

# System Theory perspectives in Technical Education and Private Vocational Training Policy in Libya

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## ABSTRACT

The educational policy is in harmony with society's potentials that it can be used for the benefit of the educational process and the goals and aspirations that education seeks to achieve; there is no point in drawing up ideal educational policies that the educational reality cannot promote. This research will attempt to reach a suitable model after analysing the subsector through the review of previous studies. It cannot be an ideal model because it is expensive for those who are difficult to fully implement due to the diversity of restrictions in terms of time, resources, available data, etc., that must be dealt with on the ground. This private sector was explicitly chosen, education investors, because problems stemming from the private sector can be solved by adopting policies to improve outputs and harmonise. The outcomes of this study recommended that further research be undertaken in several areas. First, the sample drawn from the populations of TVET in Libya could be further enlarged. This would empower the variances according to the sample size by subgroups of investors such as micro, small, and medium-sized enterprises by underlining the type of regulatory preference in selecting an educational policy and proportionate structure, particularly in different contexts.

## Keywords

System Theory, Technical Education, Private, Vocational Training, Policy, Libya

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## Introduction

The educational policy helps determine a mechanism to measure performance in the educational system and determine the frameworks and principles, and values in the light of the educational process. It also helps in directing and taking decisions to achieve the goals set and identifying the administrative bodies responsible for implementing these policies. Further, it helps solve many educational problems and change the existing educational conditions that are not desirable. If there is no successful education policy, this will result in the loss of enormous human resources and efforts to build educational institutions that will require high costs without achieving the desired goal (Mohammed, 2015) because it tangles on the educational system in any country. It also reflects its society's aspirations and devotes its cultural, economic, social, and political choices. It tries to find the appropriate way to nurture generations as it ensures building the nation's most important capital (Al-Eid, 2019).

The United Nations 2016 report about Libya mentioned: "There is no indication that there is discrimination in education between the two genders, the opportunities and free education are available to all, there is also no indication that there is discrimination based on religion, sectarian, regional, or social status in granting

educational opportunities". However, there is often criticism in local and international studies on the quality of education in Libya. Indicators show the low quality of education. According to this index, Libya was ranked 80th out of 133 countries in 2009 and ranked 135th among 144 countries in 2012. The quality index of scientific research institutions ranked it as low as 91st and 125th during 2016. Therefore, these low indicators show an urgent need to reconsider and develop a comprehensive policy plan for education and must be strictly monitored and continually reviewed to reach the desired goals and keep up with development requirements. The Sustainable Development Goals 2017 stressed that the lack of qualified teachers and trainers creates a threat to quality education for all. General Training Index refers to Libya's low rank during these years, where it ranked 99th in 2009 and fell even further to 143rd in 2017. This shows an overall indicator of the poor level and quality of training in the Libyan education sector.

There are efforts made by the Ministries of Education, Labour and Rehabilitation of Libya (Al-Halaq, 2018) in building new schools with technology and training of teachers. However, previous literature in the manufacture and analysis of educational policies proved that educational policy is not achieved for its objectives. Besides,

there is a lack of an integrated education policy to reform education and develop training during previous periods because of the absence of a comprehensive view and the absence of standards and the future vision of educational policy standards. Vocational training diversification suffers from limited capacity and operational capacity. And the disruption of its structure due to the concentration of training mainly in higher-profit activities, which are not necessarily those most closely linked to development needs. The labour market suffers from the absence of legalisation of levels of craft and industrial labour in general and defining their specifications and standards.

In contrast, production sites suffer from a "lack of quality" for their human inputs, which are the education-training system's outputs, from the angle of skills needed for the productive branch. What skills are no longer just the centre of attention in building the workforce and the ability to produce knowledge? Consequently, the formation of "skills" has gradually been replaced to create experience associated with innovation and creativity.

The educational policy is in harmony with society's potentials and can utilise to benefit the educational process and achieve goals and aspirations that education seeks to achieve. There is no significant reason to draw up ideal educational policies that do not contribute to a holistic education in reality. Thus, a realistic educational approach must be developed. The policy should define and guide the educational system to achieve cognitive, scientific, social, and economic development and formulate its plans and civilised future. The implementation of this policy must provide all the material and workforce resources needed and the cost to meet all the community development plans' demands. Studying comparative educational systems helps to identify the educational system's problems and develop positive solutions and monitor similarities and differences between different educational systems. Also, Comparison contributes to decision-making on vital education issues. It provides educational policymakers with alternatives to policy-making and sound decision-making. The Libyan model of education is one of the most distinctive models at all levels and levels. It has also made clear progress in the education

process, which has positively impacted human development in Libya, based on a set of educational policies. It has a positive reflection on the development of Human money there (Amin, 2018).

No nation can rise intellectually and culturally unless it has a precise, realistic, and flexible education policy derived from society's philosophy, in harmony with its principles and values, and based on scientific foundations. The educational approach based on scientific foundations helps develop plans and build programs that ensure the individual's building of personality according to the community's beliefs and in determining a mechanism to measure performance in the educational system (Baghdadi, 2015). This research continued studies previous That recommended the formulation of the general policies of technical and vocational education. (al-Hallak, 2018) The Libyan state institutions' diligence for technical and vocational education is still deficient, and each institution operates in isolation from its counterparts. This does not contribute to graduates specialises in any skills that make them compatible with modern technology. The labour market currently manages this ( and remained the process of developing the workforce through the national technical education institutions the most critical problems facing the State without actual participation by Almsttmereyn beneficiaries) (Al-Senussi, 2018). Previous research found that an employee who has high job involvement will be more pleased and considerably support the organisation's goals. Teamwork can be increased by participation and can also promote progress. (Yeong, 2017). The main aim is to improve the policy of technical education and private vocational training in Libya.

### Literature Review

The governments have recently begun to pay attention to educational reforms in various aspects of the educational system in the Arab, in line with the spirit of the times and its rapid developments. Several Arab countries have already begun to develop the entire educational process. The call for education development did not exceed educators' attention, and those in charge of the educational process have taken on new political dimensions. It became a demand imposed by the developments that followed the events of

September 11, 2001, and the United States of America's call to reconsider the educational process in the Arab countries, whether we like it or not, that call overshadows the educational process in general. It is fair to mention that efforts are being made to develop the education system in Libya. These efforts have resulted from the challenges dictated and by many incorporating changes and developments internationally and locally. Unfortunately, despite these efforts, there is still much criticism of education policy and education processes in general.

Libya has only participated in one of the Torino Process, as political instability in recent years has prevented the ETF from involving the country in its activities. In December 2017, the General National Accord Minister of Education conflicted Libya's interest in ETF support, specifically to review its TVET system. A particular Torino Process round was launched in 2018 with the participation of stakeholders representing ministries and VET. The European Union focused on supporting small projects for youth and women only due to political and economic instability; the education policy has not been addressed.

The research will examine and address why the education policy has failed to develop technical education and private vocational training in Libya. This is very relevant for two reasons: First: It is possible to understand the methodology, policy, and tools for diagnosing the educational sector through analysing a subsector in the educational system because it is similarly used for the entire plan. Diagnosing all sub-sectors of the educational system may require time and cannot be accomplished within the current research limits. Second: Through the review of previous studies, this research will attempt to determine a suitable model after analysing the subsector, and it cannot be an ideal model because it is expensive for those who are difficult to fully implement due to the diversity of restrictions in terms of time, resources, available data, etc. that must be dealt with on the ground. This private sector was explicitly chosen, education investors, because problems stemming from the private sector can be solved by adopting policies to improve outputs and harmonise.

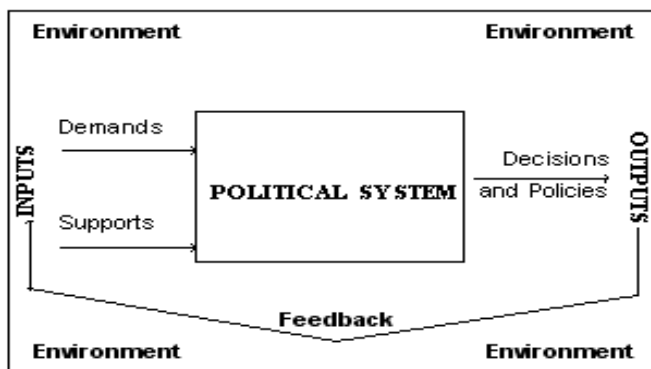
### **Systems Theory**

The history of theory has two stages. From the beginning of the eighties to the mid-nineties, I gave 'the almonds' and 'Powell' priority to studying the political system's perimeter, i.e., its relationship to society (the so-called Return of the total). At this stage, the focus was also on David acetone's contribution, especially on the Input / Output Process feedback, or feedback that are aware of how to accept the environment to the outputs of the political system. In addition to the study of institutions and decision-makers, focusing attention also on the surrounding environment change, especially on the company's stability based on A) to please society.

The development stage in systems theory and the information revolution and then the generalization of the use of the Internet in 1993 led to the use of new methods in performing the associative functions between authoritarian institutions and the societal environment. New concepts emerged such as political rationalization or good governance, electronic government, artificial intelligence in the political analysis (Salim Al-Haj, 2017). In 1994, World Bank defined the Rashad government as: 'How power is exerted around managing the economic and social wealth with a view to development. Good governance has three dimensions: The type of political system; The processes by which power is exercised (in the conduct of the country's wealth); and the government's ability to visualize/build/implement policies (in a way that allows the government to exercise its functions. Kahi (2017) found a relationship between the effect of political interactions on the local environment in the Arab Maghreb countries on the development of public universities in them. However, Salim El Hajj (2017) focused on the impact of Algeria's external and local environment as the current research. Still, he found the effect of the relationship of the social aspect on Algeria's education policy.

Kahi (2017) explained the political system's interaction by saying the components of the political system are distinguished by a set of interactions and relational relationships that differ from other relationships. This does not mean that the political system exists in a vacuum, but rather that it lives in an internal environment that affects it and is affected by it. The social reality does not know the clear separation between the political system and the economic and cultural system. The

current research resort to this separation to facilitate research and define the framework's phenomenon and reveal its variables and interactions between them. So, we start in the current research from the unity of social truth and its interdependence. The various social systems of political, economic, and cultural are linked and complementary to each other. It follows that any scientific analysis of the political system should consider the broader social framework but without being transformed by the political phenomenon to just a dependent variable. He draws attention to a fundamental principle of all systems (Kahi, 2017).



**Figure 1: The Political System of Easton**

### Educational policy

The current research has benefited from this study, which introduces the concepts of education policy and the factors that influence education policy and focused on the need to prepare good industrial education policies through diagnosing education systems in South Africa, Ghana, and Nigeria to see similarities and differences. Who will present this current research but has not developed an analytical framework for identifying strengths and weaknesses? In this research, the comparison is different. As we mentioned earlier, it is of the first type: the interpretation of relationships and knowledge of their causes. Still, Ali revealed the similarities and differences that resulted in cognitive variations that do not help generalisation. The education policy's failure links the undemocratic style of government that affected the preparation of an excellent educational policy for technical education and vocational training. From Arfo (2015), public policies are created through a complex iterative process that can vary in many ways at the level of issues and between countries. The education policy derives from public policy a set of orientations, frameworks, and outlines; for the

state, it reflects its vision and its directions often (Arfo, 2015). The focus is on structures, organisation, duties, and government functions institutions. Policies are sometimes described and analysed where educational policy relates to educational institutions because they implement this policy using organisational charts. Although often uninterested to the masses, organisational charts have the advantage of tackling problems if roads are well deserved (Kahi, 2017).

### Educational policymaking

The beginning of any policy formulation is to identify and formulate the objectives and clarify the essential and sub-original and subordinate, urgent and forward, and direct and indirect (Kahi, 2017). For example, to address the chronic unemployment situation globally, education policies are geared towards reverse transformation, as many graduates of literary disciplines choose vocational and technical education in technical and community. A distinction must be made between general objectives related to vague goals and abstraction, such as the development of national spirit. While the purposes of the unique or procedural are observable and can be evaluated, and maybe cognitive or dynamic (Eid, 2019). for example, if the target is interested in the learner to understand the lesson, then here are measured competencies based on achievement and find solutions according to reality, the conduct of work in any process related to the educational system or one of its components. It is possible to say that when following a particular policy (procedures or arrangements) in dealing with different levels of planning, a distinction must be made between the educational policy (or planning) as a determinant and a guide to the general objectives of the education system. The study indicates that the reality of the educational system's goals in Libya was and remains quantitative. However, it aims to build people and raise students' skills, such as Libya. The difference lies in identifying priority goals between the two systems, but Libya recently started to pay attention to setting priorities. For example, reaching international education gave priority to begin learning English from primary school, not from seventh grade.

### Decision-making

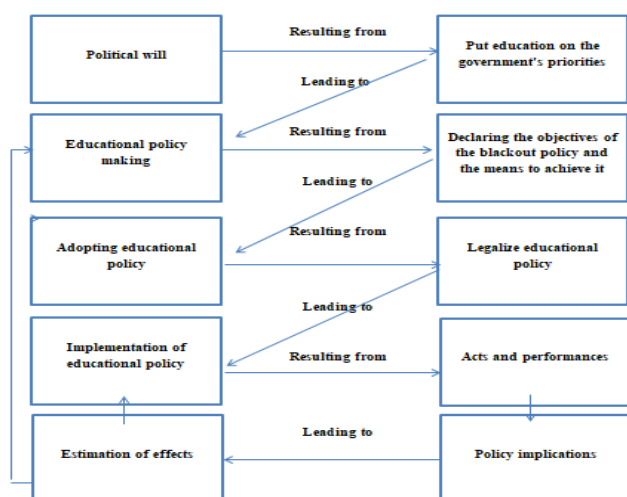


Decision-making related to the stages of educational policymaking is determined by the nature of the state and the government system, the heart of the relationship between the political system, the government, its institutions, actors, and internal and external factors. A distinction must be made between routine and strategic decision-making that concerns long-term plans in education. (Milovanovic, 2018). Belhaj (2017) believes that the three levels of planning are:

**Level 1:** It is a type of planning geared towards developing a general plan or a general framework to move towards achieving the objectives of educational policy and detailed, insofar as they are general trends and indicators that guide the education system.

**Level 2:** the level of educational strategy, the level of intermediate goals, and this level corresponds to strategic planning; Or in case of changing the conditions of implementation.

**Level 3:** the level of the executive plan, the level of detailed objectives, and this level correspond to the procedural or tactical planning, which determines the organisational steps that must be followed within a certain period to achieve the objectives of the plan, in the light of the circumstances and possibilities available (Belhaj, 2017).



**Figure 2 Educational Policy Planning and Contemporary Civilization Challenges.**

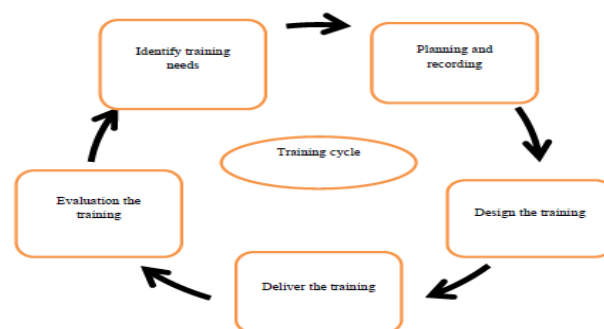
*Source: (Jackson, Sørensen & Møller, 2019).*

According to figure 2, there is a continuing coexistence between cooperation on the one hand and conflict on the other. Collaboration is a

demonstration of the political power in which choices are shaped to show disagreement and consents to that force's dominance, values, and interests. The strength, values, and claims that moved the political decision-maker from his time and place to his goal through his decision examined the options available and chose the most appropriate. There is no policy without options, no policy without crises, but crises are irrational strongholds of unstable political action (Jackson, Sørensen & Møller, 2019).

### Training Elements

Professional guidance means all actions that are carried out to help a person choose a profession and prepare for it. This includes providing enough information on the professions in terms of their nature, requirements, and circumstances and assessing individual tendencies and abilities using tests designed for these purposes (Elferjani, 2015). While Abider (2016) adds Professional guidance and guidance services are conducted in individual or group sessions. The primary career guidance tool is an interview. Information is gathered about the individual's characteristics and provides him with the necessary information about the job description, requirements, and vocational training opportunities.



**Figure 3 Training Elements**

Al Hashimi (2017) explains that many countries have moved to allow private education, considering the state's limited resources. Technical and vocational education systems have been linked to economic development. In poor and less developed countries, technical and vocational education and training (TVET) tasks are often government duties, TVET and administrative, due to the weak economy. Al Hashimi (2017) adds that industrialised countries are responsible for developing, managing, and supervising the production and services sector

represented by industry and commerce chambers. The government shares this responsibility because it maintains fairness in the distribution among individuals and regions to provide adequate stability in society.

### Research Methodology

In this research, the elements of systems theory have been identified. It was then used as a guideline, and the data used in this research was collected by reviewing the available documentation on the policy of TVET. This includes policies, procedures, reports, and research studies conducted in this area. Some processes regulate and guide the policy of TVET towards the intended objectives. However, resources must be well organised to ensure equitable access and optimised to carry out the organisation's responsibilities. It is essential to have a clear outline of how activities are implemented, including the development of guidelines governing processes and setting policies on how to access, use and manage resources to ensure optimal use. The good outputs are specific and well thought out that harness resources and implementation tools to achieve the desired results (Rieckmann, 2017). As for the feedback, studies in this research provided the necessary analysis to develop indicators to improve developing technical education and vocational training in Libya.

### Results And Discussion

The education system, aims, processes and styles are determined by education policy. Intellectually or culturally, no nation can prosper unless it has a simple, practical, and versatile educational policy. Salameh writes that the connection between educational policy and strategic planning should be emphasised. In particular, because of its prominent role in preparing qualified, skilled workers, technical education and vocational training receive significant attention from the government and private sector. Educational policy formulation is not limited to educators alone. Still, it is connected to the country, with all its institutions and bodies, and to public and private sector activities, he adds. Higher education is closely related to facets of the state and its economic and social life. Investors have joined the higher education market to reduce public education spending. For instance, secondary and

higher education in the Arab Republic of Egypt was extended before total enrolment reached lower levels of education. The lack of demand for technical education is attributable to the non-technical existence of guaranteed government jobs. Libya was ranked 80th out of 133 countries in 2009, 135th out of 144 countries in 2012, and the Scientific Research Institutions' Quality Index ranked it 91st and 125th in 2016. Therefore, these low indicators demonstrate an immediate need to rethink and implement a detailed educational policy strategy, says Al-Talib meets the target targets and keeps up with growth criteria. It must be strictly supervised and reviewed continuously. The 2016 United Nations report on Libya claimed no inequality in education between the two genders and that free education and resources are open to everyone.

The shortage of trained teachers and trainers poses a challenge to quality education regarding the Sustainable Development Goals 2017. During these years, the General Training Index refers to Libya's low level, where it ranked 99th in 2009 and dropped even lower to 143rd in 2017. Diversification of vocational training suffers from insufficient capacity and organisational capacity where there is a lack of legalisation crafted for labour in the general labour market. According to Halaq (2017), there is a lack of an integrated education program to reform education and establish training during the early days. The educational strategy is in line with society's ability to benefit the educational process and the goals and expectations that education aims to accomplish. Halaqa (2017) states that implementing this policy must include all the required material and workforce services and the expense of fulfilling all the specifications of the community development plans. The emphasis changed from year to year in the division of productive work. From the general image to the sub-speciality, this change was followed by the increasing importance of interdisciplinary integration. One of the most distinctive models at all levels and levels is the Libyan model of education. The education process, which has had a positive effect on human development in Libya, has also made clear progress based on educational policies. It also reflects favourably on the growth of human capital.

Quality education at every level has a vital bearing on every aspect of a country's development. Investors contribute to education directly and indirectly in finding technical outputs and a skilled job for the labour market. The educational policy's preparation must be interrelated and integrated into all the specialties, interests, and aspirations because the development of educational policy is not limited to educators only. The success and development rates and even economic advancement are measured by human development indicators, and even local, in any country. The education system also reflects its community's aspirations and devotes cultural, economic, and social choices to its population.

The increase in the number of technical and technical education graduates without attention to quality indicates the absence of an integrated educational policy to reform education and develop training. There is, therefore, an urgent need to shape educational policies in general and TVET education because it is today the subject of controversy in all countries of the world. Nasser (2015) agreed that with the High quantitative growth of the number of graduates, TVET graduates do not fit the labour market to achieve the state's economic advancement. The beginning of actual development is the type of education, and this requires research and diagnosis and activation of his role (Almeida et al. 2015; Zanca and Valiente 2019). The private sector's participation in education in its multiple forms, whether in partnership or privatisations or by opening educational institutions by private companies, directing them to serve educational policy objectives and contribute to lifting the burden on the state.

Most Arab countries, however, still rank late in the international rankings of quality education. Libya must review its educational policies in general, keep pace with the challenges, and reform education because it has repercussions on other aspects of the country. The absence of training standards needs to be upgraded technical and vocational education and training, not only in its importance to finding productive and decent work opportunities. Higher education institutions are no longer limited to preserving and transferring cultural heritage from one generation to another. It also has a role in serving society to seek the facts, face the ongoing changes, and contribute to

finding solutions to society's problems. The share of the private sector is gradually increasing in several Arab countries. The difference between public funding and private funding for higher education was stable, and there was not much innovation and interchange between them. There are few relationships between these institutions and labour market representatives. They result from individual initiatives by the training framework or institutional managers, which remain unfeasible and lack permanence. It is essential to improve technical education and vocational training policies, which link strategies and plans for economic development and attract domestic and foreign investment.

This research will address the educational policy according to a comprehensive vision based on the diagnosis of the reality of the policy of education TVET in Libya. The latest significant academic development in Libya takes the form of the Libya Education Blueprint 2013-2025, launched on 6 September 2013 to embark on a transformation of preschool to post-secondary education. In this research, the emphasis is upon using the method of systems analysis as this method contributes to problems by placing them in a general structural context derived from specific content. The method of systematic analysis is, therefore, the best choice for this thesis. The research aims to find a model to improve and develop the performance of the private education organisations in Libya to improve the performance in the education system. It aims to show the differences and similarities between the Libyan and Libyan systems regarding the factors, the stages of education development, the education philosophy, private TVET policy, and the most critical problems to find the model to improve. It will provide a comprehensive view of Libya's education policy and the challenges facing compared to Libya and to identify the best ways to improve it.

Together, the result of the study outlines the relationship between determinants of the structure by identifying the determinants of structure decisions towards Graduate Performance among TVET in Libya. This study's primary objective is achieved and significant influences between structure decisions and TVET performance, as well as filling up the research gap of TVET structure decisions appropriately.

## Conclusion

This study provides several implications from this research results, including academia, TVET and policymakers in Libya. This study's findings empower TVET to better understand their TVET preference in accessing various sources of policy in the market. Some of the valuable information and insights on the nature of the structure of a successful TVET. Therefore, the understanding of making adequate TVET decision regarding adjusting the blend of capital sources used to policy their business activities. Ultimately, it is expected that the decision on structure among mature and successful TVET in Libya would give some supportive recommendation to other TVET in dealing with their educational regulatory structure concerning the graduate performance and productively.

The literature review revealed gaps between Arab like Libyan-owned TVET and non-Arab TVET educators like others, particularly accessing government grants and loans. The government and policymakers should ensure the racial uniformity and fairness are ethically implemented in the funding and TVET development policies. The government should audit the current quota and amount of grants and soft loans by enlarging the allocation specifically for non-Arab owned TVET in Libya periodically. The outcomes of this study recommended that further research be undertaken in several areas. First, the sample drawn from the populations of TVET in Libya could be further enlarged. This would empower the variances according to the sample size by subgroups of investors such as micro, small, and medium-sized enterprises by underlining the type of regulatory preference in selecting an educational policy and proportionate structure, particularly in different contexts.

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