JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue
JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)
An International Scholarly Open Access, Peer-reviewed, Refereed Journal

Total Quality Management (TQM) in Maltese Post-Secondary Education: A Strategy for Continuous Improvement

Josephine Ebejer Grech
Central Mediterranean Business School - Malta

Abstract

The aim of this study was to explore the perceptions of post-secondary educators in the Maltese islands regarding the potential of Total Quality Management (TQM) at this education level. It also sought to identify the factors that educators in Malta consider important for enhancing the quality of education in their sector. To achieve this, a thematic analysis of local and international policies, documents, and studies related to TQM, particularly in post-secondary education, was conducted. The findings from this analysis informed the development of a web-based quantitative survey, which was distributed to all 258 educators across five post-secondary schools in Malta and Gozo. A total of 163 valid responses were received, highlighting key factors that educators believe contribute to improving education quality, grouped under the themes of leadership and management, teaching and learning, and school ethos.

Keyword: *students, leadership, teaching, learning, ethos*

INTRODUCTION

The role of education in shaping the trajectory of a nation cannot be overstated. In Malta, education has long been regarded as a pillar for economic and social progress. In fact, education expenditure in 2022 was 5.5% of the country's GDP, surpassing the EU average of 4.9% (European Commission, 2023). Post-secondary education in Malta plays a critical role in preparing students for further education, employment, or vocational training. It is at this stage that many students, aged 16 to 18, make pivotal decisions about their future career paths. Quality education is essential not only for their employability but also for their personal development and well-being (Cristina, 2012).

In the foreword of *A Quality Assurance Framework for Education in Malta*, Dr Grima emphasises that continuous monitoring and evaluation, along with constructive feedback, are vital in enabling educators to deliver high-quality education (Grima, 2023). Continuous monitoring and evaluation are central to the philosophy of Total Quality Management (TQM), which has successfully improved education quality in various institutions worldwide. Given that Malta has a directorate dedicated to quality assurance for pre-compulsory and compulsory education: Directorate for Quality and Standards in Education (DQSE) and an authority overseeing quality at the tertiary level: Malta Further and Higher Education Authority (MFHEA), the author decided to explore whether TQM could be adopted to raise the quality of education in the post-secondary sector.

Ms Denise Gatt, the Director for Quality and Standards in Education, explains that the goal of the *Quality Assurance Framework for Education in Malta (0-16 years)* is to establish common criteria defining quality in education. This empowers schools to "become more autonomous in evaluating their internal improvement plans and thus increase the level of accountability towards development and improvement" (Gatt, 2023, p.9). Similarly, this study aimed to identify themes and sub-themes from the literature that could serve as criteria to define quality in post-secondary education. The author shares Gatt's vision, intending to empower post-secondary schools to become more self-sufficient in assessing their internal progress, enhancing their accountability for improvement and development.

The author also drew inspiration from the national strategy outlined in *Visioning the Future by Transforming Education* (MEYR, 2023), which will be implemented over the next six years. The author argues that high-quality education is equally important at the post-secondary level. The study outlines how the three pillars of this strategy—Wellbeing,

Growth and Empowerment, and Equity and Inclusion—align closely with the principles of TQM, particularly when applied to the post-secondary context. For example, the theme of wellbeing, which extends to all stakeholders, is a sub-theme proposed under the broader theme of TQM leadership and management. Moreover, the pillar of Growth and Empowerment is reflected in the ethos of setting high expectations for students, while the pillar of Equity and Inclusion is highlighted through themes that advocate for collaborative efforts to provide quality education for students with diverse needs.

LITERATURE REVIEW

This section reviews the literature on educational leadership and Total Quality Management (TQM) in educational institutions globally, focusing on leadership's role in promoting high-quality learning environments. It explores how educational leaders influence academic settings and examines TQM implementation worldwide to form a cohesive framework.

Educational Leadership

Leadership is critical to achieving quality in education (Bush et al., 2019). Various leadership styles, such as transformational and situational, are explored, with transformational leadership noted for its effectiveness in significant educational reforms, such as Malta's decentralisation of schools and the introduction of vocational training (Xuereb, 2020). Transformational leaders, as Onorato (2013) describes, use proactive methods, including intellectual stimulation and individual consideration, to implement change. Attributes such as empathy and collaboration are essential for leaders to raise educational quality and foster a culture of trust and cooperation (Onorato, 2013). This trust is vital for introducing TQM, as staff confidence and professional abilities must be acknowledged (Krein, 2023).

Operations Management in Post-Secondary Schools

Heads of Schools (HoS) are responsible for strategic and operational decisions that shape the school's long-term service delivery (Slack & Lewis, 2020). This includes aligning the school's mission and vision with its operations strategy, distinguishing the school's Unique Value Proposition (UVP), and ensuring effective competition in attracting students (Roy et al., 2021). The "School Development Plan" annually assesses these operations, focusing on areas like leadership, curriculum, and resources (DQSE, 2014).

Total Quality Management (TQM)

TQM in education refers to the continuous improvement of all processes, people, and structures, ensuring excellence in service delivery (Roy et al., 2021). Implemented widely across countries such as the US, UK, and Finland, TQM has proven effective in raising educational quality (Sfakianaki, 2021). The collaborative effort of all staff is key to TQM success, and schools must tailor their approach to fit their specific needs, incorporating a SWOT analysis to guide improvements (Sallis, 2002). Continuous improvement methods, like Kaizen, can further enhance operational effectiveness (Sallis, 2002). In the context of total quality management in post-secondary schools, *Kaizen* refers to a continuous improvement approach that involves all stakeholders, administrators, educators, and students, in systematically identifying and implementing incremental changes to enhance educational processes, outcomes, and overall institutional quality.

Impact of TQM on Staff and Student Satisfaction

Studies show that TQM enhances staff satisfaction, leading to better performance and commitment (Boulder et al., 2015). Similarly, student satisfaction increases when schools implement TQM, as it improves teaching methods and ensures student feedback is considered, aligning with priorities highlighted by the European Commission (Pulis, 2018).

Themes from the Literature Review

This study focuses on three core themes derived from literature: leadership and management, teaching and learning, and school ethos. Leadership encompasses staff training, process improvement, and evaluation, while teaching and learning cover student-centred education, and ethos reflects the school's relationships and community ties. By concentrating on these themes, the study aims to develop a framework for applying TQM to enhance education quality in Malta's post-secondary schools.

METHODOLOGY

The study began with a comprehensive analysis of literature on Total Quality Management (TQM) in post-secondary education, using primary and secondary sources. Based on this analysis, a quantitative web-based survey was developed, influenced by W. Edward Deming's emphasis on the use of numerical data for validation. The survey was finalised after discussions with the Deputy Director of Quality Assurance and the Head of School, followed by a pilot study to refine the questionnaire. It was then distributed to 258 educators across five post-secondary schools in Malta and Gozo, resulting in 163 valid responses. The data collected was analysed quantitatively, focusing on factors related to leadership, management, teaching, learning, and school ethos that educators deemed important for improving education quality.

Ethical considerations were central to the research process, with informed consent obtained from participants and strict adherence to confidentiality and anonymity protocols. The study was cleared up by the Ministry for Education, Sports, Youth, Research and Innovation (MEYR), the Head of College Network, the Secretariate for Catholic Education, and the Heads of Schools. Throughout the process, participants were assured of their autonomy, with clear communication about the research's purpose and findings. Safeguards were in place to ensure there was no risk of physical, moral, or business harm to the respondents or the schools involved.

FINDINGS

A total of 163 valid responses were collected. These educators agree that the main three themes identified in the literature, which are leadership and management, teaching and learning and school ethos all contribute to higher quality education.

Leadership and Management

Educators agreed with all the sub-themes proposed under the theme of Leadership and Management. They emphasised that the wellbeing of the whole school community should be prioritised, and ethical values should be integrated into the school culture to foster respect, self-discipline, motivation, empathy, and collective responsibility, promoting holistic development. The mission, vision, and values of the school must be established by the entire staff, not just the senior leadership team (SLT), and the SLT should promote best pedagogical practices for curriculum enrichment. Policies should be updated regularly to ensure consistent actions that align with the school's mission, vision, and values. Additionally, the senior leadership tema (SLT) and Heads of Departments (HoDs) should ensure adequate teaching hours, tutorials, and practical sessions for all subjects, while also providing flexible learning programmes tailored to students' needs. Opportunities for professional development should be accessible to the entire community, and collaborative partnerships with other educational institutions should be established to create better opportunities for students. Furthermore, the SLT should ensure the school's environment is safe, accessible, inclusive, and clean, with appropriate amenities, while also making the best use of financial resources. It is vital that all teaching staff are equipped with necessary materials, newly recruited staff receive adequate induction, and staff members' qualities and potential are recognised and appreciated. Finally, the SLT should ensure that all staff experience professional fulfilment and seek timely solutions to problems, adapting to unexpected challenges.

Teaching and Learning

Educators concurred with all the sub-themes proposed under the theme of Teaching and Learning. They emphasised that every lesson should be well planned, clearly outlining learning outcomes, sequenced activities, and engaging tasks tailored to meet the diverse needs and abilities of students. Teachers delivering the same content should collaborate to create assessments that effectively monitor and record student progress. Collaboration between teachers and Learning Support Educators (LSEs) is crucial to ensure quality education for students with different needs. Additionally, it is important to motivate students to take responsibility for their own learning and foster the development of skills relevant to the 21st century. A scaffolding approach should be employed whenever possible to stimulate prior knowledge and build on it with new content. Teachers are encouraged to actively involve all students in deepening their understanding and helping them develop effective learning strategies and problem-solving skills. Furthermore, teaching staff should regularly evaluate the teaching and learning processes to identify areas for improvement, while technical staff should also review their practices with the aim of enhancing them.

School Ethos

Educators fully support the sub-themes outlined under the theme of School Ethos. They highlight that all staff members should experience a sense of professional fulfilment within the school environment and work passionately towards embracing the school's mission, vision, and values. Educators are encouraged to build healthy relationships with students through their awareness, empathy, and cultural competence. The school community is expected to challenge stereotypical assumptions in a respectful manner. Additionally, the school's policies should align with national guidelines, focusing

on effective behaviour management, promoting positive behaviour, defining rights and responsibilities, and creating a secure learning environment. These policies should also foster restorative practices and effective disciplinary measures. The school celebrates the diverse abilities of all students and sets high expectations to help them achieve their full potential. Furthermore, efforts are made to ensure high student attendance, and the school offers students the opportunity to form a Student Council where they can express their views, take initiative, and provide solutions to enhance their learning experience. The school ensures that students are given the necessary support to operate effectively within this council.

DISCUSSION

TQM requires effective leadership to succeed. School leaders play a vital role in driving the culture of continuous improvement and ensuring that all staff members are working towards the same goals. Transformational leadership, which prioritises collaboration, intellectual stimulation, and motivation, is particularly suited to the TQM philosophy (Onorato, 2013). For TQM to be successfully implemented in post-secondary schools, it is essential that leaders continue to engage all staff members in the process of quality improvement.

Teaching and learning are central to the success of TQM in education. By collaborating on lesson planning, assessment methods, and pedagogical strategies, teachers can ensure that they are meeting the diverse needs of their students. The focus must be on fostering student-centred learning, where students are encouraged to take responsibility for their own education and develop the critical thinking and problem-solving skills needed for success in the 21st century (Neyestani, 2017).

The ethos of the school plays a crucial role in shaping the learning environment. Schools must foster a culture of respect, collaboration, and inclusion, where all students feel supported in their academic and personal growth. This is particularly important in the post-secondary sector, where students are navigating a period of significant transition and may require additional support to cope with the demands of their studies.

Challenges and Criticisms of TQM in Education

While TQM has proven successful in many contexts, its implementation in education is not without challenges. Some critics argue that TQM, originally designed for the manufacturing sector, does not always translate well to educational settings (Kanji et al., 1999). Educational institutions argue that they are not driven by profit but by the goal of providing a public service — namely, education. As such, the metrics used to evaluate success in a TQM framework may not always align with the values and goals of educational institutions (Houston, 2007).

Furthermore, the success of TQM in education depends on the commitment and collaboration of all stakeholders. Without collaboration from staff, students, and administrators, the implementation of TQM can become superficial, with little real impact on educational outcomes. It is therefore crucial that any attempt to introduce TQM in Maltese post-secondary schools be accompanied by thorough training and support for staff, as well as clear communication about the goals and benefits of the philosophy.

CONCLUSION

The implementation of TQM in Maltese post-secondary education has the potential to significantly improve the quality of education provided at this critical stage. By fostering a culture of continuous improvement, TQM can help schools standardise their internal review processes, engage all stakeholders in the pursuit of excellence, and ensure that students receive the highest quality education possible. However, for TQM to succeed, it must be carefully adapted to the unique context of post-secondary education, with a focus on leadership, teaching, and school ethos. With the right support and commitment from all stakeholders, TQM could provide the framework needed to elevate the quality of post-secondary education in Malta.

Limitations

The primary limitation of this research lies in the nature of questionnaires, which do not allow for interpretive responses (Dewaele, 2018). Despite the offer of clarification, no participants sought assistance, suggesting either complete understanding or reluctance to engage further. The restriction to a quantitative method also limited deeper insight into the motivations behind responses, and there was no way to distinguish between genuine and insincere answers.

Overall Contribution

This study provides valuable insights into the potential of TQM to enhance the quality of post-secondary education, a topic that has not been widely explored. The study also highlights the relevance of themes and sub-themes drawn from the literature, which could serve as criteria for developing a quality assurance framework at this level.

Recommendations for Future Research

Future research should adopt a qualitative approach to gain more comprehensive insights into respondents' answers. Additionally, exploring students' perspectives on educational quality could provide a more holistic view of the factors that contribute to enhancing post-secondary education. Such studies would support the development of a quality assurance framework tailored specifically to post-secondary institutions, similar to the national framework for compulsory education.

As the research suggests, post-secondary institutions can benefit immensely from structured quality assurance mechanisms that promote collaboration, continuous evaluation, and a shared commitment to excellence. TQM, with its holistic approach to quality improvement, offers a promising solution to these challenges, enabling schools to meet the evolving needs of their students and the broader Maltese economy.

REFERENCES

Boulder, B., Kissoon-Charles, L. T., Based, D., & Toya, L. (2015). Total Quality Management in higher education institutions: challenges and future directions. *International Journal of Productivity and Quality Management*. https://doi.org/10.1504/IJPQM.2010.032962

Bush, T., Les B., And Middlewood, D. (2019). *Principles of Educational Leadership & Management*. 3rd ed. SAGE Publications.

Cristina, D. (2012). In *Teachers' code of ethics and practice*. Ministry for Education and Employment. https://education.gov.mt/en/Ministry/Documents/New%20Code%20of%20Ethics%20Doc%20EN.pdf

Dewaele, J.M. (2018). Online Questionnaires. In: Phakiti, A., De Costa, P., Plonsky, L., Starfield, S. (eds) *The Palgrave Handbook of Applied Linguistics Research Methodology*. Palgrave Macmillan. https://doi.org/10.1057/978-1-137-59900-1_13

European Commission. (2023). *Education and training monitor 2023 - Malta*. Directorate-General for Education, Youth, Sport and Culture. Accessed December 29, 2023. https://op.europa.eu/en/publication-detail/-/publication/9851f113-8cda-11ee-8aa6-01aa75ed71a1/language-en

Gatt, D. (2023). In MEYR, *A quality assurance framework for education in Malta (0-16 years)*. Government of Malta - Ministry for Education, Sport, Youth, Research and Innovation. https://educationservices.gov.mt/en/dqse/Documents/publications/Framework-EN.pdf

Grima, C. (2023). Forward by Minister. In MEYR, *A quality assurance framework for education in Malta (0-16 years)*. Government of Malta - Ministry for Education, Sport, Youth, Research and Innovation. https://educationservices.gov.mt/en/dqse/Documents/publications/Framework-EN.pdf

Houston, D. (2007). TQM and higher education: a critical systems perspective on fitness for purpose. *Quality in Higher Education*, *13*(1), 3–17. https://doi.org.10.1080/13538320701272672

Kanji, G.K., Malek, A. And Tambi, B.A. (1999). Total Quality Management in the UK higher educational institutions. *Total Quality Management, 10*(1), 129-53. https://www.semanticscholar.org/paper/Total-quality-management-in-UK-higher-education-Kanji-Malek/f1f050588969ea97cb7b4457c6a5c316a82a921d

Krein, U. (2023). What's your take on school leadership and digitalization? A systematic review of publications from the last 20 years. *International Journal of Leadership in Education*. https://doi.org/10.1080/13603124.2023.2237939

MEYR - Ministry for Education, Sports, Youth, Research and Innovation. 2023. *Visioning the future by transforming education. National education strategy 2024-2030*. Government of Malta - Ministry for Education, Sport, Youth, Research and Innovation. https://education.gov.mt/wp-content/uploads/2023/12/NATIONAL-EDUCATION-BOOKLET-DEC-2023-2030.pdf

Neyestani, B. (2017). *Principles and contributions of total quality mangement (TQM).* Gurus on Business Quality Improvement – Selected Works. De La Salle University, Manila, Philippines. https://doi.org/10.5281/zenodo.345428

Onorato, M. (2013). Transformational leadership style in the educational sector: An empirical study of corporate managers and educational leaders. *Academy of Educational Leadership Journal, 17*(1), 33-47. http://jennrauleadershipnotebook.weebly.com/uploads/7/2/9/7/7297738/transformational_leadership_style_in_the_educational_sector__an_empirical_study_of_corporate_managers_and_educ.pdf

Pulis, A. (2018). Mixed methods research on the role of pupils as assessors in quality assurance of schools in Malta. *Management in Education, 32*(1), 40–47. https://doi-org.ife.idm.oclc.org/10.1177/0892020617748152

Roy, D., Sunil, K., And Baskey, S.K. (2021). Total Quality Management in educational institutions. *An International Bilingual Peer Reviewed Refereed Research Journal, 11*(41), 258-263.

https://www.researchgate.net/publication/369885171_TOTAL_QUALITY_MANAGEMENT_IN_EDUCATIONAL_INSTITUTIONS/citation/download
Sallis, E. (2002). *Total Quality Management in education* (third edn). Taylor & Francis.
Sfakiansaki, E. (2021). Critical success factors for Total Quality Management in primary and secondary education. *International Journal – Services and Operations Management, 40*(2), 564-595). https://doi.org/10.15404/IJSOM.2021.120061
Slack, N. And Lewis, M. (2020). *Operations strategy*. (6th ed). Pearson
Xuereb, V. (2020). *Transformational leadership in Gozo's primary schools* [Master's dissertation]. University of Malta. https://www.um.edu.mt/library/oar/handle/123456789/74062

BIOGRAPHY

Josephine Ebejer Grech graduated with a B.Ed. (Hons) in Biology Education from the University of Malta. She later pursued a Postgraduate Diploma in Applied Educational Leadership at the Institute for Education (IfE) Malta, and a Master of Business Administration (MBA) at the Central Mediterranean Business School (CMBS) Malta, in collaboration with Coventry University London. Currently, she is a doctoral candidate at IDEA College Malta. Her areas of interest include quality assurance in education and developing strategies to enhance the resilience and overall well-being of post-secondary students.

