https://doi.org/10.53656/voc23-310addr

Methodology & Experience Методика и опит

ADDRESSING THE PROBLEM OF SURPLUS SCHOOL PLACES IN A MUNICIPALITY; BASED ON A TAXONOMY OF EDUCATIONAL OBJECTIVES

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Abstract. Initially, this paper illustrates the 20% fall between 2001 and 2021 in the population of The Province, The Municipality and within The City. It then goes on to illustrate that, despite an 18% fall in the number of school enrolments between 2011 and 2021, no schools were closed by The Municipality. The paper then indicates the two major problems arising from this lack of intervention: a large number of surplus places and a complex organisation and structure of schools; too many small school, large two-shift comprehensive community schools and problems recruiting specialist teachers. The paper then acknowledges that The Municipality has had no option other than to develop an expensive Funding Formula: the only real solution being to address the cause; i.e., the structure and organisation of the school system.

Keywords: municipality; major problems; small school; two-shift comprehensive community schools; recruiting; specialist; teachers

Using A Taxonomy of Educational Objectives (Budgell and Kunchev 2023), the paper goes on to set delineate a clear structure for the school system: 7 unchanged Rural Primary Schools with 1,650 places; 13 Urban Primary Schools with 8,272 places; 5 Innovative Secondary Schools with 3,250 places. This structure would result in a reduction of over 1,500 in the number of surplus places in the primary sector; and a reduction of almost 4,000 in the number of surplus places in the secondary sector.

INTRODUCTION

The approach taken in this paper, see Figure 1, is derived from a paper presented at an Annual Professional Development Meeting for Teachers and Principals, Budgell and Kunchev (2019) and subsequently revised by Budgell and Kunchev (2023).

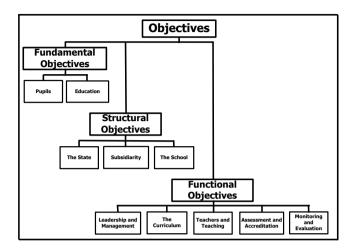


Figure 1. A Taxonomy of Educational Objectives

PROBLEMS WITH THE CURRENT STRUCTURE AND ORGANISATION OF SCHOOLS A) DEMOGRAPHIC SHIFTS

In common with much of Bulgaria, The Municipality has suffered a major decline in its population. Figure 2 illustrates that, however it is determined (The Province, The Municipality or Within the City Limits), there was a significant decline in the population: for example; a 22.5% decrease in The Municipality from 182,388 in 2001 to 141,256 in 2021.

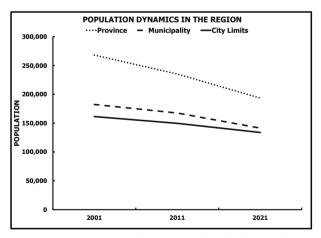


Figure 2. Population Dynamics in the Region

Although a number of schools were closed between 2005 and 2009, since 2009 the closure of schools has not kept up with the decline in the total enrolments in all the schools in The Municipality (Primary, Secondary and Vocational). Figure 3 illustrates the decline in the Number of Enrolments plotted alongside the decline in the Number of Schools. An average of 324 enrolments per school in 2009 had dropped to 279 in 2021: this suggests that an additional 9 schools should/could have closed between 2009 and 2021.

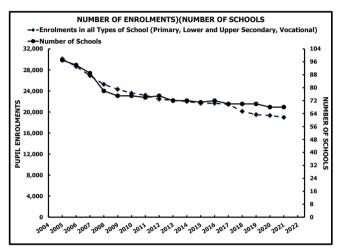


Figure 3. The Number of Enrolments (The Number of Schools)

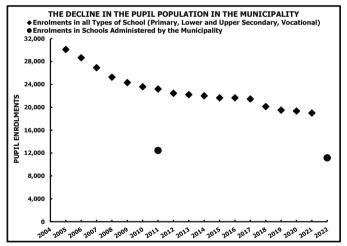


Figure 4. Enrolments in All Schools Compared to Enrolments in Those Administered by The Municipality

Figure 4 indicates that between 2011 and 2021 the total number of enrolments fell from 23,189 to 18,988 – a decline of 4,201 or 18%. At the same time, the number of enrolments in schools administered by The Municipality fell from 12,449 to 11,155 – a decline of 10%. Conversely, the enrolments at schools not administered by The Municipality (the Vocational Schools) fell from 10,740 to 7,888 – a decline of 27%.

B) SCHOOLS ADMINISTERED BY THE MUNICIPALITY

i) The Current Organisation and Structure

Table 1 summarises a complex structure and organisation of the schools funded directly by The Municipality. They range in size from 23 to 1264 pupils; there are 7 Rural Primary Schools, 10 Urban Primary Schools, 6 Comprehensive Community Schools that lose 50% of their 14+ pupils; and 2 Grammar Schools.

Table 1. The Overall Structure of Schools Funded by the Municipality

	NUMBER OF PLACES AND PUPILS IN DIFFERENT TYPES OF SCHOOL					
Type of School	Number of Places	Current Number of Pupils	Number of Surplus Places	Percentage of Surplus Places		
Rural Primary Schools	1,650	556	1,094	66.30%		
Urban Primary Schools	5,430	3,568	1,862	34.29%		
Community Comprehensive Schools	10,284	5,825	4,459	43.36%		
Grammar Schools	1,452	1,206	246	16.94%		
TOTAL	18,816	11,155	7,661	40.72%		

ii) Surplus Places

The reluctance to close schools, despite the decline in the pupil population, as indicated in Figure 3 and the overly complex structure and organisation of schools, indicated in Table 1, has inevitably led to surplus places in schools. This is clearly illustrated in Figure 5 and summarised in Table 2.

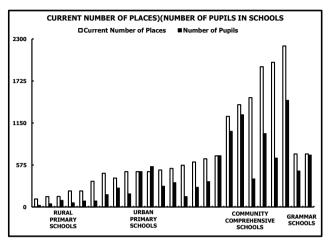


Figure 5. Surplus Places in Schools Administered by the Municipality

Table 2 . Surplus Places in Different Types of

	School Type	Class Range	Range in Number of Pupils	Total Number of Pupils	Range in Number of Classes	Total Number of Classes
Rural Primary School	Inf	1 - 4	23	23	2	2
Ixurai Filliary School	Pri	1 - 7	45 - 170	533	4 - 8	39
Urban Primary School	Pri	1 - 7	144 - 703	3568	8 - 29	161
Comprehensive Community School	Comp	1 - 12	386 - 1264	5825	19 - 67	249
English Language Grammar School	EnGr	8 - 12	494	494	19	19
Mathematics Grammar School	MaGr	5 - 12	712	712	27	27

iii) Funding the Current Organisation and Structure

In order to make all the schools financially viable, The Municipality has had to include three Main Components:

1. Pupil-led Funding
2. Institution-led Funding
3. Class-led Funding
TOTAL
24,882,761 lv. (78.15%)
1,329,848 lv. (4.18%)
5,625,609 lv. (17.67%)
31,838,761 lv.

The Institution-led Funding is (overall) a very small amount. However, for the smallest school it is almost 42% of its income; whereas for the largest school it is only 1.3% of their income.

The Class-Led funding is there to ensure that classes do not exceed 26 - a legal requirement. This is a much larger sum of money and is there to support schools where the year groups are not simple multiples of 26. This leads to some 'interesting' results: one school 'benefits' enormously from class-led funding. If its 1461 pupils were divided into classes of 26, it would only have 56 classes. However, this would require classes of mixed-age pupils and so it is funded for 67 classes – this provides the school with an additional income of 135,830 lv. There is nothing 'wrong' with this – the Leadership Team in the school does not really benefit. However, the teachers (overall) have smaller classes – 22 rather than 26.

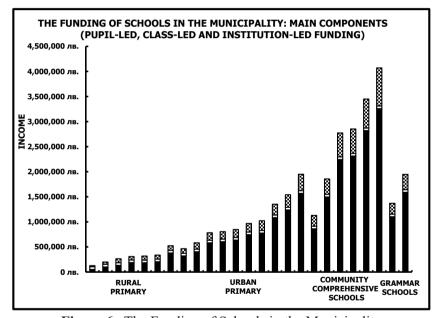


Figure 6. The Funding of Schools in the Municipality

Figure 6 illustrates the aggregate income from the Main Components across the schools in The Municipality. Given the range in size from 23 to 1264 pupils, this information is not very useful – other than to illustrate the problems that the Municipality has in funding its schools. Figure 7, on the other hand, illustrates the income per pupil and the relative cost of funding the very small rural primary schools.

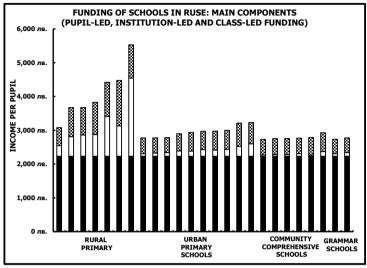


Figure 7. The Funding per Pupil of Schools in the Municipality

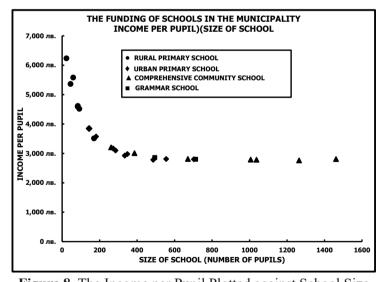


Figure 8. The Income per Pupil Plotted against School Size

Figure 8 provides an alternative view of the same issue; here The Income per Pupil is plotted against the School Size for different types of school. This information is summarised in Table 3.

Income per Pupil (Main Components + Supplementary Components) Type of School Minimum Mean Maximum • Rural Primary Schools 3.512 lv 4.924 lv 6.235 lv **Urban Primary Schools** 2.783 lv 3.122 lv 3.847 lv ٠ Community Comprehensive Schools 2,761 lv 2,866 lv 3,102 lv Grammar Schools 2.801 lv 2.830 lv 2.860 lv

Table 3. Minimum, Mean and Maximum Income per Pupil

iv) Small Schools

As was demonstrated above, the reluctance to close schools not only led to surplus places in schools, it has also led to some very small schools. There are two Community Comprehensive Schools with only one class per year group and three schools with only three classes per year group of secondary-aged pupils. This raises major questions about:

the Quality of Education

the Quality of Teaching, and

the Breadth and Balance of The Curriculum; and consequently

the Standards of Achievement.

Although the Funding Formula can make these small schools financially viable, the schools have great difficulty in appointing specialist teachers that are needed in (for example) mathematics, science and languages.

v) Large Two-shift Schools

Paradoxically, not only are there very small schools, there are four very large Community Comprehensive Schools. However:

- the buildings are not large enough to accommodate all the pupils in one shift; for example, 1037 pupils in a building for 640 pupils;
- there is no easy split between Primary (4 year groups), Pre-secondary
 (3 year groups), Lower Secondary (3 year groups) and Upper Secondary Phases
 (2 year groups); and
- over 50% of the pupils leave at the end of Year 7 to attend Grammar Schools or Vocational Schools.

Only one of the schools can place all the younger pupils in the first shift and all the older pupils in second shift – given that they attend the opposite shift in the second semester. The other three schools have to mix older and younger pupils; for example: Years 1, 4, 6, 8, 10, 11 and 12 in the morning and Years 2, 3, 5, 7 and 9 in

the afternoon. All the schools try to ensure that Years 10, 11 and 12 are taught in the same shift: the older pupils needing access to more specialist teachers without them having to teach in both shifts.

So, is that the problem solved? No – like the child's toy, the problem pops up somewhere else! By operating two shifts without being able to fill either shift, the schools essentially double the number of surplus places. Furthermore, during one of the shifts, there is a minority of pupils in the school and the unit cost of maintaining the buildings becomes disproportionately high.

vi) Interim summary

The Municipality has suffered a 22.5% decline in its population since 2001. There was an 18% fall in school enrolments between 2011 and 2021. An insufficient programme of school closures has resulted in over 7,500 (40%) surplus places in the school system. There is now an overly complex school system with both very small schools and large two-shift schools. Consequently, the Municipality has had to develop a complicated and expensive 'Funding Formula' to ensure that all schools are financially viable. However, the Funding Formula' is, in itself, not the problem: the structure and organisation of the school system is the problem that has to be addressed.

C) ALL SCHOOLS, INCLUDING VOCATIONAL SCHOOLS

The preceding discussion concentrated on schools directly administered by The Municipality. However, over half of the pupils transfer to Vocational Schools at the end of Year 7 and these are administered directly by the Ministry of Education and Science.

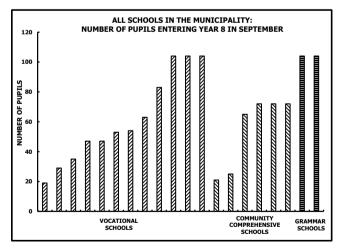


Figure 9. The Number of Pupils Entering All Schools in September

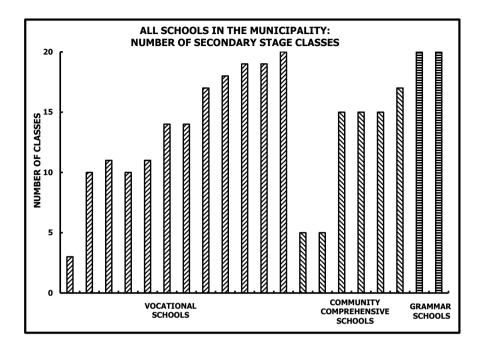


Figure 10. The Number of Classes in the Secondary Stage

Figures 9 and 10 indicate that the Structure and Organisation of the Vocational Schools is just as complex as that of the schools administered by The Municipality: too many schools, surplus places, a wide range in the size of the schools and too many small schools.

A TAXONOMY OF EDUCATIONAL OBJECTIVES

1) PUPILS

The Ministry of Education and Science does not publish systematic information about the pupil population in Bulgaria. However, since joining the European Union in 2007, some basic data has had to be collected and is published annually in the **EU Education and Training Monitor**. In addition, the **World Population Review (2020)** provides very useful insights into the 'ability distribution' of the Bulgarian Population.

Figure 11 indicates that, along with the other counties in the Balkan Peninsular, the average Intelligence Quotient of the Bulgarian population is amongst the lowest in Europe.

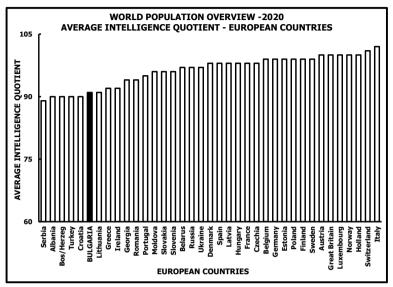


Figure 11. The Average Intelligence Quotient Across European Countries.

Table 4. Key Comparisons between the Normal Distribution
and the Population of Bulgaria

	Require Special Education	Have Additional Educational Needs	Below the Lower Quartile	Below The Mean	Above The Mean	Above the Upper Quartile
Bulgaria	17%	25%	42%	69%	31%	12%
International	5%	20%	25%	50%	50%	25%

Key comparisons between the Normal Distribution and the Bulgarian Population are illustrated in Table 4. For example:

- -42% (25%)¹ of the Bulgarian Population are below the Lower Quartile;
- -69% (50%) are below The Mean;
- therefore only 31% (50%) are above The Mean; and
- only 12% (50%) are above the Upper Quartile.

Of even greater concern is the finding that:

- up to 17% (5%) of the population have special educational needs and are unlikely to be able to cope in mainstream schools;
- a further 25% (15%) will have additional educational needs and will require structured support to be able to cope in mainstream schools; and
 - in Bulgaria these pupils are placed in Vocational Schools.

Since joining the European Union, Bulgaria has also taken part in the **Programme** for International Pupil Assessment (PISA).

The Average Test Scores in Reading, Mathematics and Science in the **2018 PISA** tests are summarised below in Table 5.

	Average Intelligence Quotient	Average Reading Score	Average Mathematics Score	Average Science Score
Minimum	89	380	398	383
Bulgaria	91	420	436	424
Bulgaria (Percentile)	14 th	8 th	11 th	8 th

488

523

487

530

Table 5. Intelligence and PISA Scores (Reading, Mathematics and Science)

A comparative analysis of the **PISA** results forms an important element of the **EU Education and Training Monitor**.

479

523

Almost half of young Bulgarians (those in Vocational Schools) lack basic skills in Reading, Mathematics and Science²:

- 47% of 15-year-old Bulgarian pupils have difficulty understanding texts of moderate length and complexity or unfamiliar material;
- 44% have difficulty interpreting and recognizing the mathematical representation of simple situations; and
 - -47% show a lack of basic understanding in the field of natural sciences.

The percentages for **Pupils** who show poor results are among the highest in the EU and are twice as high as the EU average:

- 22.5% in Reading;

98

102

Median

Maximum

- 22.9% in Mathematics: and
- 22.3% in Science.

The proportion of **Pupils** classed as top performers – who have demonstrated complex knowledge of the subjects tested – is very low.

- -2% in Reading (EU average: 8.5%),
- -4% in Mathematics (EU average: 11%) and
- -2% in Science (EU average: 6.3%).

Figure 12 illustrates recent results in the Year 7 National Tests in Mathematics and Bulgarian Language in The Municipality. In the Mathematics tests, 57 % of the **Pupils** failed to score above 4.0 and only 14% scored 5.0; similarly, 35% of the **Pupils** failed to score above 4.0 and only 27% scored above 5.0 in the Bulgarian Language test.

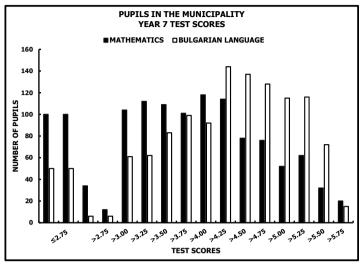


Figure 12. Year 7 Test Scores

In Figure 13, the type of school that **Pupils** transferred to at the beginning of Year 8 is plotted against the average of their test scores in Mathematics and Bulgarian Language. This indicates that just under 20% of **Pupils** transferred to Grammar Schools, just over 25% of **Pupils** stayed in their Community Comprehensive Schools and 55% of **Pupils** transferred to Vocational Schools.

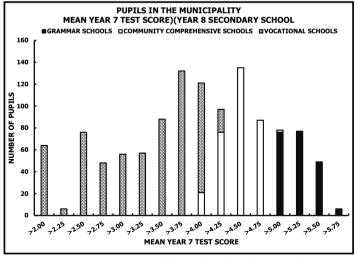


Figure 13. Pupil Destinations in Year 8

The basic ability distribution of the Bulgarian population has huge implications for the structure and organisation of the education system. To the extent that almost 55% of **Pupils** over the age of 14 in The Municipality are sent to Vocational Schools – schools that are administered by The Ministry of Education and Science.

Pupils have the right to leave school:

- believing that they are good learners;
- being independent and self-sufficient;
- being more capable of thinking clearly and making their own Choices; and
- having had their **Agency**, as an individual, fostered and developed.

However:

- too many Pupils have low ability and even lower levels of attainment in reading, mathematics and science;
 - too many Pupils attend either very small schools or two-shift schools;
 - too many Pupils have to attend Vocational Schools; and
 - too few Pupils have the opportunity to develop Agency and exercise Choice.

2) EDUCATION

Education should be a means to empower pupils to become active participants in the

transformation of their societies.

Education should focus on the values, attitudes and behaviours which enable individuals to learn to live together.

The primary purpose of **Education** should be to build up of the capacity of the individual for the benefit that individual.

Pupils should leave the **Education** System more capable of thinking clearly and making their own **Choices**.

The priority of **Education** should be respect for the **Agency** of the individual.

The priority of Education ought to be respect for the Agency and Choice of the individual. However, very small schools provide pupils with very little opportunity to exercise either agency or choice. Furthermore, Vocational Schools seek to provide pupils with certain sets of skills so that they can meet society's needs; rather than becoming more intellectually capable, more able to work together with other people and to contribute to building their community.

3) THE STATE

It should be **The State's** responsibility to ensure that the resources allocated to Education are deployed efficiently and effectively.

It should be **The State's** responsibility to ensure that:

- equal educational opportunities are available to everyone;
- parents send their children to school;
- education is affordable for everyone;
- democracy is preserved; and
- a common social fabric is created where all are respected and accepted.

When significant responsibility, authority and accountability is delegated to the School, **The State** should still determine the frameworks for:

- aims and objectives;
- policies;
- priorities;
- quality and standards;
- accountability; and
- the appropriate conditions for individual development.

The State retains direct responsibility for vocational schools, but the most recent EU Education and Training Monitor concluded that:

- early school leaving remains problematic in Vocational Schools;
- pupils who attend Vocational Schools are low attaining pupils from lower socio-economic backgrounds and this has a significant impact on their learning outcomes;
- vocational education provides less benefit to pupils than general upper secondary education;
- poor labour market relevance and quality of vocational education leads to poor employment prospects for low ability pupils; and
- the employment rate of recent vocational education and training graduates is still below the EU average.

4) SUBSIDIARITY

Subsidiarity is the principle of social organization that holds that educational issues should be dealt with at the most immediate (or local) level that is consistent with their resolution – The School.

It should be The State's responsibility to determine the structure and organisation of the education system and the levels to which agency and choice and their rights and responsibilities should be delegated.

The principles, the criteria and the formula for allocating resources should be:

- open, transparent and objective; and
- reflect the real costs inherent in education.

The principle of **Subsidiarity** assumes that:

- improving the quality of education; and
- raising standards of achievement

should be the responsibility of The School.

The State should not take centralized decisions on:

- the allocation of resources within The School;
- the detailed planning of The Curriculum; and
- different approaches to teaching and learning.

However, at its core, the education system in Bulgaria remains a heavily centralised, top-down autocracy. The delegation of financial resources in 2007 only gave the illusion of devolution.

Dainov (2007) concluded that:

- "reforms fail under indecisive governments, lacking in public support, incapable of overcoming entrenched interests";
- "the Bulgarian education system has continually evaded reform by de-legitimating and side-tracking it, thus helping entrenched interests preserve the status quo"; and
- "future reform attempts will have to begin with restructuring education away from a heavily-centralised and state-run system, and towards competition and accountability, beginning with decisive de-centralisation".

5) THE SCHOOL

Schools must comply with national policies, expectations and standards.

Schools should be self-organising, complex systems in a radically re-designed environment free of national and local municipal control.

Schools should maintain a high quality of education and high standards of achievement within a cycle of continuous improvement.

Schools should be age and stage specific.

Schools must become future proof, they must:

- become **Innovative Schools**;
- provide increasing opportunities for independent learning in virtual classrooms:
 - regulate the use of the school website, cloud technologies and social networks;
- ensure that pupils can positively and confidently engage with the digital world; and
- ensure that pupils have the skills and knowledge to effectively use digital technologies to participate in society, communicate with others and create and consume digital content.

Although, Schools should be age and stage specific, too many of the Community Comprehensive Schools in The Municipality:

- have too few secondary-age pupils;
- have to operate two shifts;

- have to mix pupils from elementary and secondary stages; and
- incur high maintenance costs because of the low occupancy.

6) LEADERSHIP AND MANAGEMENT

The quality of **Leadership** is fundamental to:

- school improvement;
- school effectiveness;
- achieving high performance; and
- bringing about change and innovation.

Successful Leaders are those educationalists who can balance and integrate

the principle the moral basis of the school the purpose the core business of the school so that they are balanced and mutually supportive.

Leadership is seen as having a responsibility for the values by which the school works. What the right things are is, of course, highly contestable and will be the product of:

- personal values;
- the prevailing moral consensus in society; and
- the dominant moral hegemony.

Management is concerned with:

- translating principles into actual practice;
- 'doing things right';
- focusing on systems, structures and delivery.

Administration is about:

- doing all the routine tasks;
- the organisational routines; and
- infrastructure.

However, the centralised, top-down autocratic nature of the education system in Bulgaria reduces most school directors to being Administrators. There are few high-level issues about which the school director has the right or the responsibility to take decisions.

The knowledge, skills and understanding of Leadership and Management do not develop naturally in a closed, command economy; but they will be a prerequisite to the development of Innovative Secondary Schools.

7) THE CURRICULUM

The inflexible interpretation of the "belief that education should train the

individual to meet societal goals" where pupils are channelled into **Profiles/ Pathways** chosen by The State leads to real conflicts.

- An immediate conflict between the maturing pupils' goals and the **Profile** they were placed in at 14+ by The State to meet societal needs.
- -A deep conflict caused by The State's inability to actually determine society's real needs and the Schools and Profiles that are meeting false needs.

There are a number of frameworks that can be used to describe the **Curriculum** which must provide sufficient breadth and balance while enabling pupils, as they mature, to exercise increasing choice of the subjects that they wish to study.

- The Entitlement **Curriculum** Framework:
- The Aims and Objectives **Curriculum** Framework:
- Areas of Learning **Curriculum** Framework:
- Subject Strands:
- Cross-curricular Skills:
- Thinking Skills and Personal Capabilities:

However, in Bulgaria, there is a huge mismatch between theory and practice. The Ministry of Education and Science draws upon neither the Entitlement Curriculum Framework nor the Aims and Objectives Curriculum Framework in developing the National Curriculum. It relies solely on the Areas of Learning Curriculum; but even then, it concentrates on Subject Strands.

Despite the fact that half of young Bulgarians lack basic skills in reading and mathematics, the Ministry of Education and Science ignores communication, literacy and numeracy. The Curriculum must be freed from the straightjacket of Pathways/Profiles. Secondary Schools must become Innovative Schools and must provide sufficient breadth for the pupils to have the opportunity to exercise real choice of the subjects that they wish to study.

8) TEACHERS AND TEACHING

Teachers must clearly understand and always act within the statutory frameworks which set out their professional duties and responsibilities.

Teachers must demonstrate consistently high standards of personal and professional conduct.

Teachers must have consistently high expectations of the pupils' attitudes to learning and standards of achievement.

Teachers must have a deep knowledge and understanding of the subjects they teach. They must plan lessons effectively, making maximum use of lesson time and coordinating learning resources.

Teachers should question the pupils effectively and demonstrate a clear understanding of the ways they think about the subject.

In the very small schools and some of the two-shift schools, it is not always possible to appoint suitable qualified and experienced Teachers in specialist subjects; e.g., mathematics, science and foreign languages.

9) ASSESSMENT AND ACCREDITATION

Formative **Assessment** should provide the pupils with accurate information about their knowledge, skills and understanding, and should be accompanied by developmental marking.

Reliable and valid **Formative Assessment** provides very important feedback for the teacher and allows parents to follow their children's progress and to be aware of their standards of achievement.

Summative Assessment undertaken at the end of the module, course, year or school provides:

- a measure of the pupils' standards of achievement;
- the teacher with an indication of any weak areas in the quality of their teaching; and
- the leadership team with an early indication of any teacher who is beginning to fail in the classroom.

When it is analyzed and presented effectively, reliable and valid **Summative Assessment**, should provide parents with appropriate information about:

- the strengths and weaknesses of their children; and
- the strengths and weaknesses of schools.

National (State) examinations should fulfill the following functions, they should:

- accredit the knowledge, skill and understanding of the pupils in a particular field, subject or profession;
- allow pupils to be awarded a diploma, degree or qualification that acknowledges the level attained;
 - function as an 'entry ticket' to the next stage of education.

"The national external examinations are not designed to measure progress in pupils' learning over time³. A separate national standardised test would have to be created for this purpose. The results should be public, disseminated, analysed, used for policy and strategy, and comparable over time and grade. The strengthened assessment system should be aligned with the accountability and autonomy framework.

National assessments are needed to measure progress, school value-added, and to determine the ability of parents and local authorities to hold principals to account. Existing national assessments could be made more suitable for monitoring changes in quality resulting from the reform"

10) MONITORING AND EVALUATION

The State should provide reliable and comprehensive information about the efficient and effective deployment of tax-payers' money.

Schools should have more autonomy and therefore they should be fully accountable for the results of their activity.

Inspections could provide an evaluation of the extent to which each school has achieved its goals: this should motivate schools to search for ways to improve their outcomes.

The Inspection of Schools could perform five essential functions it could:

- provide parents with information that informs their choices and preferences about the effectiveness of the schools their children attend or will attend in the future;
- keep the state informed about the work of the schools which provides assurance that minimum standards are being met;
 - provides confidence in the use of public money;
 - assists accountability; and
- promotes the improvement of individual schools, and the education system as a whole.

It has already been suggested that the education system in Bulgaria is centralised, top-down and autocratic in nature: few high-level decisions can be taken by school directors - the system can be characterised as one of Quality Control⁴. In terms of the core business of the school, decisions are taken at the highest possible level with only limited devolution of real power to the school director. Furthermore, despite its name, the Regional Inspectorate is really a branch of the Ministry of Education and Science and its role is limited to one of compliance and ticking boxes.

A PROPOSED STRUCTURE AND ORGANISATION OF THE SCHOOLS WITHIN THE MUNICIPALITY

Phase 1: THE REMOVAL OF SURPLUS PLACES

The absence of any long-term attempt to manage the problem of surplus places has left The Municipality in a difficult position. Other than in the two Grammar Schools, there are substantial surplus places in every type of school administered by The Municipality. Without an expensive and illogical programme of building new schools, it has no obvious solution.

The decline in the population of the villages presents an intractable problem for Rural Primary Schools. The only real alternatives are:

- to close schools in some of the villages and transport very young pupils to schools in other villages or within the city limits; or
 - maintain the schools despite their high cost per pupil.

The financial and psychological problems associated with 'bussing' very young children means that The Municipality has no option other than to absorb the small cost of maintaining very small Rural Primary Schools.

The only real solution open to The Municipality is to:

- deconstruct the 6 two-shift Community Comprehensive Schools; and for
- 3 to become Primary Schools, and
- 3 to become **Innovative Secondary Schools** and
- remove pre-secondary phase classes from the Mathematics Grammar School.

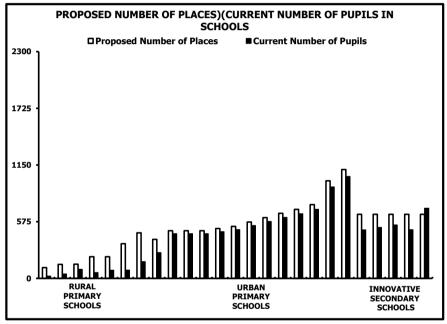


Figure 14. Surplus Places in Schools in the Proposed Structure

Table 6. Surplus Places in Different Types of School in the Proposed Structure

	NUMBER OF PROPOSED PLACES AND PUPILS IN DIFFERENT TYPES OF SCHOOL				
Type of School	Number of Places	Current Number of Pupils	Number of Surplus Places	Percentage of Surplus Places	
Rural Primary Schools	1,650	556	1,094	66.30%	

Urban Primary Schools	8,272	7,747	525	6.35%
Innovative Secondary Schools	3,250	2,852	398	12.25%
TOTAL	13,172	11,155	2,017	15.31%

Figure 14 and Table 6 indicate that this would result in:

- $-\overline{7}$ unchanged Rural Primary Schools with 1,650 places catering for a current pupil population of 556s;
 - − 13 Urban Primary Schools with 8,272 places for a current pupil population of 7,747;
 - leaving some facility for parental choice;
- 5 **Innovative Secondary Schools** with 3,250 places for a current pupil population of 2,852;
 - creating the opportunity for real innovation in teaching and learning,
- ensuring that older pupils have specialist teachers in mathematics, science and foreign languages,
- leaving sufficient capacity to future-proof the secondary sector against a review of vocational education;
 - a reduction of over 1,500 in the number of surplus places in the primary sector;
- a reduction of almost 4,000 in the number of surplus places in the secondary sector; and
 - a reduction in the unit cost of maintaining the buildings.

Figure 14 and Table 6 present a target to be aimed for. The Municipality would have to develop a phased implementation plan that:

- facilitates the development of **Innovative Secondary Schools**;
- enhances the leadership and management skills of school directors;
- minimises the disruption the education of pupils currently in the system; and
- protects teachers' employment rights.

Phase 2: CURRICULUM REFORM

In co-operation with The Ministry of Education and Science, The Municipality must establish a fundamental review of The Curriculum in the Upper Secondary Stage that will facilitate the development of the new larger **Innovative Secondary Schools**, and:

- ensure that Agency and Choice become prime features of the pupils' experience;
 - abolish Pathways/Profiles;
- introduce a greater flexibility and real choice for the pupils in what they study in Years 11 and 12;

- introduce compulsory courses in literacy and numeracy for all pupils;
- widen the range of courses and Matura available; e.g., Further Mathematics,
 English Literature, Business Studies, Sociology (Budgell 2022a); and
- improve the reliability and validity of the Matura to make them more suitable for monitoring improvements in:
 - the quality of education, and
 - the standards of achievement.

Phase 3: A REVIEW OF VOCATIONAL EDUCATION

In co-operation with The Ministry of Education and Science, establish a similar review of the role, purpose, structure and organisation of Vocational Education in order to:

- bring the administration of Vocational Schools under the control of The Municipality;
- improve the quality of education and standards of achievement in Vocational Schools, particularly in mathematics, reading and science;
 - address the problem of low completion rates; and
 - improve the local labour market relevance of Vocational Education; and
 - improve the employment prospects of school leavers.

NOTES

- 1. Figures from the Normal Distribution are shown in brackets.
- 2. EU Education and Training Monitor 2020 Bulgaria
- 3. The World Bank: A Review of the Bulgaria School Autonomy Reforms
- 4. Contrast this with England, where the system can be characterised as Quality Assurance. Responsibility for the internal workings of the 'black box' (finance, the curriculum, staffing, premises and supplies and services) has been delegated to the headteacher and the governing body; however, s accompanied by a stringent (some would say draconian) system of monitoring and evaluation.

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