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DESIGNING OF SOCIAL POLITICS MEANT FOR THE UPGRADING OF THE EDUCATORS' PROFESSIONAL TRAINING IN THE CHILD PROTECTION SYSTEM

Abstract. The main purpose of this article is the simulation of programs, of public politics focused on the increase of successful chances for the social-professional integration of those young people who leave the social protection system. This article is meant to consolidate the debates and theoretical proposal of the wider research regarding the utilization of the simulation techniques with the issuing process of the local public politics.

Key words: social inclusion, dynamics models, budget, simulation techniques.

JEL Classification: C10, J68, I25

1. Introduction

At present the social inclusion and professional integration of the institutionalized youths is a topic of the highest interest debated both on a European and national level.
The need of a new approach in this field is widely admitted paying special attention to the young people as they represent the future. The European Pact for Young People was signed in Brussels in March 2005 whose fundamental objective is the upgrading of the young ones' tuition and formation starting from the conviction that the young people's integration in the active life and society, as well as the optimum turning into account of their potential represent essential elements to reach a long-lasting increase in Europe.

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Since the institutionalized young people are most of the times deprived of any support from their family, their integration in society is much more difficult, reason for which they need a special attention and increased measures of social protection. In the absence of such a support this category of youths risk being marginalized upon their debut in their social and professional life.

The institutionalized young people leave the protection system upon their coming of age as well as the "child" phase becoming adults. This means assuming certain responsibilities regarding their own life as well as support to enable their social and professional integration. When we speak about institutionalized young people we mean those which are in institutions, of a residential type service, they being the most vulnerable category confronted with the social and professional marginalization.

There is an on-going and actual issue with regard to the social-professional integration of the institutionalized youths who leave the social protection system at the age of 18 (or 26 for those who attend the daily courses of a higher education institute).

2. Public Politics and Dynamic Systems

The systemic pattern was first published by David Easton who considers the Issuing Process of the Public Politics as an input-output on (Birkland, 2011). The pattern represents the issuing process of the public politics as a system starting from the theory of cybernetic systems with feedback. This system is influenced by the external background where social facts occur systemically; the system is also influenced by the economic situation. The system outputs are in fact the political decisions: to do or not to do something. By adding the simulation techniques to this systemic pattern we can afford to re-formulate the policy to obtain better results. The process has been refined, the inputs are adjusted so as to have an output if not the expected one, at least as close to it as possible.

The study of public politics based on the Dynamic Systems has known a long history starting ever since 1969 with Forrester's publications about Urban Dynamics (System Dynamics Society). System dynamics is based on the premise that complex behaviors of a system result from the interplay of feedback loops, stocks and flows and delays (Sterman, 2000).

The approach to the issuing process for public politics based on the dynamic system principles and on simulation patterns to anticipate the impact represented the topic of many international studies and in various fields of activity like: the public health system (Ramadan and Roach, 2005), the public insurance system, power (Ramadan, 2005), urban development (Richardson, 1995), environment (Fiddaman, 2002) etc. System Dynamics has a number of applications in the system of public health (Luke and Stamatakis, 2012).

On the other hand, System Dynamics could be a field of analysis used to guide policy and system design in numerous fields (Groff, 2013). Groff explains how

applying this tool to educational policy analysis offers insights into the hidden dynamics of the current system and thus can be a very valuable tool in designing scenarios to improve quality of social protection for children.

3. Grounds regarding the personnel training within the child protection system

The training of the personnel who comes into direct contact with the children/young people within the *protection system* shall be sustained by the obligation of their attending the training courses/programs for the formation and development of independent life habits with the children/youths they come into contact with and for whom they are parental figures. The insufficient number of specialized personnel employed in the public social services (social assistants, psychologists, etc.) as well as the present system of minimum salary which enable the migration to other fields of activity are confirmed menaces to the social services for which solutions are sought out (to build up and test the pattern there were used data assembled or made available by the representatives of the General Department for Child Assistance and Protection Satu Mare (DSASPC Satu Mare – as per the latest diagnosis report of the social services at the county level) (DGASPC, 2014).

The provision of European standards to the *ongoing professional training for the educators and social workers of the child protection institutions* is considered a key factor as they are the family the young people take as a model.

Even if some progress was registered in this field, there are still many persons lacking a suitable training able to provide the institutionalized children a normal physical, psychic and moral development and who cannot set up accurate interpersonal relationships with these children.

The skill formation and development can be done in two modalities[1]:

- as an organized activity aiming at forming or developing certain skills for an independent life;

- as a component of the various educational activities the institutionalized teen-agers take part in or within the care by material assistants.

The main characteristics of the educators and social workers to obtain favorable results with regard to the struggle to reduce the risk of the institutionalized children's social marginalization, are: *attending professional training courses* for the formation, development and upgrading of the independent life skills for those

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[1] *Methodological guide for the implementation of the quality standards regarding the development of the independent life skills* issued by World learning within the Childnet program

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teenagers and young people which are under the evidence of the child protection system. The evaluation is compulsory by *means of monitoring sheets* where, at least once a month, all activities organized with a view to forming and developing the independent life skills shall be recorded.

The training of the institution staff, of the assistants to become able to discuss with the children and to offer them a family environment as much as possible represents **a main direction according to which a local public policy specific for the stimulation of the social-professional integration of the young people within the protection system can be successfully implemented.**

For the educators' training we shall consider, as the base of the reviews and assessment, the following table comprising the main fields of skills acquired during the child of teen-ager's socialization:

We shall consider a certain *level* (0.8) representing the number of educators and workers in the residential social system who come into contact with the children and who come into contact with the children and who attended the professional training courses as regards formation for an independent life, calculated as a percentage value out of the total number of educators and social workers.

Table 1: The cost for the organization of professional training courses of the educators in the protection system according to the necessary skills for an independent life

Courses for the educators' professional training	Cost per person per hour RON	Duration in hours	Max. number of trainees per class
C_i	Ch_i	Dh_i	Lim_i
Field of daily life skills	12.4	20	15
Field of skills regarding the dwelling management and utilization of communitary resources	12.4	20	15
Money management skills	12.4	20	15
Personal care skills	12.4	20	15
Social development skills	12.4	20	15
Professional integration skills	12.4	20	15

Source: performed by the authors based on via internet

In order to set up the professional training *level* of the educators in the system, level beyond which the institutionalized youths' successful social-professional integration chances know a negative impact, we shall apply the share average procedure by

granting importance degrees to each course listed in the Table 1; *the importance*
degree shall be assigned by the experts in the field by using the open question
technique.
Thus, at the level of the Satu Mare county there are at present a number of **148**
educators from the child protection institutions, having the following distribution for
the above courses.

**Table 2: Calculation of level appropriate to the professional training of
educators in the system**

Courses for the educators' professional training C_i	No. of educators attending the course E_i	Importance of course according to the experts' opinion PC_i	Level per course field PrC_i
Field of daily life skills	15	4	0,10
Field of skills regarding the dwelling management and utilization of communitary resources	15	8	0,10
Money management skills	15	6	0,10
Personal care skills	15	5	0,10
Social development skills	15	7	0,10
Professional integration skills	30	9	0,20
The professional training level of educators in the system – shared value $PrPregE_p$			*0,12*

Source: performed by authors

The number of educators who attended the courses for the independent life skills in
2010 at the Center for Children Halmeu Satu Mare: 15 educators within the
program "Mitigation of transition" started in March 2007. In order to substantiate
and understand the calculations we supposed that a number of 30 educators
attended the course „Professional integration skills" the one with the highest share
– in fact, there were 15 educators as per the gathered data (Table 2).

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4. **The simulation (mathematical form for calculation) of the professional training level of the system educators depending on the attendance of various professional training courses**

Be it:

i = Course field; $i \in \{1,2,3,4,5,6\}$
C_i = Course of the educators' professional training;
E = Total no. of educators in the shaped system
E_i = No. of educators who attended course i
PC_i = Importance/share of course i as per the experts' opinion
PrC_i = Professional training level per course i field
$PrPregE_p$ = The professional training level of the system educators – shared value

then:

$$PrC_i = \frac{E_i}{E}, \text{ where } i \in \{1,2,3,4,5,6\}$$

$$PrPregE_p = \frac{\sum_{i=1}^{6} PrC_i * PC_i}{\sum_{i=1}^{6} PC_i}, \text{ where } i \in \{1,2,3,4,5,6\}$$

Since the level calculated at the level of county Satu Mare is ***PrPregE_p = 0.12***, a rather low value as compared to the value proposed by the model of 0.8 we recommend as an immediate priority of the system management to be the increase of this level; how?

The possible directions are offered by means of this instrument, as follows:

A. Either a ***maximum available budget*** is set up for the next year and then predictions are made on the level value with a view to increasing it by meeting the importance the number of hours and the maximum number of trainees in a class;

B. Or a ***target value of the value is set up*** and the course mix for the educator is identified, their duration in time as well as the necessary budget to reach the level.

For any of the presented approaches, irrespective of the envisaged objective, the algorithm to determine the values of the important variables (budget or level) is the same.

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Model output:

i = Course field; $i \in \{1,2,3,4,5,6\}$

C_i = Course for the educators' professional training

E = Total number of educators within the shaped system

E_i = Number of educators attending course i

PC_i = The importance/share of course i as per experts' opinion

PrC_i = Level of professional training per course i field

$PrPregE_p$ = Professional training level of system educators – calculated share value

$PrPregE_t$ = Target level for educators' training

Ch_i = Cost per person per hour RON

Dh_i = Duration in hours

Lim_i = Maximum no. of trainees per class

$NrOreSapt$ = Number of course hours per week

CA_j = Additional costs per person per course,

$j \in \{1,2,3,4,5,6,...,m\}$

$NrMax$ = Maximum number of iterations

$Buget$ = Available Budget

Model Premises:

a) No more than 1 course - 1 session at the same time

b) If the number of trainees for a session for a course i is of Lim_i, than a new class shall be formed if and only if:

    i. At least half of the course class is covered

$$E - E_i \geq 0.5 * Lim_i \quad \text{and}$$

    ii. The professional training level per selected course i field failed to reach the value of the *Target level for educators' training*

$$\Pr C_i < PrPregE_t$$

c) The model carrying out stops when:

    i.   The professional training level of the system educators – calculated share value reaches the Target level of educator's training

$$PrPregE_p \geq PrPregE_t$$

    ii.   There is no available budget to financially support other courses

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Budget = 0 or

Budget < (E-E$_i$) *CT$_i$, for any *i* representing the course;

where *CT$_i$* represents the total cost of the course *i* for one person and it is determined as follows:

[CT$_i$]$_j$ = CA$_j$ + [Ch$_i$ * Dh$_i$]$_j$, for any course $i \in \{1,2,3,4,5,6\}$ and any person $j \in \{1,2,3,4,5,6,...,m\}$

   iii. The maximum number of iterations was reached – *NoMax* – this is a safety variable to prevent entering infinite cycles of the model; 1 iteration represents in time about 1 month, therefore I consider 36 a good value to stop the estimations, meaning about 3 years. Of course this value can be changed being an entrance variable of the model.

Model outputs:

   The variables arising interest when assessing and fundamenting the actions to be run are important to be saved, tabled and visualized for each model iteration for

     a. *PrPregE$_p$* = The professional training level of system educators – the share value calculated for each iteration
     b. *Budge$_t$ = Consumed budget (cost of iteration course)*
     c. *Budge$_t$=* Outstanding budget
     d. *PC$_i$* = Selected course identified by the importance/share of the course *i* as per the experts' opinion
     e. *NrE$_i$* = Number of educators who graduated course *i* meeting the iteration/step

The Algorithm for the policy proposal which, based on a preset budget, follows up the upgrading of the system educators' professional training based on the course priority/importance:

   Step0. Inputs / initiating all input variable;
     Budget$_r$ ← Budget;
     M = multitude of courses of already covered by the algorithm in iteration t, initially $M = \phi$;

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Step1. $t \leftarrow 1$; // iteration

Step2. $i \leftarrow$ the course i with the highest share/importance for which

$$E_i \quad < \quad E \qquad \textbf{and} \qquad \Pr C_i < \text{PrPregE}_t \textbf{ and}$$

$$E - E_i \geq 0.5 * Lim_i \; ;$$

$$\text{and } i \not\subset M \; ;$$

Step3. Save PC_i

Step4. If *E-Ei > Lim$_i$* then *NrE$_i$ = Lim$_i$* , therefore *NrE$_i$ =E - E$_i$* ;

Step5. $CT_i \leftarrow CA_j + Ch_i * Dh_i$;

Step6. $Budget_c \leftarrow NrE_i * CT_i$;

Step7. If $Budget_r < Budget_c$ and $NrEi \geq round(0.5 * Lim_i) + 1$ then

$\qquad\qquad$ NrEi $\leftarrow$ NrEi – 1;

$\qquad\qquad$ resume Step6 ;

Step8. If $Budget_r < Budget_c$ then go to next iteration, course i cannot be attended anymore as the budget does not permit formation of a new class

$\qquad\qquad i \in M$;

$\qquad\qquad$ t←t+1;

$\qquad\qquad$ resume Step2.

Step9. $Budget_r \leftarrow Budget_r - Budget_c$;

Step10. Save NrE_i ;

Step11. E$_i$ ← E$_i$ +NrE$_i$;

Step12. $\Pr C_i \leftarrow \dfrac{E_i}{E}$;

Step13. $\text{PrPregE}_p \leftarrow \dfrac{\sum\limits_{i=1}^{6} \Pr C_i * PC_i}{\sum\limits_{i=1}^{6} PC_i}$

Step14. If *PrPregE$_p$ ≥ PrPregE$_t$ > STOP : target level reached;*

$\qquad\qquad$ Display *PrPregE$_p$, Budget$_c$*;

Step15. If *Budget$_r$ = 0 > STOP : consumed available budget;*

$\qquad\qquad$ Display *PrPregE$_p$, Budget$_c$*;

Step16. If *t ≥ No.Max > STOP: Max. number of reached iterations;*

$\qquad\qquad$ Display *PrPregE$_p$, Budget$_c$*;

Step17. Display *PrPregE$_p$, Budget$_c$, Budget$_r$,PC$_i$, NrE$_i$*;

Step18. t←t+1; $i \in M$; resume step2.

The implementation was performed in Excel with routine issued in Visual Basic (Figure 1, Figure 2).
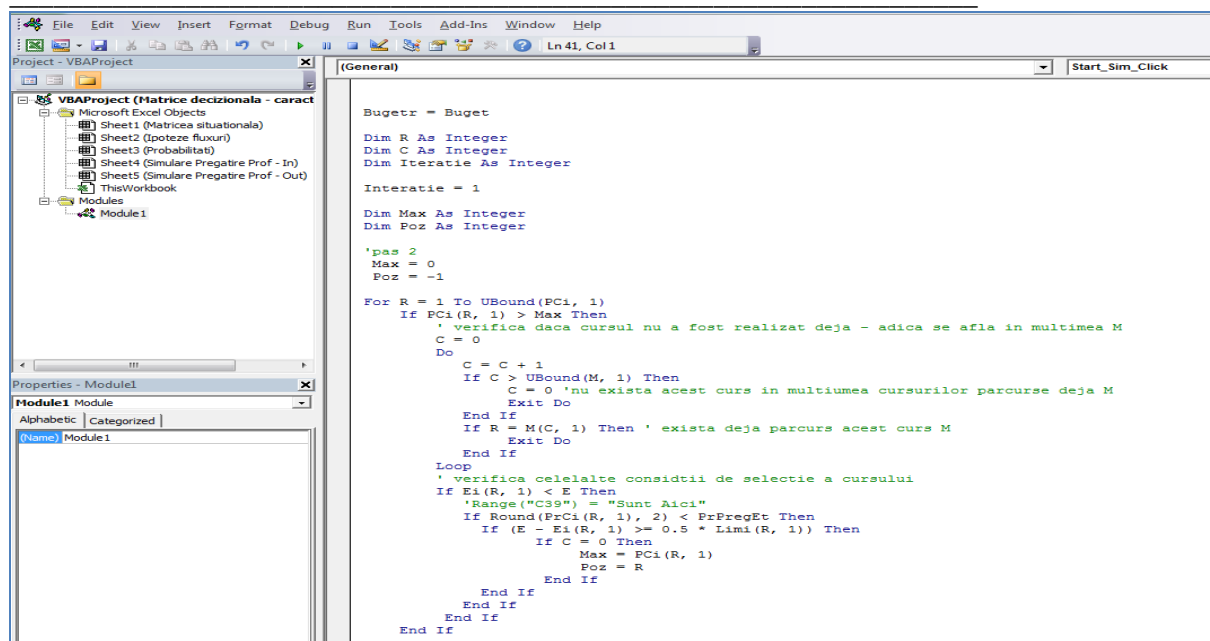
Figure 1: Picture of Routine Visual Basic scare which runs in background upon Pressing of Start Simulation Button

Description	Variable	Value
Available Budget	Budget	10000
Target level for educators' training	PrPregEt	0.8
Number of course hours per week	NoHoursWeek	2
Additional costs	CA	0
Daily allowance per person	Daily allowance	0
Transport per person	Transport	0
Accommodation per person	Accommodation	0
Max. no. of iteration	Max.No.	36
Total no. of educators	E	148
Courses for the educators' professional training C_i	**No. of educators attending the course** E_i	**Course importance as per the experts' opinion** PC_i	**Level per course field** PrC_i

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Field of daily life skills	15	4	0.10
Field of skills regarding the dwelling management and utilization of communitary resources	15	8	0.10
Money management skills	15	6	0.10
Personal care skills	15	5	0.10
Social development skills	15	7	0.10
Professional integration skills	30	9	0.20
The professional training level of system educators – share value			*0,12*

Start Simulation

Figure 2: Main screen performance of program in Excel

5. Simulation Prof-out training. Interpretation

After the first iteration the pattern helps by identifying the optimum variant which, under budget constraints conditions, offers the variant ensuring the maximum increase of the *level (Figure 3).*

Courses for the educators' professional training	Cost per person per hour RON	Duration in hours	Max. number of trainees per class
C_i	Ch_i	Dh_i	Lim_i
Field of daily life skills	12.4	20	15
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Money management skills	12.4	20	15
Personal care skills	12.4	20	15
Social development skills	12.4	20	15
Professional integration skills	12.4	20	15

	PrPreg	**Consumed Budget** *Bugetc*	**Outstanding Budget** *Bugetr*	**Course/Field (importance)** *PCi*	**No. of educators who graduated the course** *NrEi*
Iteration 1	0.15	3720	6280	9	15
Iteration 2					
Iteration 3					

Figure 3: **Resulted at one iteration and presentation modality of obtained results**

The level reaches a value of 0.15 and no other possible variant had led to this value. As well the option is also described through parameters, namely: 15 educators shall attend the course having share 9 and the cost is of 3720 monetary units.

At a subsequent iteration the level value shall increase towards the target value set up upon shaping commencement and the option cost shall never exceed the budget had available for much activities.

6. Conclusions

These last few years the quality of the decision act at any level (organizational, private or public) has become critical topic of the studies carried out by researchers, managers, media representatives and many others. Quality provision for the decision making process has known an ever-growing interest, irrespective if the decision is taken at the level of private or public organizations.

Against this background new approaches of the public policy process need to be found, as well as the promotion of the strategic management principles and testing in a virtual environment of the public policy alternatives at the level of the local public administrations. Thus the effects can be anticipated and the decisions adjusted to obtain the desired results.

This approach also triggers the opportunity to train the public policy decision makers and other participants in this process by involving them in the system utilization and testing.

Unfortunately there is no such concern in Romania for this kind of research in the field of public policies, or if there is not at the necessary level to genuinely support the issuing and implementation process of public policies; there is a fragile attempt made by the Institute for Public Policies to assess the impact for the mayors' election

system in one round of voting. The simulation result shoved there would be 17%
less electors behind the elected persons, 12% localities having other mayors than
the current ones, netto gains/losses under 1% for the parties[2].

Mention should be made here of the research work carried in this field of activity
within these 2 last years by Ani Matei (Matei etc., 2012) who proposes a complex
and complete pattern of simultaneous equations for the local development. This is
the direction which the experts in dynamic systems and simulation should follow
to offer support to the public policy decision makers, because, as Forester used to
say as quoted by N. Ghaffarzadegan (Ghaffarzadegan etc., 2011) "the failure to
penetrate the principles of the dynamic systems at the administration level depends
on the profession of the dynamic systems and not on the public administration".

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