

A NEW MULTIDIMENSIONAL MODEL OF ETHICS EDUCATIONAL IMPACT ON WELFARE

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Abstract: All the progress made by the economists who established the theory of welfare, are based on the needs for the progress in engineering that marked out the era of the industrial revolution. All the models that go along with these theories are based on the science of engineering and contributed at the same time to its flourishing. The economic crisis is global and reflects the moral swamp that mankind has created. The current economic climate dictates a review of the theory of welfare and its reconciliation on a fundamentally different basis. The global economic climate has shifted the need for advances in engineering of earlier periods to the need for establishing ethics. In this paper we investigate the impact of ethics in welfare.

Keywords: welfare model, social welfare, economic welfare, ethics education, moral education, moral values, crisis.

1. INTRODUCTION

All the progress made by the economists who established the theory of welfare, are based on the needs for the progress in engineering that marked out the era of the industrial revolution. All the models that go along with these theories are based on the science of engineering and contributed at the same time to its flourishing. Furthermore we observe that the very scientists who developed the fundamental economic theories of welfare were not economists, but came from the discipline of engineering. We realize that these theories were derived from the scientific field of engineering, in order to promote the development of engineering and beyond this the industrial revolution.

The economic crisis is global and reflects the moral swamp that mankind has created. The current economic climate dictates a review of the theory of welfare and its reconciliation on a fundamentally different basis. The global economic climate has shifted the need for advances in engineering of earlier periods to the need for establishing moral values. Any theory or formulation of welfare must sustain the today's requirement of moral values.

Moral values can be retrieved only through moral education and only in Aristotle can

we find what ethics and moral education are (Tessitore A.,1992). Therefore, today's need is to work on moral education. Today the global scientific community is trying to approach the ethics of Aristotle through the science of psychology using relevant experiments. The theory of emotional intelligence is one such approach.

2. MAIN TOPIC

Moral education is, according to Aristotle, the most important parameter of welfare. According to him, welfare increases when young people acquire moral education. This proposal constitutes the basic principle of our study. According to Aristotle, moral education is characterized by basic learning aimed at creating free and broad minded people (Lianos Th., 2012). Free people have the ability to:

- a) decide correctly, because they have understand exactly what should be done
- b) be independent, impartial and not manipulated

In contrast, teaching designed to build skills and exclusive specialization leads to the creation of people who are not free and who are easily manipulated and execute commands, while not being able to decide correctly and not having their own volition. Moral education is, according to Aristotle, education in virtue. While virtue is defined as the people's tendency to choose the middle ground (Voudouris K., 1995), and respect moderation. Moral education can only be attained through practice and repetition in order to form a habit. In this way, a person's second nature is shaped through habit. This habit will be formed through exercises that shape the correct feelings, which drive one's acts. Virtues therefore are emotional rather than purely cognitive situations, so the acquisition of moral education is a matter of habit or addiction. It is the school and the family who are responsible for the acquisition of moral education through practice.

The education that is provided today is problematic in that it focuses only on technical activities that seek only to develop skills and expertise. This lack of moral education and the consequent creation of people who are not free and who do not decide correctly, has led to the current economic mess. Therefore it is important to invest in moral education in order to improve both economic and non economic welfare. The lessons that lead to a moral education are those that focus on the human being. That is, these lessons develop an individual's inner world and teach what it means to be human. These lessons make the person complete and free, while any other type of lesson aims to foster only skills.

Pigou complements Aristotle's view on moral education, albeit through a completely different approach. Pigou divides total welfare into economic and non-economic, concluding that it depends on society to promote one or the other. Moral education aimed at promoting non-economic welfare, while fostering skills, promotes economic welfare. Specifically, Pigou argues that: «A man close to nature and art is moral and contributes to the non-financial part of welfare. A man who is a perfect

machine operator contributes to economic welfare. Furthermore these people can use machines but cannot write a poem. The inner world is blind and deaf. Their whole life is an infinite reflection on promises that were not inspected and conclusions that are not estimated. This is the picture of your culture in my imagination. All your dedicated efforts to produce people who are good instruments, leading to an inability to produce good people» (Pigou, 1920). Aristotle's view on moral education is accompanied and complemented perfectly by Pigou's view on the simultaneous and balanced promotion of economic and non economic welfare.

Another well-known economist, J. M. Keynes, also from the University of Cambridge, argues that there should be ethical limits to economic growth which are linked to the correct understanding of life. According to Keynes, a society should allow quantitative data to dominate up to the point at which abundance predominates and then it should allow moral values, which are responsible for qualitative data, to prevail. Keynes states that public expenditures aid in the achievement of that objective. They should focus on activities that promote ethics and the quality of people's everyday life. (Skidelsky, 2012). This view of Keynes is essentially the same as that of Pigou. On the other side Zolotas a prominent economist, professor and former P.M. of Greece, stated that the equilibrium lack between the cultural or intellectual values and the technological advances is embedded in all crisis that the mankind plague. (Zolotas,1982).

3. MODEL ETHICS EDUCATION

This work is based on a harmonious, parallel and equal promotion of economic and non economic welfare. On this basis a function is produced examining whether general overall welfare improves or worsens through today's education. This function is based on the theory of Aristotle and complementary theory of Pigou, and includes the same weighting for moral education (non economic welfare) and for the development of skills (economic welfare).

Overall Social Welfare = Economic Welfare + Non Economic Welfare

This equation is useful as it recommends to the decision makers to put emphasis on moral education and furthermore on non economic welfare in order to maximize overall social welfare. The unilateral promotion of economic welfare, without an emphasis on non economic welfare, leads eventually to a decrease in economic welfare and ultimately reduces overall social welfare.

The current economic climate is a perfect example of this sequence. The moral crisis (with limited or no support of non economic welfare, focusing all efforts on putting forward only economic welfare) ultimately led to an economic crisis (aggravation of

economic welfare in spite of the intense efforts to unilaterally promote and improve the economic welfare) and to the reduction of overall welfare. Thus the growth of overall social welfare requires the harmonious and balanced support of economic and non-economic welfare. This means the simultaneous and balanced encouragement of moral education and cultural skills. Moreover, Aristotle argues that, in order for a state to prosper, the educational system should provide moral education, which leads to the creation of free and virtuous people, but without excluding the simultaneous and moderate development of skills.

Our education system today encourages specialization, cultivates skills and provides practical knowledge without providing moral education. According to the reasoning mentioned, this policy leads to a reduction in total social welfare. The view of Aristotle and Pigou on moral education, that there must be simultaneous and balanced support of non-economic and economic welfare which cannot be treated separately. They should both be seen in the same equation. These policies, which can be combined and which complement each other, result in the equation given below according to which:

Education = Moral Education + Skills

We give the same significance ($\frac{1}{2}$) to both moral (H) and skill education (Δ) because we

want our model to support economic and non economic welfare equally. $E_1 = \frac{1}{2} H + \frac{1}{2} \Delta$

$$E_1 = \frac{1}{2} [(a_1 * x_1) + (a_2 * x_2) + \dots (a_n * x_n)] + \frac{1}{2} C$$

(See appendix 1 and appendix 2)

4. MODEL OF ETHICS EDUCATION

Ultimately to what degree the overall welfare is affected (economic and non economic welfare) can be described by the following equation, taking into account the utility obtained from the training today plus the usefulness of the training of the future that includes lifelong learning. Therefore welfare depends on the education obtained throughout our entire life.

$$W_1 = \frac{1}{2} U (E_{1\Delta} + E_{1\Lambda} + E_{1\Gamma}) + \frac{1}{2} U (E_1'), \quad W_1 \text{ is the welfare of our proposition.}$$

$$W_0 = \frac{1}{2} U (E_{0\Delta} + E_{0\Gamma} + E_{0\Lambda}) + \frac{1}{2} (E_0'), \quad W_0 \text{ is the existing welfare.}$$

We are asking for the utility function that maximizes the welfare ($W = W_1$) such that:

$$\text{Max } W = U(E_1) \quad , \quad \text{s.t.} : B_{\Pi\Delta} \leq \frac{1}{2} B_{O\Lambda}$$

where U is the utility function and E_1 is the education function. $B_{O\Lambda}$ is the total education budget and $B_{\Pi\Delta}$ is the budget allocated to the first 12 years of education (two levels of education).

$$\frac{\partial W}{\partial a_1} = \frac{\partial W}{\partial E_1} * \frac{\partial E_1}{\partial a_1} = \frac{\partial W}{\partial E_1} * x_1$$

$$E_1 = \frac{1}{2} [(\alpha_1 * x_1) + (\alpha_2 * x_2) + \dots + (\alpha_n * x_n)]$$

$$\frac{\frac{\partial W}{\partial a_1}}{\frac{\partial W}{\partial a_2}} = \frac{x_1}{x_2} \quad (\text{As we can see the fraction of the first partial derivatives of two subjects$$

is proportional to the rate of their significances)

$$B_{EP} = \sum_1^n \varphi(\alpha_i) \quad E_1 = \sum_1^n \alpha_i * x_i \quad \text{where } \varphi(\alpha_i) \text{ is the amount of the budget corresponding to the } \alpha_i \text{ subject.}$$

The problem can be formulated as:

$$\begin{array}{l} \text{Max } W = \sum_1^n \alpha_i * x_i \\ \text{s. to } B_{EP} = \sum_1^n \varphi(\alpha_i) \leq \frac{1}{2} B_{O\Lambda} \end{array} \quad \left. \vphantom{\begin{array}{l} \text{Max } W = \sum_1^n \alpha_i * x_i \\ \text{s. to } B_{EP} = \sum_1^n \varphi(\alpha_i) \leq \frac{1}{2} B_{O\Lambda} \end{array}} \right\}$$

Taking the Lagreangian function:

$$L(\alpha_1, \lambda) = W + \lambda \{ \sum_{i=1}^n \varphi(\alpha_i) \} = f(\alpha_i) + \lambda \{ \sum_{i=1}^n \varphi(\alpha_i) \}$$

$$\frac{\partial L}{\partial \alpha_i} = f'(\alpha_i) + \lambda \{ \sum_{i=1}^n \varphi'(\alpha_i) \} \quad (1)$$

If $\alpha = (\alpha_1, \alpha_2, \dots, \alpha_n)$ and $f(\alpha) = \sum_1^n \alpha_i * x_i$ then

$$f'(\alpha_i) = x_i \quad (2)$$

From (1) and (2) we have that: $\frac{\partial L}{\partial \alpha_i} = x_i + \sum_{i=1}^n \varphi'(\alpha_i)$

Furthermore $\partial^2 L / \partial \alpha_i^2 = \sum_{i=1}^n \varphi''(\alpha_i) = \varphi''(\alpha_i)$ and the second derivatives

$$\text{matrix: } \begin{pmatrix} \varphi''(\alpha_1) & \dots & \dots \\ \vdots & \ddots & \vdots \\ \dots & \dots & \varphi''(\alpha_n) \end{pmatrix} \quad \text{with only the main diagonal elements are}$$

different than zero.

5. GENERAL FORM OF THE MODEL OF ETHICS EDUCATION

The general form of the proposed model of this work, W_1 , will produce results in the next generation. That is of course, provided that the decision makers implement the study's improvements in welfare, the results will be evident after one generation, which is estimated to be approximately thirty years. So we can compare the welfare that will be achieved in thirty years through the implementation of the proposed study, with the welfare that exists today in the current situation. This comparison is performed with difference equations using the software package of "Mathematica".

The basic principle on which the theory is based in the general form of the model is that W_1 is better than W_0 since it improves moral education which maximizes total welfare. That is: $W_1 \geq W_0$.

The figures F_1 and F_2 show the percentage improvement of welfare, W_1 from the baseline of W_0 . Various percentages of improvement were selected (3%, 5%, 8%, 10%, 12%). Three percent (3%) means that there is little change in social welfare, while 12 % means that there is a significant improvement in social welfare. Figures indicate the rapid improvement in welfare. The horizontal axis shows the years. Observe that all curves are significantly altered after 30 years (see appendix 3).

6. SPECIAL FORM OF THE MODEL OF ETHICS EDUCATION, DESCRIPTION OF THE EXCEL MODEL

The basic principle, upon which our theory is based, is that welfare depends completely on moral education. This is the principle put forward by Aristotle on moral education and welfare. In this model, welfare depends ex officio on moral education and moral education depends on the degree of significance put on the lessons. However, moral education is a necessary but not sufficient condition for welfare, because there are other variables that influence and determine welfare.

A list of 16 lessons was created. We consider these to be lessons that contribute to moral education, which is, according to Aristotle, responsible for increasing welfare. In the proposed model, moral education depends on the degree of significance given to each lesson in the list of 16. The Ancient Greek language, the Nicomachean Ethics of Aristotle in the Elementary, Middle School and High School, Aristotle's Politics in High School, Homer's Odyssey in the Elementary, Middle School, and High School, Plato in Middle School and High School, Philosophy as general reading texts in Middle school, poetry in Elementary School, as well as a lesson of Understanding, Protection and Love of our Environment in Elementary and High School are proposed and should be added to the already existing lessons. We have to change the quality of teaching in similar existing courses related to the environment and teaching should take place outdoors. Dance and theater studies in Elementary and Middle school, and finally Greek mythology at all three

levels of education (Elementary through High School) should also be undertaken. A lesson that is proposed but already taught in the theoretical direction, in our work is perceived as a new lesson, even if the curriculum is the same, as it is required a different way of teaching. This is depicted in the variable "quality of teaching" the lesson. Referring of course to Homer which is already taught in high school, the current work requires changing the method of teaching as well as the quality. The way this lesson is taught today is technical and focuses on an analysis of the structure of the text and other technical characteristics, without delving into the meaning of the myth from which we can derive useful advice for life, politics, science, economics, etc.

It is important to clarify that our work takes into account two situations. The first is the "current situation" which describes education today, with regard to the courses on the list which are the subjects of the "moral education". The other is called "the proposal" and describes the training proposed by the study, referring to the list of lessons, i.e. lessons on Ethics Education. In the case of the "current state", the present teaching hours remain unchanged, while the list of courses that are not taught today are simply denoted by zero. While in the case of the "proposal", the teaching hours of some existing courses are shared with additional courses offered, and in some (few) lessons the overall teaching hours are increased.

In our model we focus on six of the sixteen courses, both in the current situation and in our proposal, which we believe contribute even more to the fostering of moral education. These courses are the Ancient Greek language, the Nicomachean Ethics, The Odyssey, The Poetry Lesson on Understanding and Nature Conservation and Greek Mythology. However lifelong learning (E'_0 and E'_1) does not appear in the final model, but only a description of the general form for three main reasons:

1. Lifelong learning is not compulsory and therefore only a fraction of the population participates, as opposed to education in Primary and High School.
2. Lifelong learning focuses on the development of skills.
3. Moreover, lifelong learning depends on European funds (and not on National funds) which are not stable.

University education is considered to be part of E' which is not compulsory. We should include courses of "Moral" Education at the University teaching level, however due to its non-mandatory nature, this issue is not explored in our study.

Thus: $E' = \text{University teaching} + \text{lifelong learning}$

Finally, the model concludes that the implementation of our proposal will yield a welfare six times more than the welfare that we take with the current training. (See appendix 4).

Quantification of qualitative data (significance level, etc.) was necessary to carry out this work. "Mathematica" was the software used for the general purpose model and Excel (Solver module) used to tackle the Linear programming problem (Simplex method) and the Non Linear one (method Newton - Raphson). The Linear programming model was

selected due to its simplicity in the representation of the quantitative - qualitative variables. The second degree model is a natural extension of the linear model.

7. CONCLUSIONS

The first basic principle of this work is the proposal of Aristotle on moral education and welfare. According to this, welfare increases when moral education intensifies. Moral education is a necessary but not sufficient condition for welfare, because there are other variables (this will be the subject of a future work) as well that influence and determine welfare.

Pigou's approach is the second principle, which divides overall welfare into economic and non-economic welfare. Economic welfare contributes to the education equation as skills education and non-economic welfare as moral education. Education consists of skills teaching and moral education, and overall welfare is the aggregate of the economic and non-economic welfare. At present there is more emphasis given to skills teaching and through it to economic welfare. This work proposes the equal treatment of both skills and moral education in order to maximize overall welfare.

It is clear that both economic and non-economic welfare depend upon more factors than the "education" variable, which is the main topic of this work. We argue that "moral" education is the most important factor affecting non-economic welfare and the best way to look into the variation of non-economic welfare to take into account the most significant variables one by one.

The final conclusion is that the increase of overall welfare (through the improvement in non-economic welfare) by a factor of six, after thirty years (a generation). More specifically, the model shows a small but gradual step up every year, which accumulates and goes straight up after (approximately) thirty years. This is the result that the second degree model demonstrates, keeping the rest of the variables steady and affecting non-economic welfare.

This work can go further if we examine the impact of the rest of the variables affecting welfare (budget, teaching quality, course length, etc.) and if we extend the model to include lifelong education. Our proposal could be considered as a way out of the crisis. The economic crisis and recession of the last years suggests a moral crisis. The proposed solutions have an impact only on economic welfare, leaving out the other important factors of overall welfare, the non-economic welfare.

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APPENDIX 1

The data used in this paper, refer to the Greek Educational system

Moral education in the equation consists of the parenthesis $[(a_1 * x_1) + (a_2 * x_2) + \dots (a_n * x_n)]$.

a_n : the n^{th} lesson (history , philosophy , etc.)

$$a_n = \left(\frac{\omega}{\Omega} \right) \times (B) \times (\Pi)$$

ω : The total hours of class n, derived from the curricula according to our proposal.

Ω : Total hours of all courses derived from the curricula according to our proposal.

B : To budget given to education in Greece is about 3 billion .

Π : The quality of education, we define as the way of teaching as evidenced from the curricula .

Therefore a_n symbolizes the financial resources allocated to class n as well as the teaching quality.

x_n : “Degree of significance” of each lesson contributing in the moral education. That is which is the lesson having the maximum impact on moral education. We use several questionnaires in order to set the “degree of significance”.

Each degree of significance is associated with the policy to be followed in relation to the components of the a_n (quality, hours, budget). For example, in Homer, another policy will be followed related to the quality of teaching. C is a constant that represents the skills or training and specialization.

APPENDIX 2

$E_{1\Delta}$: Education in Primary School

$E_{1\Gamma}$: Education in High School

$E_{1\Lambda}$: Education in Lyceum

We can express the equations as we mentioned:

$$\text{That is: } E_1 = \frac{1}{2} (a_1 * x_1) + (a_2 * x_2) + \dots (a_n * x_n) + \frac{1}{2} C$$

Q1: Lifelong learning education is divided into moral education and skills .

In any case I define $E' = \frac{1}{2} H' + \frac{1}{2} D' = \frac{1}{2} (a_1 * x_1) + (a_2 * x_2) + \dots (a_n * x_n) + \frac{1}{2} C$

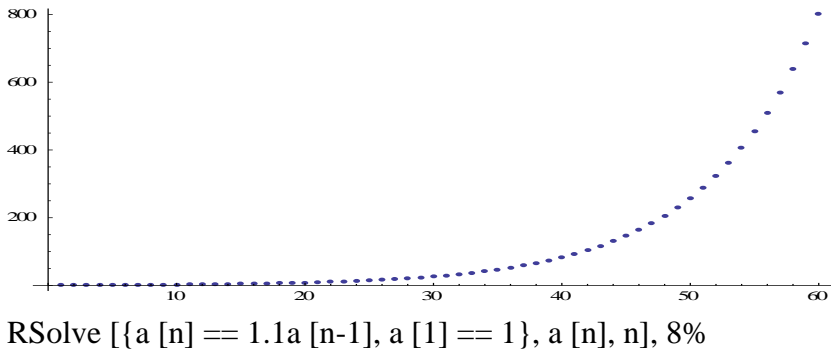
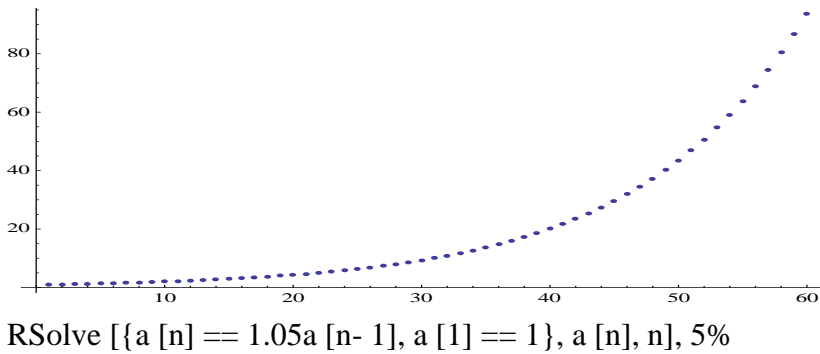
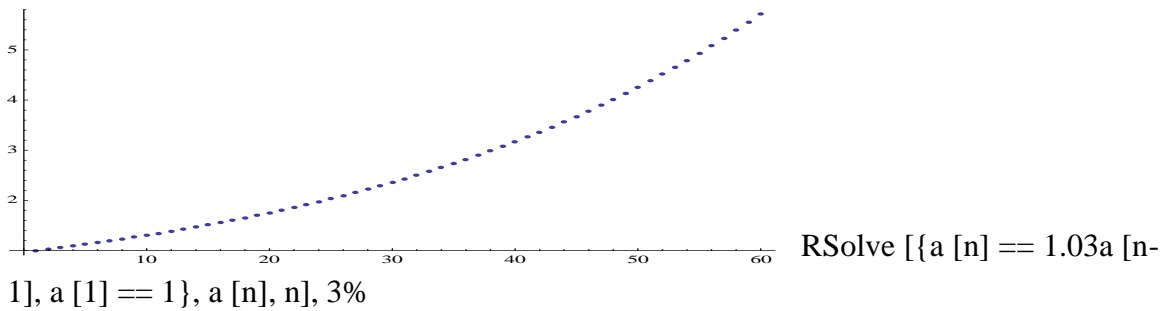
E'_0 includes only skills.

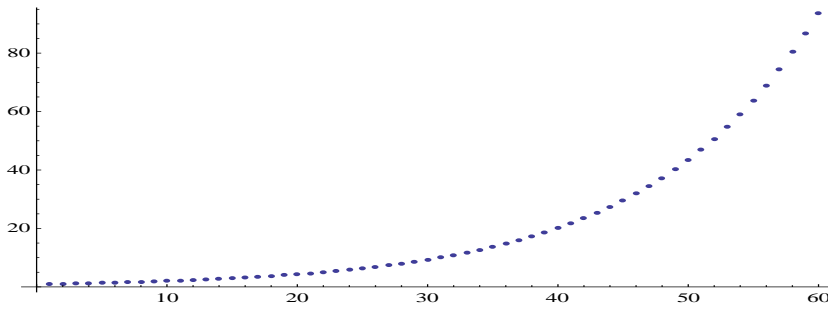
While $E_0 = \frac{1}{2} [(a_1 * x_1) + \dots + (0 * x_5) + \dots (0 * x_6)] + \frac{1}{2} C_0$, because some lessons are not taught even today.

$W_1 - W_0 > 0$, but $\frac{1}{2} [C_0 - C_1] \geq 0$, because today given excessive emphasis on skills' teaching while in our proposal we give equal significance on both.

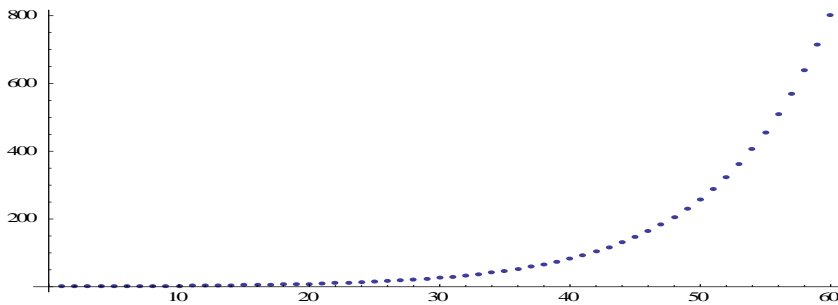
APPENDIX 3

	3%	5%	8%	10%	12%
w₁	w ₀ * 1,03	w ₀ * 1,05	w ₀ * 1,08	w ₀ * 1,1	w ₀ *1,12





RSolve [{a [n] = 1.12a [n-1], a [1] = 1}, a [n], n], 10%



RSolve [{a [n] = 1.12a [n-1], a [1] = 1}, a [n], n], 12%

APPENDIX 4

The work proposal: linear model with our simple limitations (restricted to lower and upper limits).

Consideration of E:

$$E = E_{1\Delta} + E_{1\Gamma} + E_{1\Lambda}$$

The budget is expressed in billion and 3 billion while expressing c training is constant.

Also, the model starts with random values xi and this gives the maximum values.

$$E_{1\Delta} = \frac{1}{2} U[(0,07*3*10)*x_1 + (0,03*3*10)*x_2 + (0,03*3*10)*x_3 + (0) + (0,03*3*10)*x_5 + (0) + (0) + (0) + (0,11*3*10)*x_9 + (0,04*3*10)x_{10} + (0,04*3*10)*x_{11} + (0,04*3*10)*x_{12} + (0,17*3*10) *x_{13} + (0,04*3*10) *x_{14} + (0,07*3*10)*x_{15} + (0,03*3*10)*x_{16}] + \frac{1}{2} C$$

$$E_{1\Gamma} = \frac{1}{2} U[(0,05*3*10)*x_1 + (0,08*3*10)*x_2 + (0,03*3*10)*x_3 + (0) + (0,03*3*10)*x_5 + (0,03*3*10) *x_6 + (0,03*3*10)*x_7 + (0,03*3*10)x_8 + (0,03*3*10)*x_9 + (0,03*3*10)*x_{10} + (0,03*3*10)*x_{11} + (0,03*3*10)*x_{12} + (0,03*3*10)*x_{13} + (0,03*3*10)*x_{14} + (0,05*3*10)*x_{15} + (0,03*3*10)*x_{16}] + \frac{1}{2} C$$

$$E_{1\Lambda} = \frac{1}{2} U[(0,06*3*10)*x_1+(0,06*3*10)*x_2+(0,03*3*10)*x_3+(0,03*3*10)*x_4+(0,03*3*10)*x_5+(0)+(0,03*3*10)*x_7+(0,03*3*10)*x_8+(0,05*3*10)*x_9+(0)+(0)+(0)+(0,03*3*10)*x_{13}+(0)+(0,05*3*10)*x_{15}+(0,03*3*10)*x_{16}] + \frac{1}{2} C$$

Thus: $E = \frac{1}{2} U[(0,07*3*10)*x_1+(0,03*3*10)*x_2+(0,03*3*10)*x_3+(0)+(0,03*3*10)*x_5+(0)+(0)+(0)+(0,11*3*10)*x_9+(0,04*3*10)*x_{10}+(0,04*3*10)*x_{11}+(0,04*3*10)*x_{12}+(0,17*3*10)*x_{13}+(0,04*3*10)*x_{14}+(0,07*3*10)*x_{15}+(0,03*3*10)*x_{16}+[(0,06*3*10)*x_1+(0,06*3*10)*x_2+(0,03*3*10)*x_3+(0,03*3*10)*x_4+(0,03*3*10)*x_5+(0)+(0,03*3*10)*x_7+(0,03*3*10)*x_8+(0,05*3*10)*x_9+(0)+(0)+(0)+(0,03*3*10)*x_{13}+(0)+(0,05*3*10)*x_{15}+(0,03*3*10)*x_{16}] + \frac{1}{2} C$

With simple limitation:

$$8 < x_1 < 9, 9 < x_2 < 10, 9 < x_3 < 10, 9 < x_5 < 10, 8 < x_6 < 9, 7 < x_7 < 8, 3 < x_8 < 4, 4 < x_9 < 5, 5 < x_{10} < 6, 8 < x_{11} < 9, 2 < x_{12} < 3, 9 < x_{13} < 10, 1 < x_{14} < 2, 1 < x_{15} < 2$$

The E in excel is defined as :

$$E = (A2 * 0,038 + B2 * 0,03 + C2 * 0,03 + D2 * 0 + E2 * 0,03 + F2 * 0 + G2 * 0 + H2 * 0 + I2 * 0,011 + J2 * 0,04 + K2 * 0,04 + L2 * 0,04 + M2 * 0,017 + N2 * 0,04 + O2 * 0,07 + P2 * 0,03 + Q2 * 0,05 + R2 * 0,08 + S2 * 0,03 + T2 * 0 + U2 * 0,03 + V2 * 0,03 + W2 * 0,03 + X2 * 0,03 + Y2 * 0,03 + Z2 * 0,03 + AA2 * 0,03 + AB2 * 0,03 + AC2 * 0,03 + AD2*0,03+AE2*0,05+AF2*0,03+AG2*0,06+AH2*0,06+AI2*0,03+AJ2*0,03+AK2*0,03+AL2*0+AM2*0,03+AN2*0,03+AO2*0,05+AP2*0+AR2*0+AS2*0+AT2*0,03+AU2*0+AV2*0,05+AW2*0,03)*10$$

In the linear model the proposal for this study, with simple constraints (upper and lower limbs) set to x, the default value is 21129 (ie., the initial value on the hypothesis that these qualities are perfect) and the final is 97,27 (ie., the final value of social welfare due to the improvement of moral education in our proposal increases by 4 times).

Linear model of our proposal with composite limited summed up to 150 while still and simple restriction.

At this stage of the study selected five important lessons for each step to add up to 150. This means that given even greater emphasis in these courses than the others and therefore this restriction causes the variables of these five courses to obtain the maximum values .

Composite restriction : $x_2 + x_3 + x_5 + x_{13} + x_{16} = 50$, ie., including the three steps will add up to 150 and this means that these variables take the maximum possible values , such as those formed by simple restriction.

Conclude that the linear model of our proposal when put additional constraints more complex basis of which is given even greater emphasis on a particular course of moral education making them more important than the other and while expected this case to increase the prosperity ultimately remains the same than before. More specifically, the default value is 21129 while the final is 97,27. So the linear model when given extra emphasis in these courses, prosperity remains constant.

Square model of proposal with our simple limited.

Six courses are set in a square, in order to give even greater emphasis to them while kept simple restriction.

The courses are set to square are : A2 , A3, A5 , A11 , A13 , A16

We conclude that the nonlinear model (ie when they are squared six courses for each grade are considered to contribute even more to the prosperity) receive 40,001 starting price (ie the initial value in the hypothetical case that the qualities are perfect) and final price 484, 46. From here it follows that the final price is maximized by 12 times.

Square with simple model limitations and composite limited (in aggregating 150).

Conclude that the nonlinear model with complex constraints, the final price is 569,28. Therefore the square model when we focus on five additional courses that are considered even more importantly, being sprayed by 30 % more than it was before with the simple restriction. This is an important outcome of the study. While it is worth noting that the complexity restriction to the linear model did not change.

Current situation.

In the current situation some courses shown as zero because they are not taught at all grades take different values and not all ten , while also giving importance as far as possible the lower , or 1 , because it is assumed that the current situation is not given importance to moral education and whole point shifts to training.

Education in excel is defined as follows :

$$E=(0,063+0+0+0+0+0+0+0+0,025+0+0,036+0,011+0+0,7+0+0,054+0,072+0+0+0,03+0,03+0+0+0,6+0,015+0,06+0,018+0,04+0+0,6+0+0,054+0,064+0+0+0+0+0+0,6+0+0+0+0,06+0+0,5+0)*1$$

The result obtained is 3,632. So the current situation gives baseline and 3,632 at the study's baseline is 21129.

This figure illustrates the level of welfare obtained from the current training and level of prosperity where a proposal is initiated education with greater emphasis on ethics education.

So the welfare of the current situation ie., how is the education system today, until prosperity to the starting point of the proposed design differs by 600 %. That is six times greater. This is the most important result of this study.