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Three Views of the Cuban Education Policy: A comparative study of policy deterioration

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Abstract.

Education in Cuba has been known as one of the major accomplishments of the revolution. Before it, education was unavailable to over half of Cuban children. Nowadays compulsory education through the ninth grade exists in Cuba. The literacy levels in more than half of the countries of the world are far below of that of Cuba.

This even though the Cuban economy long has been hampered by the policies of the United States and its allies. What Cubans accomplished in education since overthrowing the Batista regime in the late 1950s has been exceptional and it has shown to the international community what can be accomplished even though economic growth in the island does not stand for similar results. This is perhaps a potential solution for the so-called countries of the third world, but we should take in consideration the challenges that can rise when economic growth does not accompany the need for developing such a policy.

The prestige of Cuba's education policy comes first and foremost from its focus on inclusion and equality of opportunities. Less known is its focus on political and ideological conformity. The Cuban revolution was not only a political change for Cubans but also a totally new beginning in other fields of society such as economy, labor market, health care, and social structure among other things. One of the elements that would take a dramatic turn over would be the relationship with outside world.

However, the Cuban educational system as well as the health system has had difficult times in the past decades due to deepening economic crises and increasing exposure to globalization. At this point it is important in this paper to take a closer look at the development of Cuban the educational policy in that process. This paper aims to examine and to compare different findings by two researchers who investigate educational policies and schooling practices in Cuba. In addition, I add what I define as experiential knowledge, which is my own experience as a product of the Cuban revolution and as a witness face to face to the different transformations the educational policy has had.

At the same time we wish to bring up to light the current situation of Cubans and how the education policy initially designed by the Cuban government to produce a certain kind of person – the new socialist man and woman - is been exposed to forces of deterioration, giving arise to a negative development in the field of social values, creating an even bigger gap between social classes.

Key words: *Cuba; exposure; social transformations; crisis; new era; inclusion; equality; ideological and political conformity; people's needs; globalization; relationship with the outside world; policy deterioration; experimental knowledge.*

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1. Introduction

The International community has increased efforts for eradicating poverty in the modern world. Literacy campaigns have come to many corners of the planet aiming to help societies out of ignorance and darkness. Illiteracy is been long seen as a major cause of inappropriate ways of living. It is strongly related with health, labor, development and even death rate.

UNESCO points out that literacy is also seen as a fundamental human right and the foundation for lifelong learning. It is fully essential to social and human development in its ability to transform lives. With regard to individuals, families, and societies, it is an instrument of empowerment to improve one's health, one's income, and one's relationship with the world. The actual picture of global illiteracy is quit scary as we start thinking of the increasing demand of knowledge the world is experiencing right now(Scribner 1984). *Graph 1* shows a picture of a projected result of illiteracy campaigns at a global level and how this rate is expected to look like by the year 2015.

Cuba as many other Latin-American countries is structured by a long history of colonialism and struggle, neo-colonialism, extreme poverty and number of political and social transformations. The current political system in the island has long received strong criticism for its totalitarian style, which many human right activists define as one of the longest lasting tyrannies of modern times, I wish to add that such statement could be very debatable, but even though that may be the case it is been acknowledged that the records Cuba presents in the fields of education and health are impressive.

These systems have even been praised in an statement made by the World Bank President James Wolfensohn. He declared in 2001 that "Cuba does an excellent job in health and education...it does not embarrass me to admit it" (Wolfenohn 2001)

The education policy, which is our topic of analysis, is part of the state and for that reason it must be analysed as one. Historically the Cuban state and education act to promote social mobility and greater social equality and depending on which period of time and existing situation they also act for reducing or increasing social inequality.

Education and the Cuban state are dependent on each other as major influences on social transformations. In Cuba and elsewhere in the world, education is a crucial instrument used by all societies for implanting ideas and beliefs in their members. I wish to cite Carnoy here when wrote: "Education is they way to all things" (Carnoy and Samoff 1990 p 162)

That education has a socializing function in every society is accepted wisdom. What socialization means in the conditions of revolutionary change in Cuba is a crucial and more controversial matter. Competing conclusions about values, social practices, and the creation of "new socialist people" suggest different positions on the purposeful use of education as an agent of change.

With a paucity of relevant research and a related tendency to use anecdotal evidence to settle the questions of socialization, earlier studies and first-hand accounts of students and schools maintain an important place in the literature on Cuban education.

I wish to debate on topics and findings extracted from the work of two researchers that have doing studies in Cuba. My aim here is to understand the current situation of the educational policy in that country and perhaps find elements that can be useful for the development of similar policies that can be implemented in other countries with similar background.

2. Methodology.

I intend to conduct a comparative research where I analyse three different views on the same policy. This type of research is useful for analyze and explain similarities and differences. There will be presented literature based on three different periods of time in the history of the Cuban educational system to understand the degree of success of it. I will look at literacy levels in the country before the Cuban revolution of 1959 in order to acquire a historic perspective in the discourse, and then I will present details of the process of implementation of the new policy at beginning of Castro's regime.

Furthermore I wish to compare the views of three researchers on the overall social transformation in that society as well as the objective goals of the educational policy and it's interactive relationship with other policies that are being implemented in the island. I intend to take in consideration important factors such as income, job, and health care in the preventive view, social capital, economic growth and the wellbeing of people, and how or to what extent the overall situation in the island, as well as its political direction influences the Cuban educational policy.

I will use academic reports, studies done by different researchers, reports from international organizations, books, online database and articles. I will also present my own experiential knowledge, which means, my experience with the Cuban educational policy since I am clearly a result of it.

Furthermore I intent to use theories and models that could help me to clarified Cuba's situation by reflecting the impact of different socioeconomic elements and perhaps this analysis would give me reasons that can justified the development of the educational policy. I think the selection of an economic model for the country was a major element that takes us further to seeing a policy in deterioration, in this case I will go into what it was Guevara's model, which basically explain that moral incentives and ideological motivation would make people more productive and effective, and Liberman model, which in the other hand focuses more on the effect of material incentives on people, arguing that once individuals have enough to achieve an adequate live they would automatically focus on ideals and productivity and effectiveness would have a positive development for the good of the society.

These two models will be combined with Maslow's theory of needs. I would like to accentuate the fact that I am not calling Maslow's great work as a hierarchy, as many do, because I am quite critical to placing all needs that lead to motivation in different levels and that in order to claim up one level of needs you need to satisfy those bellow. However I do believe Maslow describes important relationships between these elements and that is perhaps being reflected in the process of deterioration of the educational policy in Cuba.

A second set of theories will be taken in use in this paper and that is the program's theory of change. This theory could be useful as a recommendation for future evaluation of the policy. It explains two different but related way of analyzing a program and it's development.

Many of my arguments in this study will be exemplified with comments and experiences from people I have contacted earlier using informal interviews and conversations. As a researcher, it is important for me to secure the safety of my informant and based on this no names will be given in this paper.

There three particular researchers I wish to present and from whom I will use studies: Martin Carnoy, Anders Breidlid and my self Kebel Marin.

Martin Carnoy

The first one is Martin Carnoy who is a professor of education and economics at Stanford University where he chairs the International and Comparative Education program in the School of Education.

Martin Carnoy has carried out two studies of Cuban education at different periods and examined educations policy and its development. He focused mostly on the changes in the education system until 1980s and as I shall show his work suffers somewhat from a lack of realism in evaluating the policy. He describes the way the policy is thought and analyse various academic results reported by the Cuban government.

Based on this, I am force to considerer all the events that has taken place in the Cuban infrastructure after the 80's.

Anders Breidlid

It seems to be relevant examine the work done by Anders Breidlid as well.

Dr. Anders Breidlid is Professor in Multicultural and International Education at Oslo and Akershus University College of Applied Sciences. He has taught among other things epistemology, education and development, and human rights and peace education.

Like Carnoy, Breidlid visited and did research on the island and as I will show, it seems to be more up to date and in more contact with the reality. Many elements of his work can be understood as a continuation of Carnoy's but he added several aspects of what Cubans and the education policy in the country are going through. It could be the case that Breidlid came in touch with some recent realities occurring after Carnoy's time on the island. One concern of mine however is that he perhaps did not manage to illustrate in his work other important elements of the current situation due to the ideological forces Cubans experience in their everyday life.

Kebel Marin

The third researcher added to this comparative study is my self.

I consider my self as a native ethnographer looking at a policy I once was involved in after studying social sciences. My experiential knowledge on this matter comes from almost 19 years as Cuban student and 24 years as a citizen. I took my first degree in a Cuban university within the field of pedagogics, acquiring plenty of information with regard to the education system. At the same time I had a regular student live in interaction with effects and consequences of this policy. My mother is an ex-teacher and my father practiced as a professor until 1995. I was born in the beginning of the 80's and by 1986 I was already a part of a great system of education.

As we can see, it is been a long journey with a strong connection to a well-established policy that made me proud once. Today the history is turning in another direction in Cuba and I believe it is of great importance to analyse the development of the educational system in the course of socio-economical transformation the country is going through. 3. Presenting difficulties when trying to do research in or about Cuba.

The history of Cuba before and after the Cuban revolution of 1959 is easy to differentiate. However the character of the Cuban authority and their political position in the global world makes it difficult for outsiders to get access to reliable information regarding this transformation.

I believe it is relevant to mention that the time space given for my study is very short, considering the distance and travel-time between Norway and Cuba. In addition, at the time this research is conducted no schools where open or institutions dealing with information needed due to summer time.

I have failed to receive any help from the Cuban embassy here in Oslo, as they are very careful at giving people access to national information without consulting the matter before hand, and besides they had a limited time for the public as well, as consequence of the Norwegian summer time.

Thinking of other type of communication channels that could facilitate data gathering and interviews, such as telephones, Internet, Skype or others, they all are quite limited in Cuba, due to national and international restrictions. For this reasons I have decided to analyse and compare earlier studies done in Cuba and add my own perspectives and views.

My main idea is to take a closer look at one particular policy that has awakened interest in the international community, that of Cuban education policy. It is not a secret that the Cuban government has made huge transformations in the country in the aftermath of the major political and economic revolutions, which began in 1959. The country did take a new socialist direction with the victory of the communist party led by Fidel Castro. 4. Analysing the process of social transformation in Cuba: The policy of education in Cuba prior and after 1959.

The picture of Cuba in the pre-revolutionary period looks totally different from what we can see today. The island was totally dominated by the U.S who controlled political institutions, the island's economic activities and the structure and development of the society was design to follow a style within the U.S sphere and influence(Carnoy and Samoff 1990).

According to Mesa-Lago, almost up to two-third of Cuba's foreign trade was with the United States in the period from 1949 to 1958, and that included sugar mills. By 1958, US investment in Cuba was possibly the second largest in Latin America(Mesa-Lago 1981) The US had also penetrated during this time almost every field of the Cuban economy and it had direct or indirect control over public utilities and communications, banks and financial institutions, mining and petroleum refining(Brundenius 1984).

In the 1940s and 1950s Cuba differed from other conditioned capitalist societies. The fact that the country's economy was dependent on trade mainly with the U.S was an advantage as well and this was due to the preferred position they had in the American market. They could produce in a cheap way and in addition the country possessed abundant supplies of nickel and in the 1950s the US developed Cuba as a market for tourism and gambling. All this together made the economic situation of the country more stable in comparison with the neighbour countries. The labor force at that time was structured through wage earnings rather than subsistence farming.

Paid workers comprised up 62 percent of the total agricultural working force by 1952. As a result of a relative fluid social order and increasing organized labor in rural areas, more than one fifth of the population was organized in unions and it was common to see people demanding better living conditions, higher wage and better education opportunities for their children. Unionization gave rise to a highly active Communist party that added colour to the Cuban lower classes, something that did not exist in other countries of the Latin- American world. New norm and values were born in society based on secular, rationalistic and modern behaviour (Manitzas 1973).

The economic and social conditions of the country in this period had influenced the education system. The average level of education in the Cuban population was relatively high during the pre-revolutionary period in comparison to other Latin- American countries as we can see in table 1(Facts 2009). According to Carnoy and Werthein, by 1953 the illiteracy rate had declined to 23.6 percent. At that time, about 72 percent of 20-29 years old had some had some primary education; 6 percent had secondary education and 2 percent were educated at a university level (Carnoy and Samoff 1990).

Actual enrolment in public schools was to be seen at 58 percent in primary, 19 in secondary and 5.5 percent did enter university. Such data was the highest numbers among countries in Central America (except Costa Rica) and they were to be seen almost 20 years later in other countries of the region(Mesa-Lago 1981).

But, what must we ask was the main problem with the education policy of Cuba in the 1950s? Quite simply, it was because education was very unequally distributed and stagnant. There was a big difference between urban and rural areas. Mesa-Lago in his work "*The economy of socialist Cuba : a two-decade appraisal*" present us some data of illiteracy rates at that time of 12 percent in urban areas while in rural areas was 3 times bigger up to 42 percent. This imbalance appears especially with regard to percentage of children attending school in both areas (Mesa-Lago 1981).

The Americanised labor-market of that time regulated somehow the way access to education was distributed and needed at all. Access to secondary school was limited to children of wealthy families, as well as university entry. This led to production primarily of professionals who had majored in law and economics, which was a way of getting students jobs with U.S companies dominating almost all job activities.

On the time of the revolution in 1959, illiteracy was relatively low as we mentioned above, with a "well" organized labor force with a reasonably high amount of schooling, a proletarianized rural labor force interested in increasing their children's education opportunities, plenty of teachers and a relatively high education spending. Cuba, had then, a well-educated and integrated population in a conditioned capitalist wage labor system (Carnoy and Samoff 1990).

The 1959 were the begging of the revolution in Cuba. It was the beginning of the revolutionary change that transformed all the country's institutions, where educational expansion played a rather vital role in comparison with other spheres. As Carnoy points out, the revolutionary government saw education as a crucial instrument for the future implantation of socialist ideology in people. This perhaps was one of the driving forces, if not the driving force, for investing heavily in a new policy, education was a synonym of incorporation into the revolutionary process and the creation of the new socialist man and woman, which basically concentrated in the creation of a generalized consciousness, collectivism, solidarity and common interest in society(Guevara and de Carreras 1967).

However, the creation of the new state required a major social transformation, which was to lead to a transition to Communism.

The new state would have a non-capitalism as well as an anti-capitalism orientation. This was to counter the extreme manifestations of peripheral capitalism represented by land expropriation, forced labor, tyrannical dictatorship, and other aspects of colonialism and neo colonialism.

The new state sought to collectivize production through public rather than private ownership. The goal was to give the basis for a classless society with equal distribution of goods and services, including education and to replace individual gain with collective consumption. The task was not an easy one, since it needed at the same time to guarantee certain elements such as right to work, narrowing wage differences and equal status in law and employment for man and woman (Carnoy and Samoff 1990).

As Carnoy mentions in his book "*Education and social transformation in the third world*", the idea of the creation of the new state did depend on several aspects that were and still are difficult to ignore. These included such things as public ownership having a direct dependency on economic success; the redefining of relations with the outside world, both military and economically; and powerful need to seek trading partners with similar goals of collectivism at least. There was also the need at that time for a new international approach which could help change domestic social relations(Carnoy and Samoff 1990).

In the same book Carnoy makes it clear that the state had to have a dominant role in all spheres of social transformation and development. And this led to creating a fundamental tension between centralized authority and local democracy.

For Carnoy, this is why the state had to depend on mass mobilizations and the use of structures and methods that were more characteristic of the old pre-revolutionary state. The new state had to control not only social transformation in order to achieve economic results but also to intensify centralization and authority as a response to external aggressions and internal resistance. It needed also to create organs of public democracy that function in a way to reinforce people's power. At last, the state was to work to give people a sense of hope(Carnoy and Samoff 1990).

In the first period of the transformation although between 1959 and 1963 changes were easy to see. The gross national product was redistributed; the population was mobilized; industry was nationalized; and agriculture was diversified and industrialized, just to mention some changes. The idea was to move the economy toward a more Soviet- style development and away from sugar production. The focus was directed upon the

creation of the "socialist man". The model was based on a centrally planned economy emphasising agriculture as well as socialist attitudes and values (*Moving away form sugar production. 1985- 2010. See table 2*). All aimed to increase economic growth through more efficiency. (Carnoy and Samoff 1990)

The Initial Educational Policy of Revolutionary Cuba

The new educational policy began with a massive policy implementation in the 1960's. a program of adult education that included literacy campaign, a rapid move to meet basic educational needs with focus on rural children, primary and secondary education levels and vocational training. It is important to understand that providing education at this speed for one-third of the population required massive demands on financial and human resources.

By 1961 the literacy campaign required major decisions with regard to priority such as closing some schools and moving educators and university students to the countryside.

At some point during the 1960's, it became clear that sugar production was quite important for the country and that the process of industrialization did not go as expected under the Stalinist- model. The alternatives presented at this time were two neo-reformist models -Guevarism and Libermanism.

According to Mesa-Lago (1981), Guevarism was a model proposed by Ernesto *Che* Guevara who believed that ideas, consciousness and willingness, although the subjective conditions could influence the material base and force production, although objective conditions. In other words he argued that moral incentives would be enough for consolidating the road to communism.

A moderate pragmatist group composed by members of the prerevolutionary pro-Soviet party pushed Libermanism in the other hand. Their idea was more upon "market socialism". The term can by define as the implementation of market mechanisms within the framework of a socialist economy, which still would focus on collectivism and consciousness.

The difference is not idealistic but in terms of objectivity. They basically argue that the material fundament alone with production growth had to be developed first and that consciousness would automatically follow.

The Liberman model made very clear that to ignore the low of supply and demand and to reduce material incentive would have a negative effect on production and the development of a crucial material base in long run (Carnoy and Samoff 1990 p. 160).

The Cuban government in the year of 1966 made official the implementation of Guevarism, giving priority to the idea of using moral incentives to motivate production, perhaps ignoring a basic need for solidification of the economy, which years later would lack strength and fundament to sustain the existence of great policies such as educational and health care.

Only four years later Castro was force to move away from the "idealism" and towards a desperate attempt to build up an economic model more based on the Soviet socialistic model(Carnoy and Samoff 1990).

The Cuban economy became then an economy that grew up in strong dependency on foreign assistance, mainly from URSS and facing a rapid decline of sugar demand on international market. It was just a matter of time before the state would confront major problem at financing universal free education and a health care system of the same character. 1980s was then a period for new reforms that would mark the beginning of the process of policy deterioration when the central government, although Fidel Castro started allowing private enterprises to run within agriculture and small service provision(Carnoy and Samoff 1990).

After the fall of the USSR, the last decade has been about survival for the economy of the country (*see graph 2*). Changes in the steering alignment have shown that it is possible to think in a different direction without loosing the socialist character. Raul Castro has taken over from his brother and is now the chairman of the Cuban authorities. Different new reforms have been implemented to lift the economy. The traveling-restrictions had been taken away, the tourist industry has grown, and the economy is moving toward s a one-currency model. Even the constitution has been changed in order to add tempo to the economic transition allowing co-operatives to practise individual farming. Most of the reforms are still controlled by the state and their character is as ideological as it was before their implementation, at least in theory (Economist 2013).

International relationship between the country and the outside world also seems to be changing with the death of Hugo Chavez. The new leader of Venezuela seems to be as committed to the ideals of the Cuban history but it is uncertain whether or not the relationship will last as long or become as strong as it was with Chavez. This forces the country to find new ways of trade and trading partners. 5. Looking at three different views of the same policy: Points of agreement between three observers.

Considering the fact that we have different backgrounds and therefore different experiences with the educational policy in Cuba, Carnoy, Breidlid and I agree on certain points and characteristics of that system. For instance, we agree about many of the successes of the literacy campaign in the 1960's when the Cuban society entered a new era. Cuban society entered in a new era during the 60's. Carnoy (1990) cites *Fagen* (1969) to argue that even though the campaign was not an unquestionable triumph from a scholastic perspective, it did serve to create social mobilisation and bring many changes into Cuban political culture (Carnoy and Samoff 1990 p. 176).

In this sense the education policy help to eliminate the abysmal gap between the well-educated urban groups and the rural illiterate poor in a very short period of time, breaking down the existing barriers between them. It also included the most physically isolated individuals into a common cause as it connected elements of the Cuban society that had long been separated long by conditioned and uneven capitalist development on the island.

Breidlid points out that the literacy campaign and the beginning of a time with universal and free education as well as healthcare were factors that led to a positive development of the quality of the people's lives (Breidlid 2007).

I can add on the basis of my own first hand experiences that the campaign was accompanied with a major redistribution within housing and employment, which made a strong impact on people's understanding of the revolutionary process. As a result of this, a number of Cuban citizens did lose property and other assets. The nationalization process as well reduced the wealth of many families, who later will take part of the opposition that immigrated to the U.S and provided recruits and funding to attack post-revolutionary Cuba.

However as Breidlid points out, the new policy especially targeted the marginalized and led to putting an end to many forms of discrimination. Education then became immediately available for all regardless gender, race or social status, as stated by Guevara in 1959:

"I have to say it (the university) should paint itself black, it should paint itself mulatto, not only its students, but also its professors; that it paint itself worker and peasant ... because the university is the heritage of none, it belongs to the Cuban people ... the university must be flexible and paint itself black, mulatto, worker and peasant, or it will have no doors, the people will break them down and paint the university the colors they want." (Saney, Peace, and Center 2004)

Breidlid and I are in total agreement about the relationship between the national educational discourse and the dominant political discourse in Cuba. He refers to a dominant discourse as a hegemonization of a particular way of interpreting the world. The concept takes us to another terminology, official knowledge, which to my understanding and in accordance with Breidlid's, refers to a certain way of understanding reality. We also both agree with the statement made by Foucault (1980) that Castro perceived that whereas knowledge gives rise to power, knowledge is also a product of power.

Carnoy, too, lends supports this in addressing some of the consequences and problems of the educational policy in Cuba in he's book. He characterizes educational reform in Cuba as one involving a constant ideological practice based on one vision and one vision only - the vision of socialism, socialist society and human behavior in such society. However, from my perspective, it often seems that the process of revolutionary transformation has been and still is based on top-down decision-making where the voice that counts is only the voice of a very small group of persons. This is apparent in the many efforts by Cuban leaders to control educational policy and the type of knowledge that reach population. Education was seen as the way to all things, and having total control of it was crucial for ideological and political transition of the country.

As from my experience, this was represented, in one way, by the lack of international information included in the curriculum. In my own schooling, I did not receive much of world history during secondary and pre-university education; we learned nothing, for example, about the history of World War II and Russia under Stalin. My teachers would tell us what they have been told to tell only. Being a student in pedagogy led me to many discussions with regard to different ways of achieving high quality in the policy of education.

Even when my colleges wanted to go deeper into the lives and ways of thinking of those we had as national heroes and the intentions they had under the revolutionary process, we were forces to think, as they wanted us to think. It is still incoherence in they way the national hero José Martí and his ideals has been presented to me. I'm not so sure that in his head he wanted to free Cuba from colony just enter a unbalanced relationship with others that would lead to economic dependency. But that could be another topic of discussion.

My point is that whenever the topic of autonomy came up, all further comments would be rejected and we were forced to consensus on what was best for the revolution. This represented for me one factor, which I believe contributed over time to the deterioration of educational policy.

Another point of agreement for all three of us can be extracted from Carnoy's explanation of model chosen by Cuban decision-makers for increasing economic growth. Guevarism-model did not help the economy as expected and the authorities often found them selves in a constant struggle for keeping the socialist character of the revolution in times of economic difficulties.

The economy is in focus as well as the results from the education system, but quality seems to be forgotten or given less priority. The efforts made for improving economic results leads to disparities in society. Solutions within the educational policy such as reduction of class-sizes and the introduction of Technology replacing the teacher in the classroom do solve the problem of capacity and give at some point a continuity to the original goals of the policy, which was to be free and available to all.

TV and video classes (*Clases televisivas*), emerging teachers (*maestros emergentes*) with a very short training and strong ideological vision and the incrementation of an ideological control constituted the new concept to be introduced to Cubans "*La Batalla De Ideas*" (the battle of ideas). Yet there are reasons to believe that these solutions may have added to the further deterioration of the educational policy in present day Cuba.

6. What do we disagree on? Applying to experiential knowledge to uncover realities. Understanding the process of policy deterioration.

I have to say that I agree with Carnoy and Breidlid in different ways of looking at the challenges that the education policy in Cuba is and will be facing. However we differ in the matter of why and what type of influence they (challenges) are having on both the policy and society.

From my perspective, it appears that the Cuban economy has fallen into a regressive period. This has given rise to a number of issues that in the beginning were supposed to combat directly or indirectly forces preventing expansion of education to the population. My main contention here is that there are several sets of factors contributing to the deterioration of the education system in Cuba and in the following I wish to examine what some of these are and the part they play in this process.

• Capitalist Economic Model

The introduction of a partially capitalist economic model to save the economy appears to be the link between the old education policy, created to contribute to the foundation of the new socialist man and social, and economical disparities that affect to a great degree the educational system.

Here I have to agree with Breidlid with regard to the reduction of commitment to and values of the revolution by the introduction of a capitalist economic model. We differ however with Carnoy, who does not address the consequences of the introduction of this policy and to which extent it (capitalist economic model) damages the achievements of the educational policies in the Cuban society.

As I have observed, the increase of tourism has impacted negatively on the policy's development and continuity. Carnoy does not address this issue in two studies of education in Cuba, perhaps because the time period he used to analyse policies and practices took place at a time when tourism was not so much of a factor in the economy.

Viewed from my perspective as a student in the system as well as a citizen of Cuba following the end of the Soviet Union's key role in the economy, the economic situation of the country has been decaying for some time.

During the 60's and 70's economic growth did not appear to be a problem for the authorities to finance the education policy and other socialist reforms. Schooling, housing, jobs, health, and even daily consumption were provided by the government, which on the other hand was being supplied by the Soviet Union. The economy was resting on the existing relationship to URSS and all reforms were to serve the ideological objective that would later reinforce the transition to communism. Unfortunately that time was to come to an end in the late 80's with the fall of the socialist camp (campo socialista) as Castro would call it.

The *Graph 1* is very useful for visualizing this development, as it shows great data with regard to the course GPD in Cuba took after the fall of the socialist empire. All supplies coming from the USSR vanished rapidly and the country's trade gap changed dramatically. These changes affected the school system tremendously as many of the elements that complemented the policy, such as school material, uniforms and food, just to mention some, were no longer in place.

The government in an attempt to solve this has launched new policies that have given new perspectives on the world to Cubans. These new events, I

argue, have had major negative effect on the development of the educational policy.

For example, the amount of Cuban people emigrating from the country every year is now quite large. This has a clear impact on the country's economy because we are talking about members of an active labor force who are young and well educated. Those individuals are forced to buy a one-way ticket to reach a better future. In other cases it is not the intention to leave the country for good but the position Cuba has in relation to the world does not allow them to do temporary travelling.

In order to secure the intellectual resources of the country and to try to recover or retain the investments of the revolution several travel-reforms were to be implemented. Among many, I can mention the traveling-restriction imposed to all those recent graduates form any university of the country, forcing them to complete a two years compulsory work-period (*servicio social*) as a payment for all the free education they received from the revolution.

The reform had a regressive effect on the situation of the educational system. It did not hinder students from pursuing a better future; instead it pushed many students to abandon school before graduating, in fear of ruining a potential future opportunity to leave the country.

At some point the problem escalated to a higher level, as it was not only economic reasons what made Cubans take such decisions but also a crucial social structure was being transformed rapidly and that was the family structure. Many of those wanting to migrate form the country were pursuing family reunification as well. Children in Cuba began a new live stile with parents apart from their homes. In many cases the child would be left with their grandparents or a third member of the big family. The school lost the well-established communication with the homes and the children lost their role models that needed to be there for their development in society. According to Aljazeera *English news, only in 2012 over 50,000 Cubans emigrated mainly to US. This is the highest total since 1994. And many of them were young and educated people. The report linked this to the economic problems, I argue, that up to this date many individuals also have no close family member living in the island (Aljazeera 13 September 2013.).

Tourism

Tourism as a major economic solution, represent a factor the damages the education policy at a high level for many different reasons.

Breidlid did mention several elements that I agree upon on but perhaps the complexity of the Cuban society did not allowed him to uncover some elements Tourism represents among other things, an opportunity of getting closer to foreigners and to obtain dollars. Today we are now witnessing a major exodus of educators from the profession. And for many finishing pre-university or even university educations, employment in the tourist industry as bartenders or waitresses is seen as a good and lucrative choice.

The wage gap between educators and workers in tourism and private enterprises is big and wealth- difference is already visible in Cuban schools as well. This is because it is impossible for state's companies to match the wages in the tourist industry. Income inequalities have inverted the income pyramid: prior to the crisis, physicians, engineers and university professors were at the top of the ladder but now domestic servants, transporters, owners of *paladares* and prostitutes earn several times more, therefore, many professionals have abandoned their jobs and shifted to occupations that are well paid. • Decline in University enrollment.

University enrollment has declined sharply because it does not pay to spend six years studying medicine or five years studying pedagogy and then, after graduation, face serious difficulties to find a job or, if employed, receive a miserable salary in the state sector.

Table 3 gives us a picture of the decreases in university enrollment between the 1989/90 and the worst decline during the crises, as well as the small increases in 2000/01. Overall enrollment decreased as much as 58% and in 2000/01 was still 52% below the previous level; some fields such as pedagogy fell as much as 70%.

As a percentage of the population of university age, enrollment decreased from 23% to 12% in 1987-1997 The impact of these declines will not be felt immediately, because there is a glut in certain professions such a medicine and teachers, but in the long run it will provoke a shortage of professionals and adversely effect economic growth.(Mesa-Lago 2002)

• Economic disparities: a new issue for both teachers and students

This economic unbalance is reflected in the education and health care system as hard money begins to determine access to services and the kind of treatment one might receive. As a result pupils coming from families with access to dollars are displaying material advantages that corrupt the functionality of an originally well-established policy of equality of education. I have witnessed in my own schooling how teachers come to work every day but the least they think about is teaching. Instead, some leave for periods of time to work while others have created a black market within the schools to satisfy their basic monetary or material needs. I include here a personal experience of what has happened in the economy.

During my visit to Cuba in 2011 with my Norwegian wife and children, I decided to check in to a beautiful hotel of five stars in the tourist area of Varadero, just to hours drive form the capital city. This was after the time when several new socio- economic reforms were taking place in the country, under the command of Fidel's younger brother Raul Castro. At this time Cubans were for the firs time allowed to enjoy the tourist attractions of their own country and theoretically no difference was to be made between a Cuban and a foreigner *(the reality looked totally different)*.

However, I could not helped to notice the over-representation of Cuban guests in the hotel. To satisfy my curiosity I started doing a very informal research here. I ran informal interviews and took advantage of the situation in order to find out how those people could afford to spend their vacations in place designed for "wealthy tourists".

It surprised me that they did not have a problem to talk out about it. According to those I spoke to, they had the opportunity to increase their wealth during the 1980s. They all were agricultural producers who had been operating privately for some time, but it was just with the recent changes in policy that they could make use of their improved wealth. Still, it was not so easy to acquire reservations for these places but as one of them stated: "I just pay a little more under the table...at the end everybody need money".

• Lack of individual identity. Becoming a market-product

As I understood it, the idea of a classless society was just that- an idea. As Carnoy tries to show, much of schooling was aimed at helping the revolution in struggling to keep alive their ideals. The lack of individual identity and ignoring what Liberman model was all about, created a feeling of social disadvantage for those without the means to achieve a certain materialistic level that would allow them the be active participants in society, I am referring to the teacher, the doctor, the nurse, the lawyer, and all those in profession that were totally controlled by the government.

We cannot ignore the fact that the revolution has turned teachers and doctors into a market product. Neither Carnoy nor Breidlid have mentioned or analysed this topic. Cuba has been exporting knowledge, as a part of their expansion plan. The reality is that graduates are being listed and sent out to work in foreign countries in exchange of money or another product, such as petroleum, etc.

As stated only at the beginning of this month by the Norwegian newspaper Aftenposten about the poor state of the Brazilian health care system, there was a great need for medical doctors and other personnel in one of the world's fastest growing economies. To help solve the problem, which is the single most concern of Brazilians today, the Brazilian government asked Cuba to supply four thousands medical doctors. In the work contract was clear that the "Cuban workers" were supposed to work in rural areas with difficult access and poor facilities. The salary or payment for each worker for a month was about 4,100 dollar, which represents an amount of 50,000 dollar for a year of work for each medical doctor. The group of distributed physicians will give to the Cuban state about 200,000,000 dollars for each year they work there. The Cuban authorities have established a special monitoring system for both educators and physicians working abroad to hinder an exodus to other countries (Moura 2013).

Those being sent out receive a very small part of this money each month and a type bonus is being paid to their families.

While in Cuba I spoke to a graduated in physical education and did not have a problem telling me about his experience in Venezuela.

He was 25 years old and for him was a great reward to get to travel because of good scores at university. The opportunity did represent a potential economic improvement for his family. He was sent to a rural locality in northern Venezuela to work in four different schools and another physical activities within the locality.

After eight month he became depressed due to constant control the Cuban team had over he's free time activities. His family did not get enough money from the state and he felt used just as a market product. He never got to see a contract or the amount of money he actually was producing. Returning to Cuba, he abandoned the profession and wide some saved money from the time in Venezuela he manage to buy an old Ford from 1946 and started as a independent taxi driver in the streets of Habana.

• Income and education. (See table 2)

The Cuban government has never published statistics on income distribution and the only available data are rough estimates of dubious reliability by two foreign scholars for selected years in 1962-1986.1 There is information available, however, on real wages in the state sector in the 1990s:

(1) Based on the CPI a Cuban scholar deflated the nominal wage in 1989-1998 and estimated a decline of 44.4% in the average real wage from 131 to 73 pesos in that period (González 2002), a decrease from \$20 to \$3 according to the CADECA exchange rates2; and

(2) ECLAC (*Economic Commission for Latin America and the Caribbean*) estimated that real average wages in 1989-1998 declined 45.2% (ECLAC 2000a; for a comparison of the two estimates see Mesa-Lago 2001). At the same time that salaries in the state sector declined sharply, income in the small but expanding private sector grew significantly.(Mesa-Lago 2002)

• Motivation of educators.

Teachers play a very important role in the learning process of students who idealize teachers and try to copy them. The motivation of teacher is, therefore, very important as it directly affects the students.

In a period when I was doing fieldwork at the end of my studies in Cuba, I expend quite a long time among teacher in the capital city. It was my impression that most of then did not choose to become a teacher. As they were in deed very young this was just a way out of the streets. Those with more experience in the field were living witnesses of the deterioration of the profession and had lost hope of a better future. Conformity was a common feeling.

Most of the teachers were not satisfied with their salaries and it was clear that low salaries of the teachers affected their teaching. They were not fully satisfied with their economic states either.

They wanted to upgrade the standard of life but they could not manage to do that. A good number of teachers felt that they had more capabilities than others as a big number of emergent teachers were sent to work short time after what they define as poor training.

To understand the reasons behind this I seek support in Maslow's hierarchy of human needs. Maslow (1943) stated that people are motivated to achieve certain needs. When one need is fulfilled a person seeks to fulfill the next one, and so on. He used the terms Physiological, Safety, Belongingness and Love, Esteem, Self-Actualization and Self-Transcendence needs to describe the pattern that human motivations generally move through as is represented in figure 1(Maslow, Frager, and Fadiman 1970). According to studies on Maslow's work there is no prove that these elements leading to a motivated individual function isolated from each other, but the theory does tell something about what Cuban teachers are going through.

It is hard for the Cubans educators to concentrate on their obligations at school or to seek development within their fields when basic needs are not being covered. Social status has also become a problem for them since the wages are lower than in other jobs with less qualification and years of schooling requirements.

Uncovered basic needs and lack of stability within the families are elements that actively contribute to the deterioration of what once was a great education policy.

• Black-market activities in schools

It is not hard to understand why black markets are constantly being established in every sphere of the economy, deteriorating every single policy and program aiming to improve equity and quality of services. Those policies, including education, have an opposite effect on people. The school, for instance, function as something I wish to call for common social ground and here is why;

Attending to school is totally compulsory for children up to around 15 years old, which means that both the marginalized and the wealthy meet on the daily basis at the same place. Parents and teachers interact constantly as a result of the well-established communication between the family and the school, which is theoretically very positive. However, for those in need becomes easier to run small illegal business within the schools, such as sales of cloth, mobiles, and other different small products. From a market perspective all elements are gathered in one place, the client, advertising opportunities, transaction free of taxation, etc.

Considering the diffusion of innovation theory of Rogers, schools are a very convenient place to secure a rapid diffusion of e product, where information can be easily spread, and one can follow up the process through out until population actually confirm and accept whatever one is trying to sale (Rogers 2003).

During my time of schooling I had a teacher who had established a small enterprise within the school walls. She was an experienced teacher in an urban school of Havana; who's identity is to remain anonymous in this paper. She was a teacher in mathematic and sometimes teaches other subjects according to what the school needs. Her students were in age between 11 and 13 years old.

The reason I turned my attention to her was because of her ability of being a teacher and besides that, an independent manicure that did nail polishing and oil massage whenever time allowed it. Usually she attended her clients, who happened to be other teachers and school workers, during the breaks but often she did the same during classes.

She just distributed exercises to the students and while we were working on it she worked on doing the nails of one person. The cost was not high, she got 1 dollar per hand and 2 dollars for massage. She could do about 5 to 8 persons each day and use one and a half hour after work to buy more material if needed.

I did question the price of the service, which it was very low in comparison with market-prices of the same service in the area and she answer me that the point was not to get rich but to be able to buy school material, food and clothing for her son, who was only 12 years old at that time.

I asked her about the reason that kept her in the profession or rather why she did not just entered the tourist industry just as many other teacher did. Her answer was quite clear and sad at the same time. She said that during the 1970's, when she graduated from university, being an educator was big thing and even bigger, it was for a woman to be independent from the husband. The salary was enough then, she never imagined that the Soviet Union could fall in the way it did. She never though about doing something else and that it was already to late to learn languages or how to serve a tourist with a totally different way of understanding things. For her it was difficult to readjust at her age. However, she did not need to do such a thing to keep going since at school it was just as easy to get clients and she managed to teach will practising manicure. She did told us the right answers if we had questions rather than using time with explanations.

What was important for her was that the students did pass all exams and her results helped her emulating with younger teachers. My concern about the quality of education she was part of, makes my dough about the validity of all the great results that are being reported by the Cuban government to the international community or whether or not those attending to this exams are using their real knowledge instead of just remembering a already given answer.

• *"El regalo al maestro"*- the gift for the teacher.

Parents with wealth do pay for the comfort and development of their children through the so called "*el regalo al maestro*"- the gift for the teacher. The gift has become a modern way of paying for an expected result. These gifts may include hygiene articles, food, oil, clothing, or the guarantee of getting access to another type of service that might alleviate the situation of the teacher.

To receive a good offer for further study at the university, one normally needs to have good results in a national exam, something that often can be modified with a small gift. These and similar practices are having a regressive impact in the society since school should be free of charge, egalitarian and ruled by fairness. What I have observed is that social classes are being born within this system and in so doing they are corrupting its integrity.

However, the state does have control over the functioning of the policy but it seems that the focus is placed more on result than in evaluation of the policy. There are theories that explain the way this works, such as the program theory and the implementation theory. The reports coming from the Cuban government regarding education seem to match with what the program theory explain, which is when the emphasis is putted on the response of people to the program or policy activities. Another assumption is one that if the policy does all the things it intent to do, good things will happen. So if a high percentage of the population attends to school and pass all the levels of the compulsory schooling that is required, then the results are satisfactory and the policy is a success.

However, this paper focuses on the development of the education policy in times of economic crises and aims to uncover the reality behind this development and whether it is positive or negative for the society. That takes me to think deeper about implementation. The implementation theory incorporates what is required to translate objectives into ongoing service delivery and policy operation. It concentrate on the way the services are being delivered, taking in consideration the quality, intensity and fidelity to the plan during the process of achievement(Weiss and Weiss 1972)

Inclusiveness

The ideological repression from the authorities gives rise to concerns with regard to the inclusiveness as well. For instance, Breidlid mention specially the terminology "consensus" and how important it is in the classrooms at the university level(Breidlid 2007). It is correct, as he states, that many students, who while increasing their understanding of social dynamics, then start questioning the way thing are being done. This, however, often makes them targets for harassment and in many cases they are being kept out of university just because a different way of thinking is totally unaccepted. The problem becomes even more complex when the families of those students also become targets of a system in panic. Often such families are automatically stamped as ant-Castro or as simple as a parasite in the society of Che Guevara.

The government has acted repressively upon students with "too much contact with foreigners" as it is my case. I was not accepted in my thesis presentation during my bachelor studies just because my wife was not Cuban. I was officially informed that I represented a threat to the revolution, according to the management of "ISCF Manuel Fajardo" just because I did not agree to be a part of a new school policy, which in my eyes was totally unnecessary to use my time with instead of studying and learning.

7. Concluding remarks

Until 1989 Cuba had one of the most egalitarian economies and societies in Latin America, but the excessive emphasis in equality caused lack of incentives to work, labor absenteeism, declining labor productivity and erosion in the value of money. In the 1990s, the collapse of the USSR and the socialist camp, combined with ill-conceived domestic economic policies, provoked the most severe socio-economic crisis under the Revolution and prompted the implementation of moderate, zigzagging market-oriented reforms. These changes resulted in significant increases in income inequality and other socioeconomic disparities, which have reversed many of the previous accomplishments.

Cuban education policy since the beginning of the Revolution until the end of the 1980s was characterized by continuous expansion in coverage, and gratuitous provision. ECLAC explains: "In part the viability of the social policies was facilitated by the especial and privileged relationship that Cuba had during three decades with the socialist countries, particularly with the URSS ...

This cooperation based on communist ideals contributed resources that raised the welfare of the population above the level of economies with the same and even higher income levels. In addition, there was the political decision of building an egalitarian society."

The disappearance of the USSR provoked the ensuing crisis and has had a severe adverse effect on social services although the government has attempted to protect them (Mesa-Lago 2000). The deterioration in social services including the educational system and its impact on inequality and other aspects of Cuban society are analyzed below.

After this comparison I have come to realize that there may be possible solutions for this complex set of issues. The economic model in Cuba is being transformed in order to cope with the global demand and with the goal of achieving economic growth so that the country could continue financing the set of social services originated at the beginning of the revolution. However the education system follows the old strategy of creation the socialist consciousness and reinforcing a not so useful prestige at the international level, instead of being modify to produce professionals that can lift the country out crisis by being innovative and productive in important fields like industry, technology, etc.

Reforms aiming to save or redefine the economic model together with a lack of autonomy are bringing down the educational system, deteriorating remarkable achievements and creating a gap between people.

Education in Cuba should perhaps maintain a strong public and free educational system but with some transformation, it should be adjusted to the demand of a competitive world market, provide proper incentives to train needed technicians and professionals, as well as to discourage enrollment in those fields where there is a surplus. Open public national discussion on issues, such as racial discrimination and ways to solve them at schools, jobs and the news media would contribute to a ownership feeling among citizens, making them take responsibility of the economic situation.

8. Reference:

Aljazeera, News in English. 13 September 2013.

- Breidlid, Anders. 2007. "Education in Cuba—an alternative educational discourse: lessons to be learned?" *Compare* no. 37 (5):617-634.
- Brundenius, Claes. 1984. Revolutionary Cuba, the challenge of economic growth with equity, Westview special studies on Latin America and the Caribbean. Boulder, Colo.: Westview Press.
- Carnoy, Martin, and Joel Samoff. 1990. *Education and social transition in the Third World*. Princeton, N.J.: Princeton University Press.
- ECLAC. 2001. THE CUBAN ECONOMY. STRUCTURAL REFORMS AND ECONOMIC PERFORMANCE IN THE 1990s. edited by UNITED NATIONS ECONOMIC COMISSION FOR LATIN AMERICA AND CARIBEAN: UNITED NATIONS.
- Economist, The. 2013. Set the farmers and shopkeepers free./Money starts to talk. *The economist*, 10-45.
- Facts, Cuba. 2009. "Issue 47, Cuba Transition Project." *Institute for Cuban and Cuban-American Studies, University of Miami (May 2009).*
- González, Viviana Togores. 2002. "Cuba: Efectos sociales de la crisis y el ajuste económico de los 90's." *Cuba siglo XXI* (13).
- Guevara, Che, and Francesc de Carreras. 1967. *El socialismo y el hombre en Cuba*: Instituto del Libro.
- Manitzas, Nita R. 1973. *The Setting of the Cuban Revolution*: Warner Modular Publications.
- Maslow, Abraham Harold, Robert Frager, and James Fadiman. 1970. *Motivation and personality*. Vol. 2: Harper & Row New York.
- Mesa-Lago, Carmelo. 1981. *The economy of socialist Cuba : a two-decade appraisal*. 1st ed. Albuquerque: University of New Mexico Press.
- ———. 2002. Growing economic and social disparities in Cuba: Impact and recommendations for change: Institute for Cuban and Cuban-American Studies, University of Miami.
- Moura, Paula. 2013. "Brasil må importere leger fra Cuba." *Aftenposten*, 4.09.2013.
- Rogers, Everett M. 2003. Diffusion of innovations. 5th ed. New York: Free Press.

- Saney, Isaac, Peninsula Peace, and Justice Center. 2004. *Cuba: A revolution in motion:* Fernwood Pub.
- Scribner, Sylvia. 1984. "Literacy in three metaphors." American Journal of Education no. 93 (1):6-21.
- Weiss, Carol H, and Carol H Weiss. 1972. *Evaluating action programs: Readings in social action and education*: Allyn and Bacon Boston.
- Wolfenohn, James. 2001. Learn from Cuba. avialable online at: <u>http://www.twnside.org.sg/title/learn.htm</u> (accessed july 28th, 2013).

9. Appendix

Table 1. Latin American Literacy Rates

<u>Country</u>	Latest Data Available for 1950-53 (Percent)	<u>2000</u> (Percent)	<u>% Increase</u>	
Argentina	87	97	11.5%	
Cuba	76	96	26.3%	
Chile	81	96	18.5%	
Costa Rica	79	96	21.5%	
Paraguay	68	93	36.8%	
Colombia	62	92	48.4%	
Panama	72	92	27.8%	
Ecuador	56	92	64.3%	
Brazil	49	85	73.5%	
Dominican Republic	43	84	95.3%	
El Salvador	42	79	88.1%	
Guatemala	30	69	130%	
Haiti	11	49	345.5%	

Source: UN Statistical Yearbook 1957, pp. 600-602; UN Statistical Yearbook 2000, pp. 76-82. A. Data for 1950-53 are age 10 and over. Data for 1995 are age 15 and over, reflecting a change in common usage over this period. B. Data for Argentina 1950-53 is current as 1947 data, the latest available, and reflects ages 14 and over. C. Data for 2000 are age 15 and over.

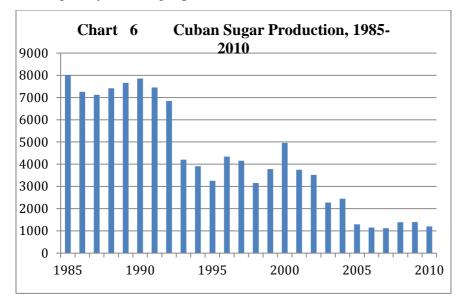
	Table 2	
Monthly Salaries	in Havana,	March-April 2002

Occupation	Pesos	Dollars
State Sector		
Lowest pension	100	4
Lowest salary	100	4
Teacher (Elementary and Secondary Sch	ool) 200-400	8-15
University professor	300-560	12-22
Engineer, doctor	300-650	12-25
Garbage collector	300-500	12-19
Police officer	200-500	8-19
Security officer in tourist sector	700-800	27-31
Armed forces official	350-700	13-23
Cabinet minister	450-600	17-23
Private Sector		
Domestic servant	520-1,04044	20-40
Private farmer	2,000-50,00045	77-1,923
Self-employed taxi driver	10,000-20,000	385-770
Prostitute	d	240-1,40046
Room rental (self-employed)	d	250-4,000
Famous artist/musician	d	600-6,00047
Owner of private restaurant (paladar)	d	12,500-50,00048

• Source: Mesa-Lago 2005

Table 3.

Moving away from sugar production.



• Source: NU CEPAL, 2000 Square A.86; ONE, 2010 Table

11.4

Table 4

Decline in University Enrollment in Cuba: 1989/90-2000/01

Sciences	1989/90	1995/00a	2000/01	%	b %	<u>b</u> c
Natural and Math	6,399	4,019	3,828	-37.2	-40.2	
Agricultural	11,606	4,680	5,125	-59.7	-55.8	
Economics	18,789	4,893	11,061	-74.0	-41.1	
Technical	29,819	13,020	14,514	-56.3	-51.3	
Medical	37,305	23,457	24,606	-37.1	-34.0	
Pedagogy	115,529	35,068	38,892	-69.6	-66.3	
Total d	242,366	102,598	8 116	,734	-57.7	-51.8

a Lowest enrollment in the period.

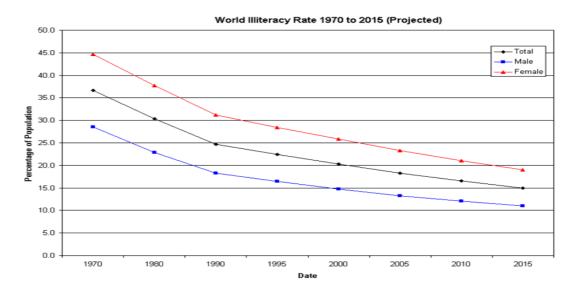
b Percentage of 1995/00 over 1989/90.

c Percentage of 2000/01 over 1989/90.

d Excludes humanities, social sciences and physical education.

• Sources: Based on CEE 1991; ONE 1998, 2001.

• Graph 1 Extracted from Wikimedia commons



Graph 2. Cuba: Gross Domestic Product and Trade Gap (1950-1998) (ECLAC 2001)

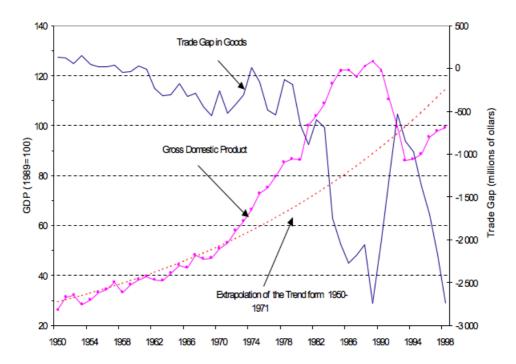
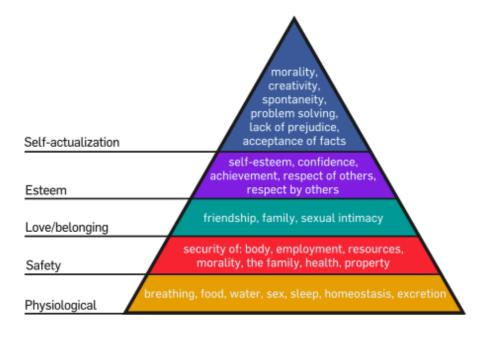


Figure 1.Maslow's hierarchy of needs.



• Extracted from http://en.wikipedia.org/wiki/Maslow's_hierarchy_of_needs