

Educational policies in the process of Moroccan economic growth

Les réformes de l'éducation comme moteur de la croissance économique marocaine

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Abstract

In an ever-changing world, where traditional borders and cultural barriers are gradually disappearing, globalization is becoming an inescapable phenomenon. This new era of global connectivity and intercultural exchange underscores the crucial importance of education. Indeed, for a country like Morocco, adapting to this global dynamic is essential to maintaining its competitiveness and asserting its position on the international stage. In this context, education is not only a tool for individual emancipation, but also a strategic lever for the country's economic development.

Faced with these challenges, Morocco finds itself at a crossroads. The need to modernize its education system is imperative if it is to meet the challenges of the 21st century. This modernization aims to prepare the Moroccan population to be more competitive, innovative and adaptable to rapid changes in the global marketplace.

In this context, placing education at the heart of economic development strategies is becoming an absolute priority.

The aim of this article is to bring together two concepts: education and economic growth.

Keywords: economic growth; education system; human capital; economic development; educational policies.

Résumé

Dans un monde en constante évolution, où les frontières traditionnelles et les barrières culturelles s'estompent progressivement, la mondialisation devient un phénomène incontournable. Cette nouvelle ère de connectivité globale et d'échanges interculturels souligne l'importance cruciale de l'éducation. En effet, pour un pays comme le Maroc, s'adapter à cette dynamique mondiale est essentiel pour maintenir sa compétitivité et affirmer sa position sur la scène internationale. L'éducation, dans ce contexte, n'est pas seulement un outil d'émancipation individuelle, mais aussi un levier stratégique pour le développement économique du pays.

Face à ces enjeux, le Maroc se trouve à un carrefour. La nécessité de moderniser son système éducatif est impérative pour répondre aux défis du XXI^e siècle. Cette modernisation vise à préparer la population marocaine à être plus compétitive, innovante et adaptable aux changements rapides du marché mondial. Dans ce cadre, placer l'éducation au cœur des stratégies de développement économique devient une priorité absolue.

Ce présent article a pour objectif de faire un rapprochement entre deux concepts à savoir : l'éducation et la croissance économique.

Mots clés : croissance économique ; système éducatif ; capital humain ; développement économique ; politiques éducatives.

Introduction

The historical and conceptual study, focusing on human capital, is a key concern of economists and for several years, the economy has been questioning the link between different determinants such as physical capital, labour, human capital and other factors and growth.

The theoretical hypothesis that human capital is the main determinant of productivity has received considerable attention in the pragmatic sense, so the link between human capital and economic growth offers theoretical work and somewhat persuasive and innovative attempts to explain the heterogeneity of growth that exists between nations, and to know the source of this heterogeneity, a set of "new theories" commonly known as "endogenous growth theories" are implemented, in other words; why some countries are growing rapidly than others. In this context, it is not surprising that education plays a major role in the development of economic policies, both macroeconomic and microeconomic.

In recent years, our country has been engaged in modernization and development in all areas. The success of this challenge inevitably depends on the contribution of several actors, and this campaign involves several components, the most important of which is the evaluation and development of human capital.

The critical place of the human element and the capacities it possesses have led economists to consider it as the main productive component of development and economic and social growth, and for the latter to play its role it must have an appropriate level of education.

In markets where goods, services, capital and technology are traded freely, human capital is one of the factors that differentiate countries' performance, as well as education for all as an investment in human capital can contribute to the development of society. Consequently, population education is crucial to determine the capacity of a country's economy to achieve a combination of high growth and low unemployment with remarkable social cohesion.

And to increase economic activity, particular attention should be paid to the education system as an investment instrument enabling human capital to acquire a number of skills and knowledge. Therefore, education policy is part of economic policy because it helps to determine the country's future in the medium term. In other words, education improves labour productivity and subsequently accelerates economic growth. In this article, we will review the main theories that address the relationship between education and economic growth through a literature review. The objective is therefore to present these two concepts from a theoretical perspective.

Then we will analyze the role that public policy plays in education "educational policies"

while listing the different stages of the evolution of the Moroccan education system, also to trace an image on the main stages of Moroccan economic growth to finally find the relationship that links these two concepts, which will help us to answer our main question, which place that education policies play in the Moroccan economic growth process.

1. Literature review: relationship between education and economic growth

Economists have always referred to the importance of education as a structural and essential vector for accelerating the production processes necessary for the economic and social development of humanity.

The purpose of this section is to provide an overview of the relationship between education and economic growth, as well as to try to show that education as an investment in human capital plays a crucial role in the process of economic growth.

1.1 Classical economic thinking

Adam Smith's masterpiece: "Wealth of Nations", published in 1776, considers that investment in learning and education is one of the ways to increase the productivity of individuals and the nation, although the costs involved [1]. In general, it can be said that classical theory proves a positive interactive relationship between education and economic growth. The increase and improvement in productivity and workers' wages are partly attributable to the evolution and improvement of education.

1.2 Theories of endogenous growth

The theory of endogenous growth depends on one of the main assumptions of the new classical theory, namely that the main determinant of economic growth is the increase in total productivity, which itself depends on technological progress, innovation, research and development [2], which leads us to conclude that knowledge occupies a predominant place in the analysis of these theories. The latter should lead to self-sufficient growth due to non-decreasing marginal returns or the presence of a positive external force generated by the diffusion of knowledge [3]. Similarly, and through economic policy choices and decisions, theories of endogenous growth affirm that we can act at the level of technological progress [4]. When we talk about theories of endogenous growth, we are automatically talking about the three models of theoretical thinking, each of which focuses on a specific parameter, namely:

- 1.2.1 Models of human capital accumulation;
- 1.2.2 The model of knowledge and research.
- 1.2.3 The new Schumpeterian model.

1.2.1 Lucas' model: The theory of human capital accumulation

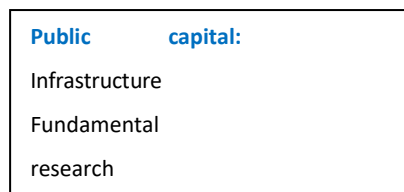
Lucas' (1988) model provides an analytical framework in which the accumulation of human capital and knowledge are determinants of productivity and growth. This model addresses the impact of this accumulation of human capital on growth. Its main objective is to explain the continuous nature of growth on the one hand and the diversification of income levels on the other. [5] - [6].

1.2.2 Romer's model: Knowledge as a product of research activities

According to Romer (1990), knowledge means innovation, research and development, and knowledge. However, growth is considered as the major consequence of knowledge accumulation, it is simply the sum of the four types of capital:

- Physical capital;
- Technical capital;
- Human capital;
- Public capital.

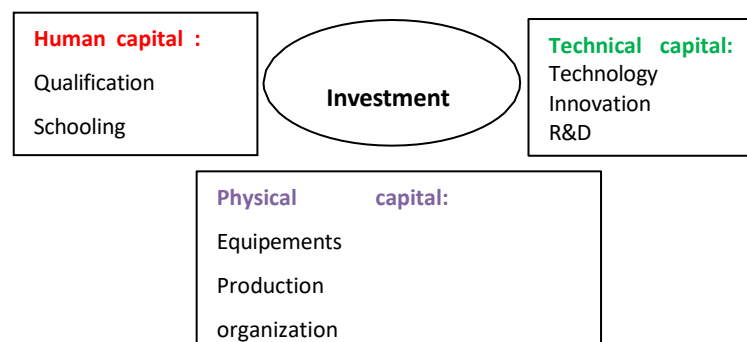
II. Figure N° 1: Accumulation of the Four Factors. [7]



Source: produced by us

1.2.3 The neo-Schumpeterian theory of endogenous growth: The Aghion and Howitt model

It is also called the "innovation-based approach" when the evolution of growth is linked to the



human capital stock, which will subsequently affect a country's ability to emerge through innovation [8].

For P. Howitt ((1992), one of the founders), this approach analyses the process of technological innovation and shows the losses and gains and their impact on society's willingness to change [9] [10]. Education has always been a key factor for the future of individuals, the economy and society in general. The work cited in this section concludes that human capital has an important influence represented by education in the process of economic growth. And it is in this context that a country must seek to stimulate its economic growth while investing in education to increase not only the quantity but also the quality of its human capital stock.

A decade ago we witnessed a positive change in the model of public policies launched in Morocco. This change is mainly noticed in the nature and degree of reforms that have begun to emerge in recent years, which means that the country has entered a new era of reformulation of the place and the crucial role of the education system.

Although the relationship between education and economic growth has long been identified and accepted, the sense of causality and the magnitude of the impact between these two forces remains an important question: we still question the mechanism by which this relationship is established.

Knowledge of the depth of the relationship remains imperative, because it defines and guides the country's public policy measures.

2. The public role in education

In recent years, policy makers have supported the idea of increased spending on education, and structurally spending in the educational sphere can be maintained by three institutions:

- The credit market to finance studies and especially for the last internships
- The family
- The State, which always meets the objectives of equity and efficiency

First, we will mention the various studies carried out in this regard, and then show the role played by educational policies.

2.1 Inventory of the situation

In the literature, many documents analyze government intervention to finance education. And from the results obtained, education is used as an economic policy tool, and to examine its impact on growth several studies have been conducted; To analyse the link between education policies and economic growth, according to Bräuninger and Vidal (2000), it is first necessary

to take into consideration the subsidy to private education expenditure. However, for Glomm and Ravikumar (1997) and Blankenau and Simpson (2004), public education must be financed by a fixed share of GDP provided by the government.

De Fraja (2002) adopts a more normative vision, considering that educational policy is a tool that must be determined internally by the person responsible for political decision-making. Consequently, it proposes an intervention plan for educational policies that will subsequently make it possible to decentralize the solution of a utilitarian social system, this public intervention plan for education requires three justifying factors, namely;

- Income distribution;
- Market inequality;
- The results obtained through the increase in qualification levels.

Cremer and Pestieu (2006), Doquier et al (2007), have adopted a similar approach, pointing out that the externalities of financing education are not always positive because the social planner has not taken into account the motivation of individuals as an essential factor that can enhance the sphere of education.

Blankenau and Simpson (2004), separate the positive effect of the policy used in the sphere of education from the adjustments made by the government, because in their case the capacity of public expenditure to store human capital depends only on positive externalities, while adjustments depends on the level of expenditure, the financing method and the parameters used to accumulate human capital.

2.2 What role for educational policies?

"Any public policy is a response to a problematic situation: public action implies the existence of a "problem", i.e. dissatisfaction, a lack, a frustration, which requires intervention to remedy it; any policy is therefore potentially a source of change, insofar as it aims to correct a social dysfunction, to achieve a better social balance". [11] Chevallier, Jacques.

In view of the important role that human capital plays in improving economic growth, it is clear that people's education is changing their ability to understand and decode information, which represents a powerful policy tool at the disposal of policy makers. For this reason, we will present the main stages of the historical succession of educational policies that have led to Morocco of today.

The period between 1956 -1960

This first stage is characterized first by the country's independence in 1956, also by the adoption of the new orientations and reforms introduced in a single national education system far from

the educational policies pursued during the colonial period (Spanish, French...).

The period between 1960 -1980

This stage is marked by the unification and expansion of the education system. On the one hand, the State was the only investor in education and aims to increase access to education for all. On the other hand, try to train competent Moroccan executives capable of replacing foreign workers to occupy positions of responsibility within the administrative apparatus. This approach promotes investment in higher education at the expense of primary and secondary education.

The period between 1980 -1999

During this phase, the government did not have sufficient investments to update educational content and programs to meet the new needs of the labour market. And under this pressure of scarce financial resources, private sector intervention remains a necessity, especially in higher education. On the other hand, and during this period, the Moroccan education system adopted the Arabization of public education at both primary and secondary levels, but higher education remains in French.

At the end of the 1990s, access to primary education made real progress by reducing diversification between regions, allowing for widespread access in urban and rural areas. This generalization causes the transition from one crisis of quantity to another of quality.

The period between 2000 -2012

The State has undertaken an ambitious educational reform based on broad consent from the highest level of the country, which has led to the approval of a National Charter for Education and Training (CNEF), which shows a new vision for 2020, aims to:

- Expand access at all levels;
- Close the gap between areas and genders. Decentralize management and renew curricula and manuals;
- Accelerate the development of a good quality education and training system;
- Integrate the different components of the education and training system into the economic, social and cultural environment;
- Strengthen the decentralization process and the implementation of new methods of good governance.

However, the strategic framework for the development of the education system did not have the necessary budget, which explains its inefficiency and dysfunction. It is in this context that the 2009- 2012 emergency plan has been implemented; to promote what has been achieved, while making the necessary adjustments and ensuring the optimal application of the guidelines

of the National Charter for Education and Training (CNEF).

The strategic vision 2015-2030

The adoption of new methods of change will make it possible to solve the problem of cross-cutting issues, as well as to match ambition and reality through the identification of priorities in a participatory context for the implementation of relevant reform, it is within this framework that the strategic vision is spread over a period of 15 years from 2015 to 2030. The main objectives of this vision are to

- Develop the skills of individuals at all levels of education;
- Focus on scientific research, technological progress and innovation in all fields in order to evolve Moroccan society from the stage of knowledge consumption to a more advanced stage of knowledge production.

3. Public expenditure on education and growth economical

3.1 Economic growth in Morocco during the period 1960 - 2015

In this section, we will describe the main stages of economic growth during the period 1960-2015.

The period between 1960 and 1971

During this period, the State had as objective; the development of its national resources to strengthen its economic independence, but given the financial constraints, a number of projects were postponed, but this period was marked by a 5% increase in GDP.

The period between 1972 and 1982

During this period, the State had two objectives, in a first place the protection of the new Moroccan industry by a customs tariff in order to limit competition, in a second place the realization of different projects in diversified sectors, compared to the previous period, the annual growth rate was slightly lower is 4.9%.

The period between 1983 and 1993

This period was marked by the implementation of a structural adjustment program (SAP)¹ by the government and agreements with the World Bank and the IMF, during which the rate of economic growth was limited to 3.1%, a level 1.8 points lower than in the previous period.

¹ "SAP" is an economic reform program that the International Monetary Fund (IMF) or the World Bank are implementing to enable countries affected by severe economic difficulties to emerge from their economic crisis.

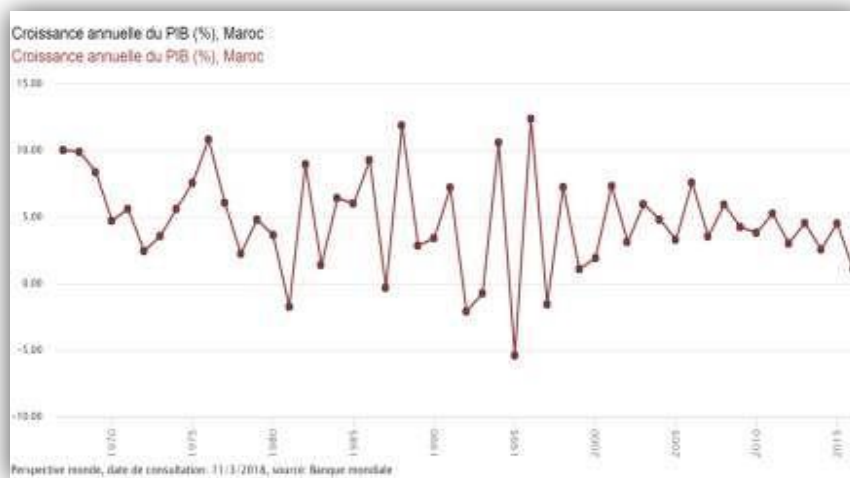
The period between 1994 and 2004

This period is characterized by the emergence of a second generation of reforms with the cooperation of international institutions to strengthen the productive fabric. The period from 1994 to 2004 was characterized by an annual rate of 3.7%.

The period between 2005 and 2015

Characterized by an increase in the GINI index² due to excessive job loss, income concentration and widening inequalities in access to education have resulted in the neutralization of economic growth. This period was marked by a growth rate of 4.3%.

Figure N° 2: Economic growth GDP in %



Source: www.perspective.usherbrooke.ca

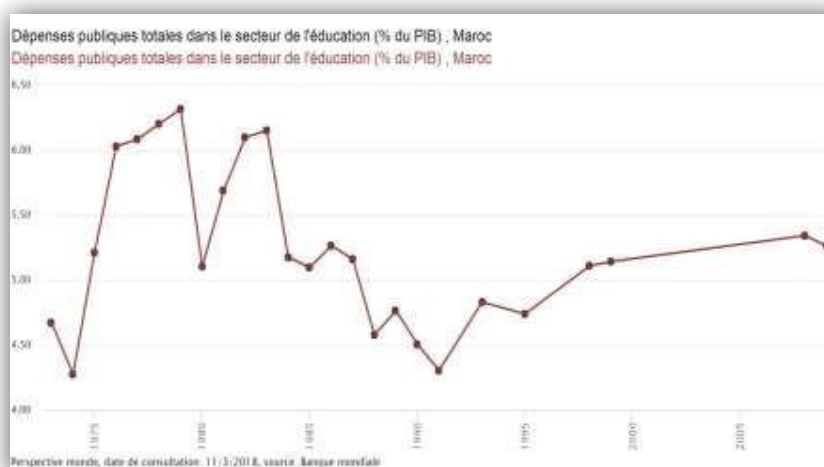
In conclusion, the main feature of the evolution of economic growth is the high structural volatility that disrupts the smooth functioning of the wealth productivity process and negatively reflects on the sustainability of economic growth.

3.2 Total public expenditure in the education sector

Through this figure we will show the change in public spending in the education sector in Morocco from 1973 to 2016.

² "The Gini index (or coefficient)" is a synthetic indicator of wage inequalities (income, living standards, etc.). It varies between 0 and 1 and is equal to 0 in a situation of perfect equality where all wages, incomes, living standards... would be equal.

Figure N°3: Public expenditure on education [15]



Source: www.perspective.usherbrooke.ca

"For the whole period 1973-2010, the annual average is 5.24. The change between the first and last year is 13%. The highest value was recorded in 1979 (6.32) and the lowest value in 1974 (4.28), an increase of 13% in 37 years. On the basis of the last five available values, it can be estimated that in 2020 the value should fluctuate around 5.7%".³

Education plays a very important role in the evolution of several aspects; first, education ensures integration and equality between individuals, second, on the economic side through increased employability opportunities, third, at the political level, it allows the active participation of citizens in the management of local and national affairs and finally, education allows better control of population growth, the existence of these findings positively impacts a country's economic growth and what is confirmed by economic theory.

As a result, the place of education in the process of shaping economic policies remains surprising at both the macro and micro levels.

4. New development model: Morocco at a crossroads

4.1 State of the arts

A development model is a long-term vision of the economy and society, translated into public policies, aimed at economic progress and the well-being of the population. It is complex in its conception and multidimensional in its character. The question of the development model can only be understood in terms of structural changes. It is therefore important to reflect on the conditions for the implementation of the model after having undertaken a precise and real

³ Public expenditure on education curve www.perspective.usherbrooke.ca

diagnosis.

Morocco has important assets on which it can rely to accelerate its development. Its wealth lies in its history, its international influence and its geographical position at the crossroads of civilizations, in other words; its image capital, its natural, human and immaterial capital. Our country has taken the time to take stock, to measure its strengths and weaknesses, to identify the challenges that lie ahead and the promises it can keep, even before a global health crisis strikes indiscriminately at the weak and the powerful. Given its strengths and achievements, Morocco is entitled to aspire to a greater ambition of development.

When the citizen, whether he is a worker or an entrepreneur, young active or retired, man or woman, urban or rural, experiences a persistent frustration in relation to the satisfaction of his needs, aspirations and to the preservation of his dignity, we lead towards a break with the existing model. To this end, the construction of a new dynamic development model ensuring strong, inclusive and sustainable growth, guaranteeing equal opportunities, promoting the blossoming of the individual and reinforcing his or her capacities within a prosperous and solidary society centered on the citizen is essential.

The new development model will therefore be the result of identifying, sharing and implementing new major choices in a participatory and proactive manner that will make it possible to address weaknesses in order to achieve ambition.

4.2 Which development model for the education system in Morocco?

In the area of human capital development, the efforts already made have made it possible to generalize basic schooling. Nevertheless, they have not been accompanied by an improvement in the quality of public education-training services: the performance of Moroccan schools remains very poor, with two-thirds of pupils not mastering reading at the end of primary school and a school dropout rate that remains very high⁴. University education has also experienced a strong but uncontrolled expansion, marked by a weak development of scientific research and a still limited opening to its socio- professional environment. On the other hand, Morocco has a young population that constitutes an invaluable resource and a major potential growth factor, often referred to as the "demographic dividend. Seizing this opportunity means putting in place

⁴ According to data published by the Superior Council of Education, Training and Scientific Research, some 432.000 students dropped out of public school programs in 2018 without obtaining a diploma, of which 78% were in primary and college education programs (See Regional atlas territorial of school drop-out rates, December 2019).

the conditions necessary for its development and its optimal insertion in the country's development process. In other words, it is to place the individual at the heart of the new model, by ensuring the improvement and the reinforcement of the individual and collective capacities of the whole of the components of the society, to release the energies and to register the country in a dynamic of sustained and durable development. This implies, first of all, to guarantee to all, without any discrimination, an accessible and quality public education and training service, for a qualified and productive human capital, mastering the cognitive weapons of the new era. The State must rise to the rank of national priority, the investment in the reinforcement of the capacities and the competences of its citizens in order to give the possibility to each one to bloom and to be able to contribute to the development of the country. The potential of each one must be able to be expressed thanks to the concretization of an effective national system of education and training, inclusive and recovering its role of social elevator and which passes by an urgent, deep and audacious transformation, for objective to form a citizen actor of the economic and social progress. This will involve ensuring quality education for all, a university education system, vocational training and research focused on performance and supported by an autonomous and responsible governance.

Conclusion

Currently, the world is experiencing a new era of economic growth, which is mainly based on knowledge, moreover for countries that maintain a level of production and economic development exploits in a relevant way these resources, and especially seeks to use human resources of a higher quality, a well-trained and educated society will have the opportunity to create new avenues of research and innovation for the benefit of the entire country, however, we notice sometimes different failures from one country to another in education despite the efforts of states in this direction. As we have already mentioned in the first part of this article, the theories of endogenous growth are based on the fact that in order to access the labor market and improve productivity, it is first necessary to acquire the necessary knowledge and skills through a quality education.

Among the main objectives of the educational policies in Morocco, we find the generalization of education. The idea is to take advantage through this access to education, a guarantee of a high level of knowledge and innovation which will reflect positively on the economic growth of the country, however this generalization must be seen not only from the quantitative side but also qualitative in the functioning of the system. If we take for example the case of Morocco in relation to the countries of South- East Asia since 1960, we notice that these two

States use the same efforts in the elaboration of their educational policies; however, the results of their economic growth remain different.

Morocco is currently engaged in several very interesting economic development projects ("the generation green⁵", "the energy strategy⁶"...) which will soon bear fruit: a GDP with a sustained growth rate, a notable improvement in the Doing Business ranking, an industry occupying a prominent place on a global scale, and first-rate infrastructure on a regional scale. Despite these advances, Morocco is still a middle- income country. For this reason, all of these projects require a skilled, competent, and demanding workforce for greater productivity, which will reflect positively on the country's economic growth, and build a prosperous future in a strong civic spirit and with a sense of solidarity, ensuring the well-being of all citizens.

It is also necessary to take into consideration the maintenance of training courses that match the profiles with the market needs, because it remains among the main problems of educational policies in Morocco, we must also note that the country lacks a clear strategy in terms of investment and financing either of the public or private system, It is for this reason that the State must look for sources of financing on the medium and long term, to invest more in educational policies, if we want to satisfy the needs in terms of quality for a remarkable economic and human development, while anchoring the principle of scientific research and innovation for a better performing country.

In conclusion, the new roadmap that Morocco is drawing tends to put an end to multiple dysfunctions and to propel the country, in different areas by 2035, in the top third of the various world rankings of nations. The challenges are listed, but also the stakes, the priorities as well as the way to achieve the change to which all Moroccans aspire in an ambitious, organized, sustainable, inclusive and united country.

⁵ "As its name indicates, "Generation Green 2020-2030" places the human element at the heart of its concerns. Under this first foundation, it aims to contribute to the emergence of an agricultural middle class, to energize rural youth, to develop human capital and to further structure farmers around successful agricultural organizations. The development of the human element is indeed a sine qua non condition for the pursuit of the modernization of the sector and the consolidation of its achievements".

⁶ Morocco's new "2030 Energy Strategy" aims to diversify the energy mix towards renewable energies with the aim of meeting the triple challenges of guaranteeing energy supply while reducing energy dependence on the outside; limiting the environmental impacts of the Moroccan growth model; and guaranteeing access to energy, particularly for the poor. www.energienvironnement.com.

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