary data through interviews and questionnaires and secondary data through desktop literature</td>
</tr>
<tr>
<td>How will the research data be stored?</td>
<td>Research data will be stored in my personal laptop and hard disc with strong password</td>
</tr>
<tr>
<td>How and when will the research data be disposed of?</td>
<td>The data will be deleted within one month after the dissertation is accepted and given a passing mark</td>
</tr>
<tr>
<td>Is a risk assessment necessary?</td>
<td>No</td>
</tr>
</tbody>
</table>

Signature(s) of Researcher(s): [Signature] Date: 26 April 2020

Signature of Supervisor: [Signature] Date: 30 April 2020

Please attach:
- A copy of the research proposal
- A copy of any risk assessment
- A copy of the consent form to be given to participants
- A copy of the information sheet to be given to participants
- A copy of any item used to recruit participants