Exploring the sustainability of specialized higher education curricula as exemplified by Jamaica’s maritime education and training curriculum

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Abstract

Purpose – The purpose of this qualitative, single-case study was to explore the development of Jamaica’s maritime education and training (MET) curriculum within the local education context. In this research, the story of the development and sustainability of the local MET curriculum in its 40-year journey from 1980 to present (post 2020), as communicated by various maritime stakeholders and archival documents, is chronicled.

Design/methodology/approach – The study utilized a qualitative orientation and was an embedded single-case study in its design. The entire local MET institution community and those legislatively and operationally allied to its sustained viability constituted the general population of this study. Non-probability sampling techniques were used to arrive at a maximum variation sample. Three sources of data were used in this study: individual interviews, focus group discussions and documents.

Findings – The Jamaican (local) MET curriculum was the brainchild of local perspicacity that was empowered by international benevolence. It was developed to satisfy market demands that existed at the time of its inception. These market requirements of the maritime industry are what impacted the development of the local MET curriculum over four decades. Several other factors led to the sustained viability of the local MET curriculum. These included the ability of the local MET curriculum to meet direct market needs and maintain its fitness for purpose.

Research limitations/implications – It is the view of the researcher that the findings of this study were limited by the fact that the voices of current students and employers from the four decades of the curriculum’s existence are not represented in this initial study. The perspectives from these two sources would have broadened the description presented in this study.

Practical implications – This research has shown that specialized higher education (HE) institutions are better served in their business when they maintain a symbiotic relationship with the industry for which they are producing graduates.

Social implications – The treatment of HE as a service industry has gained traction globally. This would suggest that ‘product placement’ in specialized HE is important to the growth, development and longevity of that course of study within the society in which it exists.

Originality/value – There is a dearth of national research on Jamaica’s four-decades-old MET curriculum and the elements that lend to the sustained viability of same. This discussion of sustainability of the MET curriculum will benefit maritime educators and policymakers, who must continue to hone this curriculum so that it is fit for purpose. The study will also identify some of the elements of a sustainable, specialized HE curriculum. The elements identified herein can serve as exemplars and conceptual starting points for other contexts where the discussion of the sustainability of curriculum needs to be had.

Keywords Higher education, Maritime industry, Curriculum sustainability, Curriculum viability, Maritime education and training (MET), Specialized HE curricula

Introduction

There is a record of the initiation of the maritime education and training (MET) curriculum in Jamaica. Despite this, there is an absence of data on the development of the local MET
There is also no formal examination of the factors that contribute to the viability of this curriculum. The data gap in the Jamaican context was what this study sought to address. The history of the institution was explored. Also explored was the story of what has led to the continued success/viability of the local MET curriculum over the four decades of its existence.

A discussion of the viability of the MET curriculum indicates where one becomes concerned with the success of this curriculum. Smith Johnson (2020) asserted that “schools, specifically institutions of higher education (HE) must respond to change to stay viable.” Mills (2001) suggested that to achieve viability of the educational product “educators must reflect, plan, and act in a focused, conscientious way.” The reality that Jamaica is a maritime nation is evidenced not only by the fact that the island is surrounded by the Caribbean Sea but also in the breadth of maritime activities carried out each day by the people and government of Jamaica. To appreciate this, it is important to establish a definition of the concept of maritime activities. Hildebrand and Schröder-Hinrichs (2014) define the concept of “maritime” as “used to describe ships, shipping and shipbuilding, and their associated activities” (p. 174). This kind of activity has been happening in Jamaica for years. Maritime commerce in Jamaica extends beyond direct shipping activities that pre-date 17th century Port Royal. The sea serves as the fulcrum for marketing Jamaica as a tourist destination. Other sea-based commercial activities carried out in Jamaica include off-shore fishing. This is but the proverbial tip of the iceberg for commercial maritime-related activities in Jamaica. Jamaica has two major cargo ports, five cruise ship terminals and multiple operations that are maritime, income-earning activities. Statistics from the 2016/2017 annual report from the Port Authority of Jamaica show earnings of 14.6 billion dollars from maritime-related activities such as cargo, cruise and marine services (Port Authority of Jamaica, 2018).

Background

The MET curriculum in Jamaica

Jamaica is a small island state that in 1980 inaugurated an MET curriculum (and requisite training organization) that sought to fulfill a national mandate to train seafarers for the then Jamaica Merchant Marine (JMM) fleet. Within a decade of the establishment of this MET curriculum, the JMM fleet was no longer in existence. Despite this challenge, the MET curriculum in Jamaica since this reality in the early 1990s has remained relevant, sustainable and globally recognized.

In this examination of the local MET curriculum, the researcher sought to explore the development of the local MET curriculum in Jamaica as the unseen touchstone for maritime activity in the nation. The study also sought to determine how the local MET curriculum has remained relevant, sustainable and globally recognized.

Related literature

Training the human element in shipping

Viorica (2015) defined the human element in shipping in this way: “in the maritime context, the term human element embraces anything that influences the interaction between a human and any other human or system or machine aboard ship.” (p. 1) Whilst saying this, Viorica (2015) pointed out that there is no accepted international definition for the ‘human element’. Despite this, it involves the entire spectrum of human activities performed by ships’ crews, shore-based management, regulatory bodies, recognized organizations, shipyards, legislators and relevant parties.” (Viorica, 2015, p. 1) In the introduction to her discourse of sustainable maritime education, Cunningham (2015) posited that, “the training and education of the human element is paramount for an effective and efficient global Maritime Industry” (p. 1).

How many persons need to be trained? “In order to obtain precise predictions on manpower demand, we need to take into consideration that they depend mainly on
assumptions about future world trade growth and also on the number of ships that can be used to transport it.” (Costel et al., 2016 p. 2).

De Vera Nalupa (2022) expands on the foregoing by noting that the “the significance of MET goes far, even beyond shipping. The competence and skills of seafarers and shore-based maritime professionals are essential for the safety and security of life and property at sea.”

This discussion ties in with the explanation advanced by Manuel (2017) who holds that the global trend in MET is increasingly to link an essentially vocational education that provides specific and restricted competence outcomes with more general or deeper academic components leading to an academic qualification. He further posits that the trending of curricula toward academic degrees has fed into the transformation of, “national MET systems to include education for and award of academic degrees with the inclusion of more university style education which tends to go beyond the acquisition of specific vocational (task-based skills) to the development of enquiring minds and a more generalist approach.”

Yi Koh et al. (2023) found that there are six areas that lend efficacy to MET. Yi Koh et al. (2023) list these six areas (in order of precedence) as technology integration, industrial exposure, learning and teaching environment, industry-aligned and innovative curriculum, faculty member competencies and supporting activities. They noted too that student satisfaction positively influences engagement and academic performance.

Earlier research by Barcelona et al. (2015) was done to determine the awareness of a new MET curriculum within a maritime academy in the Philippines. Barcelona et al. (2015) found, among other things, “skills of the students could be best acquired from the effective implementation of curriculum through various teaching pedagogies with state-of-the-art facilities, very satisfactory student services, linkages from the partner industries, integration of values and strong participation in research and community extension.”

The Association of Caribbean States (ACS) (2023) notes that, “While the regional shipping industry currently appears to be at risk from external pressures, the opportunity for its survival may well lie in the same factor which led to the formation of the West Indies Shipping Corporation (WISCO): intra-regional trade.” WISCO was an enigma that exemplified the intent of the MET endeavor in the Caribbean region.

Trade, both intraregional and global trade is ultimately what drives the need for the MET curriculum practice in the Caribbean in general and Jamaica in particular. Balci and Cetin (2017) concur with this line of thought as they note that; “Container shipping is a standardized business-to-business service market where carriers need to stay customer focused to survive.” Customer focus is driven by standards and standards require training of the people who operate around and fulfill them. This in verity points back to human element development as attended to by MET in the region and in Jamaica.

**Research type**
This study utilized a qualitative design. Merriam and Tisdell (2016) in speaking about qualitative research highlighted the following about the approach:

1. It calls for the researcher to study a phenomenon in its natural setting.
2. It is an approach that calls on the researcher to make sense of or interpret that phenomenon in terms of the meanings people bring to it.
3. Qualitative research is, in truth, an amalgam of a host of ‘interpretive techniques’ applied to the collection and analysis of data.
4. The focus in the qualitative approach is on process, understanding and meaning. The researcher is the primary instrument of data collection and analysis. In this approach, the process of learning is inductive, and the story told is richly descriptive.
This study was exploratory. Yin (2003) noted that exploratory case studies are embarked on before the researcher arrives at hypotheses and research questions. This study examined a single phenomenon—the MET curriculum in the local context. This examination demanded the application of the qualitative orientation as there was, in verity, a focus on establishing the story of the development of the local MET curriculum and the meaning it holds in the national and wider maritime community.

This study was guided by the following questions:
A. How has a selected tertiary institution in Jamaica developed and sustained the viability of its MET curriculum since its inception?

(1) What is the story behind the development of the MET curriculum in Jamaica?

(2) What are the market requirements of the maritime industry that impacted the development of the MET curriculum?

(3) What strategies were deemed by stakeholders to be the most effective in transitioning the MET curriculum in the journey from initial establishment to the present (2020)?

(4) What were the most effective strategies utilized by the tertiary institution to encourage and sustain the viability of the local MET curriculum?

(5) How effective is the current curriculum towards the preparation of graduates in the tertiary Institution?

Research design
Relationship to theoretical framework. This study examined the local MET curriculum against the understandings of change theory as articulated by Fullan (2006). Nair (2019), in commenting on the suitability of applying Fullan’s theory to her study of the development of curriculum in Malaysia, advanced the view that, “change theory is not just applied to curriculum but to the context and those elements that support curriculum growth and development.” These elements included (among others) the role of government, the input of industry players in curriculum review and the demands of an evolving marketplace. The aim of the study was to explore these elements and put together a descriptive narrative of those findings. This intention demands the use of qualitative design. Fullan (2006) in commenting on his theory postulated that,

Change theory or change knowledge can be very powerful in informing education reform strategies and, in turn, getting results – but only in the hands (and minds, and hearts) of people who have a deep knowledge of the dynamics of how the factors in question operate to get particular results.

This study paid special attention to the role of the people thought to have ‘deep knowledge’ of the dynamics that surrounded the development of the local MET curriculum. Extensive face-to-face interviews were done with them to explore the role of pioneers and other categories of staff that contributed to and witnessed the development of the local MET curriculum.

Methodology
This qualitative study took the case study design. Yin (2009) held that the case study approach to research studies a case within its real-life, contemporary context or setting.

The purpose of this single-case study was to explore the development of the MET curriculum in Jamaica. It also studied the sustained viability of the MET curriculum. In verity, the purpose of this research was:
1. To write the story of the development of Jamaica’s MET curriculum and the institution that houses it.

2. To examine the market requirements of the maritime industry in giving curricular directions to the local MET curriculum over the years.

3. To identify the strategies that were deemed to be most effective in transitioning the MET curriculum in the journey from initial establishment to 2020.

4. To identify the most effective strategies utilized by the tertiary institution to encourage and sustain the viability of the MET curriculum.

5. To explore the perceived effectiveness of the current curriculum towards the preparation of graduates.

Case design
This study fits Yin’s criteria for the embedded single-case design. In this case, the organization in which the MET curriculum is delivered is a logical subunit of the case.

Case definition
Kelly (2004) noted that there are three major areas of curriculum: curriculum as content, curriculum as product and curriculum as process. The MET curriculum in Jamaica subsumes these ‘ideologies’ and the examination of this curriculum (both the curriculum at inception and the current curriculum) necessitated an examination of content, product and process. This examination also explored the product - the graduates - and the role of the MET curriculum in the development of that product.

This single-case exploratory case study was guided by the following questions:

B. How has a selected tertiary institution in Jamaica developed and sustained the viability of its MET curriculum since its inception?

6. What is the story behind the development of the MET curriculum in Jamaica?

7. What are the market requirements of the maritime industry that impacted the development of the MET curriculum?

8. What strategies were deemed by stakeholders to be the most effective in transitioning the MET curriculum in the journey from initial establishment to the present (2020)?

9. What were the most effective strategies utilized by the tertiary institution to encourage and sustain the viability of the local MET curriculum?

10. How effective is the current curriculum towards the preparation of graduates in the tertiary Institution?

For this study, the participants in the sample were selected based on the role they play/played in the development, operationalization and establishment of the MET curriculum. This included at least four basic groups; technocrats, the curriculum and instructional managers/practitioners, the students and marketplace stakeholders.

Data sources
This research was informed by three sources of data. These were individual interviews, focus group discussions and the examination of artefacts. As such, the interviewing method of data...
collection was complemented by the review of artefacts and archival records. Records were analyzed across all four decades of the existence of the local MET curriculum.

Population
Bassey (1999) as cited in McGloin (2008) found that the case study approach provided not only a mechanism for theory-seeking and theory-testing but for storytelling as well. This is so as the case study is ‘anchored in real-life situations’ and an examination of such situation results in a rich and holistic account of the phenomenon (Merriam and Tisdell, 2016) With this understanding in mind, Banerjee and Chaudhury (2010) explained that “in descriptive studies, it is customary to define a study population and then make observations on a sample taken from it. Study populations may be defined by geographic location, age, sex, with additional definitions of attributes and variables such as occupation, religion and ethnic group.” (p. 62).

The delimitations of this study established the local MET institution as the theater in which Jamaica’s MET curriculum is enacted and as such, it is the case-the bounded system to be studied. The entire local MET institution community and those legislatively and operationally allied to its sustained viability constitute the population of this study. All players in this case-this bounded system (Merriam and Tisdell, 2016) were open to be called upon to describe the phenomenon of the MET curriculum in Jamaica.

Specifically, the following entities were subsumed in the population under study:

1. The local MET institution
2. Government entity in charge of Maritime Business and MET
3. Government entity in charge of ports
4. Government ministry with oversight for local MET institution

Site
To answer the questions posed, the data was collected primarily at several sites which housed personnel affiliated to the MET curriculum.

Sampling strategy
Following the postulations of Merriam and Tisdell (2016) that there must be sampling within the case (p. 99), several persons made up the sample for this study. Ritchie and Lewis (2007) saw the primary defining features of a case study as being multiplicity of perspectives which are rooted in a specific context which is seen as critical to understanding the researched phenomena (p. 76). This in mind, the sampling strategy that was used for this study was the purposeful sampling strategy. With this sampling strategy, “the inquirer selects individuals and sites for study because they can purposefully inform an understanding of the research problem and the central phenomenon under study.” (Creswell, 2013, p. 156).

Sample
The sample was homogeneous as participants were “chosen to give a detailed picture of a particular phenomenon.” (Ritchie and Lewis, 2007 p. 83). Creswell (2013) concurred with this thought as he noted that the case study is about studying an ‘event, program or an activity’. In this study, the ‘particular phenomenon’ was the development of the MET curriculum in Jamaica as shown in the development of the local MET institution. The researcher focused on selecting participants who could give information on the development of the MET curriculum. This included at least four basic groups; Curriculum Pioneers (to include
Findings
The central question that guided this study was:

‘How has a selected tertiary institution in Jamaica developed and sustained the viability of its MET curriculum since its inception?’

Additionally, there were several sub-questions that served to probe various aspects of the phenomenon under study—the local MET curriculum. These sub-questions and the findings from them are laid out below.

RQ1. What is the story behind the development of the MET curriculum in Jamaica?

(1) Several contributory factors preceded the advent of Jamaica’s MET curriculum.

(2) The Jamaican Government had a key role in the formation and delivery of the local MET curriculum.

(3) A bilateral agreement with the Kingdom of Norway had an impact on the genesis of the local MET curriculum.

(4) Operationalization was achieved through teaching, learning and infrastructure development.

RQ2. What are the market requirements of the maritime industry that impacted the development of the MET curriculum?

(1) Several development milestones were achieved in the second decade of MET operations in Jamaica.

(2) New requirements for the local MET curriculum emerged as United Nations/International Maritime Organization (UN/IMO) initiatives were created in response to increasing global demand for MET.

(3) Opportunities that emerged for regional expansion and partnerships made new demands on the local MET curriculum over the four decades.

(4) Industry requirements for the local MET curriculum were driven by international legislation and other pervasive imperatives.

RQ3. What strategies were deemed by stakeholders to be the most effective in transitioning the MET curriculum in the journey from initial establishment to 2021?

(1) Quality Assurance was one of the effective strategies in ensuring global compliance with the local MET curriculum.

(2) The engagement of industry stakeholders in instruction and curriculum processes had been proven to be an effective strategy in the curriculum development process.

(3) Industrial attachment to include work experience and field trips had also been an effective strategy in maintaining the relevance of the local MET curriculum.

(4) Meeting direct market needs and maintaining fitness for purpose of the local MET curriculum had been an effective strategy used to cement its relevance.
(5) Collegial coaching and collaboration of faculty is another effective strategy in transitioning the MET curriculum over four decades.

*RQ4.** What were the most effective strategies utilized by the tertiary institution to encourage and sustain the viability of the local MET curriculum?*

(1) Industry input in the curriculum planning process was an agreed effective strategy for sustainability of the curriculum.

(2) Providing relevant training to supply market needs was an effective strategy in making the curriculum viable.

(3) Strategic partnerships that augment the curriculum and instructional processes support the sustainability of the local MET curriculum.

*RQ5.** How effective is the current curriculum towards the preparation of graduates in the tertiary Institution?*

(1) The curriculum seems to be effective in the local context as graduates are quickly absorbed in the industry.

(2) The curriculum seems to be effective because of the marketability and portability of the graduates in the global maritime business.

“How has a selected tertiary institution in Jamaica developed and sustained the viability of its MET curriculum since its inception?” The response to this question will, among other things, reveal what Fullan (2006) described as ‘change theory’. Fullan noted change theory is a theory of action. This is so as, according to Nair (2019), change theory is a set of assumptions about how to move from one’s current state to a desired future state. The move from what was the state of the Jamaican maritime context prior to the establishment of the local MET curriculum and then the further move to the establishment of said curriculum in 1980 has morphed into this current (post 2020) curriculum. There was no static period. Continuous, calculated and careful change has benchmarked this evolution. This gives credence to Fullan’s action-oriented theory. Fullan (2006) implies that in each context where action-oriented change occurs, there are assumptions made by practitioners as to how that change process will work. In speaking to the larger maritime context in which the local MET curriculum is subsumed, Salopek (2015) noted that more than 90% of goods traded worldwide are transported via container ships; this has resulted in an industry estimated at an annual US$6tn. This reality was supported by Balci and Cetin (2017) who held that container lines are crucial for international trade and global supply chains. It is this powerful industry that gave birth to the International Maritime Organization.

The convention that established the IMO in 1959 was several decades ahead of a local MET curriculum. In this wise, there are several contributory factors that preceded the advent of Jamaica’s MET curriculum. Jamaica joined the region in the decision to invest in a West Indies Shipping Corporation (WISCO). Jamaica ratified the WISCO agreement on April 26, 1976. Subsequently, the Government of Jamaica established the JMM. The formation of the JMM gave rise to a need for competent persons to man these vessels for international trade. This human element need propelled the Jamaican government of the day—the Manley regime of the 1970s—to pursue key strategic partnerships that redounded to the establishment and delivery of the local MET curriculum. As such, the Jamaican Government had a key role in the formation and delivery of the local MET curriculum. Cunningham (2015) posited that, “the training and education of the human element is paramount for an effective and efficient global Maritime Industry” This training and education is what Jamaica sought and achieved when it signed a bilateral agreement with the Kingdom of Norway that devolved into the 1980 genesis of the local MET curriculum. Costel et al. (2016) asserted that the MET curriculum is a global one.
They further held that forecasts for training rely on the world trade. This has proven true in the case under study in this research as the local MET curriculum— from these early beginnings—has continued to grow for these four decades of its existence. Its viability has continued to parallel the viability of the global maritime industry. Fullan (2006) deemed as flawed the inability standard-based theories to consider the setting in which practitioners’ function. It is therefore very important to carefully examine and to understand the larger context (global, regional and cultural) context in which local MET curriculum practitioners enact change.

Tyler (1949) in Portuondo (1997) asserted that curriculum is all the learning experiences planned and directed by the school to reach the school’s educational goals. The mention of the school facility helps one to appreciate that the history of the local MET curriculum is closely intertwined with the history of the local tertiary institution. Though there is a symbiotic connection between the two, they are not one and the same. The reality of the local MET curriculum is that its operationalization was achieved not only through teaching and learning but also through infrastructure development—in verity the building out of a school plant. This plant from its early basic infrastructure has grown into a state-of-the-art facility to accommodate the global curriculum. Consideration must be given to this embedded element of the specialized tertiary institution. This is so as it is a part of what Fullan (2006) called the Professional Learning Community (PLC). The local MET curriculum must be placed within the global, regional and local PLC. The physical plant that facilitates delivery of the curriculum is a monument, of sorts, on the landscape of the local PLC.

Discussion

Implications for theory and research

Fullan (2006) defined change theory as a theory of action. He strongly held that, “change theory can be powerful in informing education reform strategies.” Nair (2019) who supported and enlarged his postulations expressed the view that, “change theory is not just applied to the curriculum but to the context and those elements that support curriculum growth and development.” These matters of action, the growth and developmental context of the MET curriculum— as being discrete from that curriculum—are indicative areas that need to be reviewed in any curriculum (more so specialized HE curricula). These elements have been shown to be relevant in the development of the MET curriculum in Jamaica. In this study, it has been shown that factors such as local political ideation and multilateral agreements can impact and shape the curriculum. While governments and technocrats do the visioning and strategic thinking, it is the curriculum planners, practitioners and managers who ensure the operationalization of curriculum through the various curriculum processes such as engineering, implementation and evaluation. All this is buttressed by infrastructure development and examination of the output (placement and performance of graduates). These considerations must be accounted for in theory and examined by research.

In promulgating his theory, Fullan (2006) speaks to curriculum growth as a product of ‘shared vision and ownership’ among stakeholders. These stakeholders include those who can communicate market needs. Specialized HE curriculum (as is the case with the MET curriculum) serves specific professional niches with market requirements unique to those industries. This study shows that it is the demands of the maritime industry that impacted the development of the MET curriculum. This reality is enlarged by the fact the MET is a global operation, regulated by common treaty agreements. Since the curriculum is not merely a domestic arrangement, attention should be given to those requirements that are born of industry requirements. It is also important to note that because of globalization, it will become more frequent for curriculum to be driven by international legislation and other pervasive imperatives. Curriculum practitioners must place these imperatives in the local context while operating in a global space and being sensitive to the wider community of curriculum stakeholders.
Nair (2019) in Fullan (2006) said that “theories of action are a set of assumptions about how one can move from its current state to its desired future”. These key ideas of action, education reform strategies and moving to a desired future – as relates to the curriculum – were interrogated in this study. As some sort of response, respondents enumerated what they deemed to be the most effective strategies utilized by the tertiary institution to encourage and sustain the viability of the local MET curriculum. Fullan’s theory calls reflective action that is executed in a cyclical model that lends to continual improvement for curriculum change and sustainability. This discourse is similar to other thoughts (from theorists and researchers) who call for a 360-degree examination of educational phenomena. Curriculum, as a discrete phenomenon in education, needs to receive the benefit of greater examination from theorists and researchers. This will lead to more empiricism in discourses pertinent to curriculum sustainability. These include matters such as industry input in the curriculum planning process and the effectiveness of this as a strategy for the sustainability of the curriculum.

The treatment of HE as a service industry has gained traction globally. Smith Johnson (2020) noted that; Jamaica has signed onto the World Trade Organization’s (WTO) General Agreement on Trade in Services (GATS), presenting the HE sector as one area that can be included in Jamaican service trade. The WTO (2018) advised that the purpose of the GATS is to stimulate ‘economic activity’ and promote trade and development globally. When HE is to be used as a tool to ‘stimulate economic activity’ and ‘promote trade and development globally’ there must then be conscious, purposeful and concerted effort to keep abreast with innovation in HE and the marketplace it serves.

The placement of the HE product as a commodity that is streamlined in a niche market is also seen in the treatment of the local MET curriculum with the application of the Blue Ocean strategic thought to positioning it in the HE market. This would suggest that ‘product placement’ in specialized HE is important to the growth, development and longevity of that course of study.

The need to give attention to this idea of ‘product placement’ as far as the MET curriculum is concerned, is growing even as the industry grows. Jean-Marie (2016) opined that ‘more and larger containerships will require investment in ports, infrastructure, technology and services to ensure that the flow of business remains efficient. The global maritime business continues to grow and is a permanent part of local, regional and the international trade experience. O’Neil (2003) further posited that the sustainability of shipping (to include safety, security and the preservation of the environment) will be determined to a large extent by the people employed in the sector. This is the ‘human element’ need that propels the local MET curriculum and by extension its viability. This reality demands that there be a marriage between the traditional curriculum and instructional understandings and the twenty-first-century imperatives that drive maritime business and the supporting MET curriculum.

Conclusions
The following conclusions can be drawn from the data gathered in this study:

1. The story of the local MET curriculum is that it is the product of a highly collaborative and forward-thinking process. This as the local MET curriculum was the brainchild of local perspicacity that was empowered by international benevolence and the magnanimity of the Norwegian people. Classic curriculum theorist- Beauchamp (1981) postulated that collaboration is fundamental to curriculum engineering.

2. The market requirements of the maritime industry are in verity what impacted the development of the MET curriculum. Viorica (2015) noted that any improvement embarked upon in the industry has a limit if attention is given only to the ‘structural, mechanical, electrical and electronic components of the ship’. In this declaration, Viorica was making an argument for greater attention to be given to the preparation of the human
element (synonymous with MET). MET is thus identified as but one area of the business of shipping. Dirks (2001) spoke to the existence of other industry imperatives such as Port State Control (PSC). Interestingly, Jamaica legislated PSC mechanisms and achieved several other development milestones (for example, a legislative Act regulating local delivery of the local MET curriculum) in the second decade of local MET operations. With this PSC legislation, new requirements for the local MET curriculum emerged. This follows the postulations of Hare (1997) who rendered PSC as; “a concept which involves the powers and concomitant obligations vested in, exercised by, and imposed upon a national maritime authority (or its delegate) by international convention or domestic statute or both.” Hare is supported by the MAJ (2003) which stated that:

Hare is supported by the MAJ (2003) which stated that:

In 1987 Jamaica became a party to the International Maritime Organization’s convention which establishes minimum Standards for Training, Certification and Watch-keeping of Seafarers (STCW 78). The training was designed in accordance with the Norwegian and British systems of training for seafarers and was well above the minimum standards required by the IMO STCW 78 Convention (MAJ, 2003, p.3).

Apart from meeting IMO STCW obligations, under the auspices of the MAJ, local MET operations—as a subset of local maritime business—were poised to benefit from UN/IMO initiatives which were created in response to increasing global demand for MET. These included opportunities for regional partnerships for IMO training and scholarships at the World Maritime University. In this environment, opportunities that emerged for regional expansion and partnerships made new demands on the local MET curriculum. In light of this, one can safely agree with Pinar et al. (1995) who presented the view that curriculum is political and that schools make their impact on society through the shaping of human consciousness. This view is held up by the history of the local MET curriculum. This is so as, industry requirements for the local MET curriculum were driven by international legislation and other pervasive imperatives. The political thinkers and other stakeholders in the local maritime industry were cementing their place in regional maritime politics/economics.

3. Quality assurance was one of the most effective strategies utilized in transitioning the MET curriculum from its initial establishment to the present (post 2020). This finding falls in with the view of Tuljak-Suban and Suban (2013). In their analysis of the role of quality assurance in MET in Europe, they found that management-oriented evaluation with its plan, do, check, act (PDCA) model renders a complete process as planning and implementation is followed by evaluation and regenerative action. Another effective strategy in this journey is the engagement of industry stakeholders in instruction and curriculum processes which proved important in the development of the local MET curriculum. This, when viewed in light of the postulations of Sam and van der Sijde (2014), is a prudent and useful strategy. Sam and van der Sijde (2014) asserted that in this age of globalization, HE is essential to the survival of learners in their various societies.

A fourth strategy that was seen to be effective in transitioning the local MET curriculum in the journey from initial establishment to the present (post 2020) was ensuring its ability to meet direct market needs and thus maintain its fitness for purpose. This has been an effective strategy used to cement its relevance. Abeles (2006) in exploring the future of the university as a social institution made the assertion that market need is one factor that challenges the traditions of universities in the 21st century. Abeles further hold that in this age, universities must reexamine their purposes and modes of operation as institutions against market needs to ensure sustained viability. This reality was echoed in the work of Plewa, Galán-Muros and Davey (2015) who saw that the HE curriculum must be aligned with business needs. This they held can be achieved through collaboration between HE Institutions and businesses. This collaboration supports
several of the aforementioned strategies to include the mapping of market needs to achieve fitness for purpose of the curriculum. Industry input, relevant training and strategic partnerships that augment the curriculum and instructional processes support the sustainability of the local MET curriculum. The data seems to coalesce on the view that industry input in the curriculum planning process of the local MET curriculum is the best strategy for the continued sustainability of the curriculum. Providing relevant training to supply market needs is the outgrowth of industry input in the curriculum processes. This has lent to the viability of the local MET curriculum over its four decades of existence. Welner and Oakes (2008), hold that efficiency – that is-high productivity should be considered in the ideals of educational policy. This has been achieved in the local MET curriculum through strategic industry partnerships that augment the curriculum and instructional processes that have supported its sustainability.

4. How effective is the current curriculum towards the preparation of graduates?

- The curriculum seems to be effective in the local context as graduates are quickly absorbed in the industry. It was found that constant review of the local MET curriculum lent to the marketability of graduates. Marketability further proved crucial to graduate preparation. This reality spoke to the effectiveness of the local MET curriculum. The use of industry feedback to tailor the curriculum and instructional processes also lent to its effectiveness in the preparation of graduates. The effective preparation of graduates is an essential consideration in HE. Gibb and Hannon (2006) as cited in Sam and van der Sijde (2014) assert that “the university degree is regarded as no longer a voucher for lifelong employability but merely an entry ticket into the world of work.”

- The curriculum seems to be effective because of the marketability and portability of the qualifications obtained by graduates in the global maritime business. Shipping maintains its dominance as a primary trade among nations. Where there is a trade, there is a need for competent tradesmen. That said, the continued growth and global dominance of the maritime industry is what gave birth to the local MET curriculum. This growth is also the bellwether for the future relevance of the MET curriculum generally and the local MET curriculum in particular.

Final words

It has been pointed out here that the challenge of the MET curriculum in Jamaica since the early 1990s has been to remain relevant, sustainable and a globally recognized brand whilst functioning as the lynchpin for a viable training organization. The impact of the maritime industry and the curriculum pertains to more than economics and education; it is also sociological and geopolitical. Indeed, the local maritime industry cements Jamaica’s place in the discourses and decision-making halls of global maritime politics/economics. The local MET curriculum, in many ways, indexes the nation’s substantive stake in the global maritime business. The records show that the local MET curriculum in Jamaica is a state-mandated curriculum. The activities carried out within its walls, redound to the building of Jamaica’s maritime conscience and her sustained viability as a maritime state. The government’s initial vision was to establish a ‘Seaman’s school’. That vision has been kept alive for four decades. The local MET curriculum continues to be relevant.

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Further reading


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