Educational Network of Small Rural Primary Schools “VORAS” (ENSRPV)

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Abstract

In this presentation appears a Greek proposal for the function of the timetable in small rural primary school in Greece and particularly in the Primary Education in the area of Pella- north area of Greece. In this proposal we talk about the need for building assemblies for the determination of the timetable of the “ENSRPV”. We appear basic principles, requirements & structures for the timetable reform of multiage primary schools. Main fields of timetable reform in multigrade schools 1st field: "Establishment of Team Teaching". Also we discuss a) The difficulty of covering the teaching hours of teachers, who work in “ENSRPV”. b) The lack of adequate teaching rooms for the simultaneous implementation of different subjects. For all of the above, we provide specific innovative proposals for the best way of running these schools.

Keywords: small primary rural school, teaching, timetable, curriculum

1. The need for building assemblies for the determination of the timetable of the “ENSRPV”

It is a primary point of reference that the study and investigation of the curricula, and therefore of the timetables, directly linked to the curricula due to the fact that they are contained in them, is a constant demand, which concerns four main dimensions: the scientific, the political, the social and the employment dimension. At the same time, the description of the individual sections of the curricula and, in particular, of the timetables is an extremely complex issue. This is because, given that conceptual confusion often arises as to the purposes, criteria, principles, structure, but also as to the approach and the quality of the theoretical principles to be adopted in order to compile or reformulate both a Curriculum and a Timetable Schedule. In addition, according to John Dewey's positions, as expressed in his work "The Child and the Curriculum" (1902), the criteria that must be taken into account for the formulation and reformulation of the Curriculum and Timetables of the formal Education are: a) The student, as an entity with all the needs, the interests of his time and the prospects for his further development and evolution. b) The content of learning chosen to achieve the above perspective, but also to make students share the officially accepted scientific knowledge. c) The data of the society.

Regarding also the case of the functionality of the “ENSRPV”s, it is pointed out that it is a multi-level and multifactorial issue, approached at organizational, educational, social and economic level. In particular:

The "organizational level" includes: the educational staff, the educational structures and the logistical infrastructure. The "didactic level" includes: Curricula and timetables, textbooks, cur-

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riculum and general learning content, as well as didactic methodology. The "social level" involves: the culture of the local community and the school's inner culture, the dialectical relations, the functioning and management of the characteristic of "multiage classroom", as well as the relation between school and local communities, but also the inverse local community and school. The "economic level" includes the quantitative and qualitative cost characteristics, namely: a) Quantitative features: teacher salaries, building operational costs, student travel costs; b) Quality Characteristics: travel risks, misbehaviour during travel, management and supervision of travelling pupils, time needed for pupils reaching and returning from a school a long way from their home.

Of particular importance is the theory, which will form the basis for the restructuring of the “ENSRPV" Timetable. In this case, the Theory of "Child Study", as formulated by Schiro (1998), is considered to be the most important, because the adversities, but also the subjective and inappropriate political choices for the MPSs, show a direct and multilevel impact on the students of the “ENSRPV”s, who suffer aggravating consequences for their status but also for the opportunities for their further development.

On the basis of what has been suggested as the main theories in this proposal for the reforming of the timetables, the Theory of "Child Study" is the most preferred because the emphasis is placed directly on the child and on his inherent abilities. The child is the basis for determining the content of the curricula and the timetables. The child is also considered to be an autonomous and independent personality and should therefore be helped to be developed socially, emotionally, physically and mentally. In general, the Theory of "Child Study" is based on the principles of human education, studying the child as a whole, taking into account his spiritual, psychological and social background.

The above-mentioned reforming logic of the “ENSRPV”s is directly and functionally related to their specific characteristics and, in particular, by the diversification of the school work and the corresponding grouping of the students. Students work in groups with a variety of purposes, and the criteria used for grouping differ according to work. Although age is often the basic criterion for the first grouping of students, however, a range of grouping strategies are used that apply to different situations. Thus, brainstorming teams are created to solve problems arising in lessons, groups of activities, or even groups of different responsibilities in the school environment.

In particular, the grouping of students in the MPSs is characterized by heterogeneity. This is due to the coexistence of students of different ages at the same time in the same classroom. This grouping, in some way, is given due to the existing operating conditions of the “ENSRPV”s and is bibliographically found to contain positive elements.

The above is combined with the fact that at the moment of the teaching process, only part of the pupils in the classroom participate in the teaching at that time. The rest of the students are implicitly involved in tasks that are performed autonomously by students but for a specific purpose. These are the so-called "silent tasks of the “ENSRPV”s".

One of the features of the “ENSRPV”s is the intense rate of work due to the limited teaching time, especially for the teaching of the new subject. It should be noted that, in the context of a teaching day, the teacher of the “ENSRPV”s has to teach a variety of lessons. Therefore, the combination of strategies and silent work is a teaching practice that particularly characterizes the “ENSRPV”s and seems to be the most appropriate.
In addition, the following criteria should be taken very seriously into the functionality of the “ENSRPV”s:

- The level of student performance.
- The type of behavior of students.
- The diffusion of knowledge.
- The necessity of flexible didactic design based on differentiated curricula and timetables.
- The importance of cross-networking.
- The development of partnerships. Based on the above, it is proposed to create a Unified Differentiated All-Day Multiage Primary School (UDADMPS).

2. Basic principles, requirements & structures for the timetable reform of multiage primary schools

The basic principles of the reform of the “ENSRPV” Timetable are:

- The principle of objectivity.
- The principle of equal learning opportunities.
- The principle of responding to modern educational and social requirements that entail increased social and communication skills.
- The principle of proportional distribution of hours.
- Exploitation of costs, without further financial burden.
- Determination of the MPS teaching staff (general education teachers and specialties) to be finalized as far as possible before the end of the previous academic year or at most in the first 10 days of September of each academic year.

The main Requirements for Reforming the Timetable are:

- Realistic consideration of students' conditions, school, local community, state choices and economic conditions.
- Objectivity of criteria, choices and decisions.
- Scientific documentation of principles, data and positions.

The focus on the reorganization of the “ENSRPV” Timetable is based on the following arguments:

- Need for flexible educational planning, adequacy of teaching time, modernization of the functional framework of the learning process, with the incorporation of learning objects similar to those of one age (mainstream) Schools, the need for adaptive differentiation, due to the flexible adaptations required in the teaching process of the “ENSRPV”.
- The implementation of the Time-table structuring principle, implying that the timetable should be readily adaptable to the way the teacher works and particularly to the work of the Multiage School teacher, given its particular characteristics. It should be noted that the teacher's way of teaching in the multiage classroom cannot due to the specific circumstances, follow a traditional type of teaching- teacher-centred or frontal-but it takes a more "open" and free character.

3. Main fields of timetable reform in multigrade schools 1st field: "Establishment of Team Teaching"

Even in the same room, when facilities are not sufficient, with particular emphasis on the use of silent work. The use of Information & Communion Technologists (ICT) plays a constructive role as: a) it can act as an alternative means and way of approaching the curriculum. b) it can contribute to the adaptation of teaching content, shaping it according to the learning needs and special characteristics of students and simultaneously enhancing the learning environment within the classroom, without affecting or hindering the conditions of teaching for the rest of the students of other grades.

The establishment of Team Teaching and its effective implementation, for which there should be appropriate training and information of the teachers involved - in organized and systematic training- by the School supervisor, who has the responsibility of the schools that make use of this option, faces: a) The difficulty of covering the teaching hours of teachers, who work in...
“ENSRPV”. b) The lack of adequate teaching rooms for the simultaneous implementation of different subjects.

2nd field: ‘‘multiage school timetable’’

A Unified Differentiated All-Day Multiage Primary School (UDADMPS) which will be monitored by all students of the school. On this basis, the operation of all types of “ENSRPV” (One, Two or Three-Grade) determines at six (6) hourly hours, that is 30 hours a week, in order to adequately cover also the hours of integration of educational specialties within the program. On this basis the opening hours of the morning cycle are proposed to be formed from 08.00am to 14.00pm.

The prediction relates to the operation of the school, not to the teaching hours of the teachers. Here is the schematic presentation:

**Teaching hours of all types of multiage primary schools**

| Educational content of morning timetable | Hours      | Duration |
|-----------------------------------------|------------|----------|
| Duration                                | 08.00-14.00|          |
| Students’ arrival                       | 08.00-08.05| 5’       |
| 1st zone of classes                     | 08.05-09.35| 90’      |
| Break                                   | 09.35-09.55| 20’      |
| 2nd zone of classes                     | 09.55-11.25| 90’      |
| Lunch                                   | 11.25-11.45| 20’      |
| Break                                   | 11.45-11.55| 10’      |
| 3rd zone of class                       | 11.55-13.25| 90’      |
| Break                                   | 13.25-13.35| 10’      |
| Preparation for the next day            | 13.35-14.00| 25’      |

| Optional zone period                    | Duration   | Duration |
|-----------------------------------------|------------|----------|
| Educational content of afternoon timetable| 14.00-16.00| Two (2) Hours |
| 1st hour                                | 14.00-14.45| 45’      |
| Break                                   | 14.45-15-15| 20’      |
| 2nd hour                                | 15.15-16.00| 45’      |

**Basic remarks:**

1. The introduction of the above reformation is divided into two (2) functional parts: The first part of the "Morning Timetable" involves the academic orientation, in order to achieve the factual knowledge in each subject, aiming to acquire the necessary cognitive background. The second part is directly related to the first part, but it also offers pupils to engage in free, flexible, creative and entertaining activities.

2. The above-mentioned function does not disturb the legally regulated working hours of teachers, which is 6 hours (Greek Law 1566/1985, Article 13, paragraph 8).
3. It is anticipated that there will be five (5) minutes in the morning because of the fact that the number of students is small, so there are no unnecessary delays and there is flexible time management.

4. A lunch time of twenty (20) minutes is introduced, followed by a ten (10) minute break. Lunch time is perceived as a student's social contact time and is not counted as a teacher's teaching time. The proposed length of time is sufficient, given the small number of students, which entails almost zero time for students to go to the feeding area, but also a limited preheating time for the meal.

5. The preparation time of twenty-five (25) minutes is considered adequate, taking into account the international standards for the proportion of time for homework for elementary school students.

6. Basic Elements of the Optional Zone: a) From the beginning of the academic year, there must be an at least 60% participation of the total school capacity of the school. This regulation compensates for the negative consequence that it had for the MPSs and their further downgrading, due to the effective cessation and rejection of a full-day school in it, the Ministerial Order 12/530/62626 / C1, vol. B’, FEK 1345, 16-6-2011 «Amendment-Completion of the Ministerial Decisions No. F / 20/482/95210 / C1 / 19-9-2003 (Government Gazette 1325, vol. B) & F. 12/773/77094 / 7-2006 (Government Gazette 1139. b) Which provided for the functioning of a school as an all-day school the following conditions: 1) to be enrolled and to attend at least sixty (60) students at school and b) the minimum number is 15 pupils. Under these circumstances, due to conditions and a set of student potential, it was not possible to respond to the “ENSRPV”, thereby enhancing inequality. 2) Supervisory responsibility for the operation of the school and students during the Optional Zone will be on the teachers who will teach during this period. Their role, beyond their teaching duties, will be rather to oversight than administrate. The school-based administration on an organized and systematic basis will be on the general education teacher, to which the responsibility of the school administration is officially entrusted by the competent education authorities. 3) There will be a provision for teachers in the Optional Zone to work within their working hours as well as anticipating their transition to different schools to complete their teaching hours.

3rd FIELD: "Total time of classes"

For all types of one-year (one-grade, two-grades, three-grades) 30 hours per week are proposed as a total of teaching hours. In this context, all the lessons of the school will be taught along with the specialty courses. There will also be resting-lunch and student preparation time.

The main emphasis is that the functionality of the "teaching semi-hours" should be redefined, which corresponds to each lesson, because this essentially does not provide any learning response, in addition to the cumulative coverage of the hours for the weekly work of the teachers and the school. It seems to be more meaningful to institute "teaching work zones" with corresponding hours per class, which will be allocated by the teacher according to the weekly working hours.

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1 Hong, E. & Milgram, R. (2000). Homework: Motivation and learning preference. Westport: Begin & Garvey. Hong, E. & Lee, K. (2003). Preferred homework style and homework environment in high-versus low-achieving Chinese students. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada. Hoover, V. et al. (2001). «Parental involvement in homework». Educational Psychologist. Vol. 36. No 3. Pp. 195-209.
according to the conditions of each school, as well as the educational needs of the students (types of school, groups of students, class composition). This possibility is feasible and scientifically documented, because it is scientifically correct to follow the principle of time domains rather than part of the course.

The program defines time by area of knowledge and class, without specifying certain hours. On this basis, the teacher has the ability to plan and organize how much time he/she will devote to each class involved daily and weekly.

However, the allocation of teaching hours should have a range throughout the teaching week so that students are in constant contact with teaching subjects, achieving a logical learning sequence, regularity and cognitive development.

In this way the structural "balance" of the timetable is achieved through the functional and flexible interrelationship of cognitive domains and learning contents. Also, the elasticity of the duration of the teaching hours contributes to the completion of the student's work as well as to the flexibility of management of teaching time, the continuation of the learning process, as well as the saving of teaching time for wider teaching, in cognitive subjects of direct or indirect students’ interests.

The designation of the zones is as follows: a) Language-Humanities content, b) Maths-Science content, c) Free Expression, Arts & Physical Education. The proposed zones in the program have the character of "unity". That is, they do not allocate by class, so that a cumulative number of teaching hours arises for the whole class or the total number of hours of the school classes. On the contrary, the hours of the zones will be common to all classes, but each class will take its lessons. For example, a total of 14 hours for Language-Humanities means that within 14 hours per week, all classes should finish all their work.

In proportion, there may also be exchange of lessons within each zone. That is, within the 90 teaching minutes of the "Language-Humanities content" area, one class is taught the Modern Greek Language lesson for 90 teaching minutes and the other or the other co-organized classes of 45 teaching minutes of History and 45 teaching minutes of Religion. This discipline also involves the specialties and the teaching of the corresponding courses.

Also, zones do not work within the program in partitions but have the ability to inter-pair. This means that no specific teaching period is taught but is spread throughout the program.

Generally speaking, the hours refer to a general framework of teaching hours and a collectivity of learning orientation.

Within the courses, the "Flexible Zone" hours are reduced based on the following arguments:

- The teaching context has a "open" character, so it can be diffused in all other lessons, but it can also draw data from them.
- It does not have the obligation to cover a specific curriculum.
- It is not committed to the implementation of its content and can therefore be extended over a broad timeframe, even throughout the academic year.

It is also possible to reduce the hours of the "Environmental Study" lesson by one (1) hour, because:

1 McClure, R. (1985). Curriculum balance. International Encyclopedia of Education. Oxford: Pergamon Press.
The subjects of the learning content of the Environmental Study course are taught extensively and specialized in the 5th and 6th grade through the courses of Physics, Geography and Social & Political Education.

The following courses are proposed in a general timeframe, during the day's compulsory schooling, as shown below. In the case of Primary and Secondary Primary Schools, but also in the one and two grade but also in the three-grade schools, the rest of the hours are covered by the operation of the implied works, aiming at the wider consolidation of the learning objects that have been taught in the teaching process by the teacher:

Timetable for all types of MPSS

| Class zone                      | Duration |
|---------------------------------|----------|
| Language & humanities           | 90’      |
| Integrated lessons              |          |
| A, B                            |          |
| C & D                           |          |
| E & F                           |          |
| Modern Greek Language           | 7        |
| History                         | 2        |
| Religion                        | 2        |
| Social & Political Education    | 1        |
| English                         | 2        |
| Total                           | 14       |
| Hours of “language and Humanities” Maths & Science | 90’ |
| Εντασσόμενα Μαθήματα             |          |
| A, B                            |          |
| C & D                           |          |
| E & F                           |          |
| Maths                           | 3        |
| Science                         | 3        |
| Study of the Environment        | 2        |
| Geography                       | 1        |
| ICT                             | 2        |
| Total                           | 11       |
| Free expression, arts &         | 90’      |
| Physical education              |          |
| Flexible Zone                   | 1        |
| Physical Education              | 2        |
| Art-Music-Theatre               | 2        |
| Total zone hours                | 5        |
| Total hours for a general education teacher | 22 |
| Total hours for specialties     |          |
| English                         | 2        |
| Physical Education              | 2        |
| ICT                             |          |
| Art                             | 2        |
| General total of hours          | 30       |
Remarks:

A) The teaching of the courses to be taught by the disciplines follows the didactic strategy of the co-teaching, with corresponding adaptations of the learning content and the didactic options. Here is what can be constructively contributed to:-In the Ministerial Order 50/76/121153 / C1 issue Second, Government Gazette 1471, 22-11-2002 "Definition of Study Programs, Hours of Operation and Hourly Schedule of All Day Elementary School". -In Ministerial Order 20/482/95210 / C1, issue Second, Government Gazette 1325, 16-9-2003"Teaching the English Language in the Third Grade of the Primary School-Program of the subject" New Technologies in Education "of the All-day School - Interventions in the All-Day Program".

B) For the hours of the optional area of the school, the classes are offered: sports, visual arts, music, theatrical play, dance.

These subjects are proposed because already with this proposal it is proposed to include the corresponding specialties in the MPSs, so they can teach without job adversity in the optional zone, having as extra motivations:-They cover at the same time a range of their teaching hours.-Reduce the number of schools to move to completing their teaching hours.

These subjects are proposed to be taught for two (2) hours each (a total of 10 hours a week), as well as the corresponding hours of the optional post-secondary zone teaching. In the case that some of the teachers who will teach in the optional zone also teach in the obligatory zone, there should be adequate care in organizing the program, so that they do not exceed their 6-hour hours; on the other, to facilitate their transition to the schools in which they will be appointed to teach.

4th FIELD: "Teachers' working time"

It is suggested that the working time of Multigrade School teachers should remain 25 teaching hours, but 3 of these hours are recognized as hours of administrative work. Therefore, 22 teaching hours + 3 hours of administrative work = 25 "working hours of a MS teacher". The term "working time of a teacher" is a new term, which is not in the relevant literature or in the relevant legislation. But it can work constructively: a) To save a sufficient amount of teaching time from the total weekly timetable so that there is teaching “space(school) - time (hours)” for the integration of specialty teachers in “ENSRPV". b) The job inequality of MS teachers is eliminated, since they teach full-time and exercise full administrative work in parallel. It is noted that the 22 teaching hours is an important incentive for teachers to choose to work in an “ENSRPV" because they are the average of the maximum and the minimum teaching time that a primary school teacher is expected to teach. c) In the Multiage Primary School with either two or three teachers, the Head of the school carries out full administrative work and therefore receives the responsibility allowance. For the rest of the teachers, the term "auxiliary administrative work" is introduced, which means that they collaborate in the school administration by assisting the Head of the school, but without having full administrative responsibility, they do not receive the allowance. However, as a counterbalance to their workload, due to the special teaching conditions in the “ENSRPV", they have 2 hours of administrative work, which reduces their teaching hours but shapes their "working time". It is reiterated that the reduction of teaching hours is covered by the introduction of subjects taught by specialty teachers.
5th FIELD: "Specialty Teachers"

a) The first point is that with the inclusion of teaching specialties in the “ENSRPV”, the principle of equal opportunities is met for all pupils of the school network of Primary Schools of the country, without discrimination. b) The inclusion of specialty teachers does not burden the state budget, because it is proposed to cover the needs by teachers from adjacent schools of Primary and Secondary Education. c) The main teaching specialties included in “ENSRPV” are: English, Physical Education, Information Technology, Arts (Art, Music, Drama depending on the availability of specialty teachers). The inclusion of the specific subjects is proposed because these subjects are already integrated in the Mainstream Schools of Greece, but also because their existence is found in educational systems in other countries. In addition, all relevant educational literature as well as the educational policy of both Greece and the European Union – but also worldwide - place particular emphasis and importance on the development of foreign language skills, information technology and art skills as ways of promoting the expression and communication between different people at both the micro- and macro-social level. d) The way of incorporating the hours does not create a problem for teachers' working and teaching hours, since: ‘‘Teachers’ working time is reformed by reducing their teaching hours. In this way there are more available hours within the weekly timetable.’’ The hours of Physical Education and Arts are covered because they are already integrated in the current timetable, but they are taught by the class teacher.

Conclusion

We came up in our proposal with a bibliographic research and a discussion with the teachers of these schools. We also attended several lessons and tried some new ways of teaching in some schools. We believe that the new timetable reform of these schools in conjunction with the entry of specialty teachers in these schools, will upgrade the functioning of these schools.

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