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Methodology & Experience
Методика и опит

ALTERNATIVE APPROACHES TO VOCATIONAL EDUCATION AND TRAINING – PART 2

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Abstract. In this paper, the author continues the discussion he started in Budgell (2021): Alternative Approaches to Vocational Education and Training. A presentation of the basic ability distribution (as determined by the **World Population Review (2020)**) of the Bulgarian Population is followed by an analysis of the **Programme for International Student Progress 2018**. The author then goes on the analyse the **efficiency** of the Bulgarian Education System by analysing the school structure in one municipality. This is followed by an analysis of the **effectiveness** of the system which indicates that, even given the basic ability distribution, the pupils' skills in reading, mathematics and science are below expectations. The data indicates that the problems with developing basic skills are concentrated in Vocational/Professional Schools. The author goes on the conclude that there should be a smaller number of larger schools (130 – 156 pupils in each grade) providing greater choice for the pupils. Furthermore, vocational training should commence in Grade 11 in larger Vocational Colleges that provide a wider range of career paths and enable pupils to postpone their career decision until they are at least 17 years old.

Keywords: student progress; world population review; effectiveness; efficiency; Programme for International Student Progress

Introduction

A significant feature of the Bulgarian education system, identified by the European Union, is the lack of systematic monitoring and evaluation. There is no publicly available information that demonstrates how well (or how badly) the education system is performing.

An open and transparent approach to monitoring and evaluation would be made up of a number of Key Performance Indicators:

– quantitative; standards of achievement, pupil destinations; and

– qualitative; questionnaires, end-user opinions

Key Performance Indicators are the critical indicators of progress toward an intended result; they:

– provide a focus for strategic and operational improvement;

– create an analytical basis for decision making; and
– help focus attention on what matters most.

This paper focusses on Quantitative Performance Indicators:
– the basic ability distribution of the Bulgarian Population;
– the comparative performance of 15-year-old Bulgarian students in tests of reading, mathematics and science;
– the efficiency of the school system in Bulgaria;
– the effectiveness of the school system in Bulgaria; and
– problem with vocational education and training in Bulgaria.

The basic ability distribution of the bulgarian population

Although the Ministry of Education and Science does not publish systematic information about the pupil population in Bulgaria; 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 1 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. Of course, this does not mean that there are no intelligent people in Bulgaria: the distribution of intelligence or basic ability, together with the Normal Distribution, is illustrated in **Figure 2**.

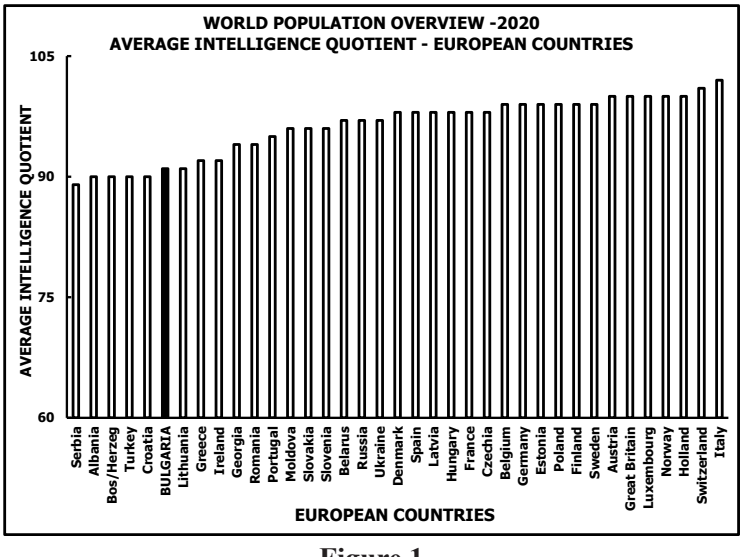


Figure 1

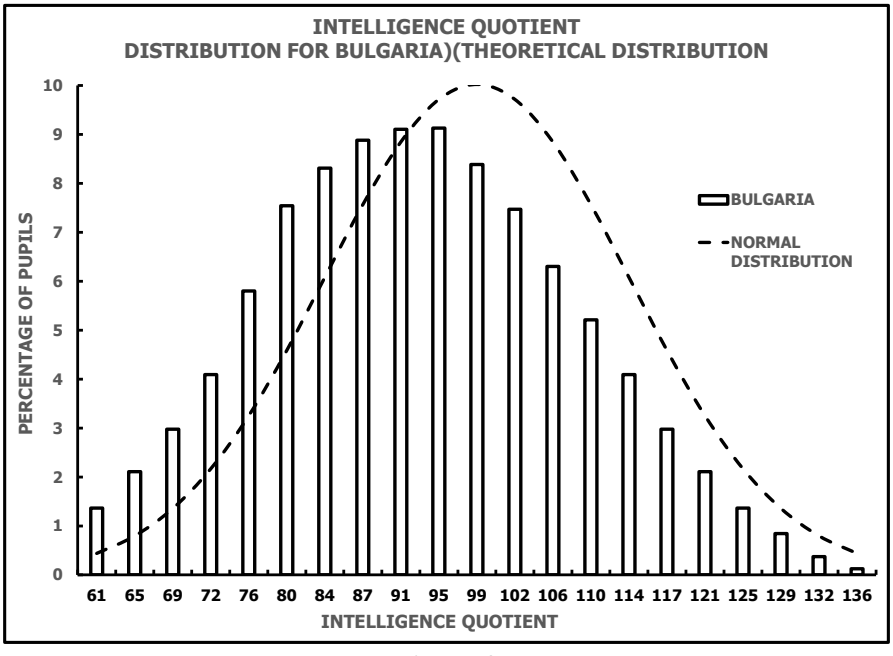


Figure 2

Key comparisons between the Normal Distribution and the Bulgarian Population are illustrated in **Table 1**. For example:

– 42% (25%)[1)] of the Bulgarian Population are below the Lower Quartile;

– 69% (50%) are of below average ability;

– therefore only 31% (50%) are of above average ability; 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; and

– a further 25% (15%) will have additional educational needs and will require structured support to be able to cope in mainstream schools.

Table 1

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

The basic ability distribution of the Bulgarian population has huge implications for the structure and organisation of the education system.

The programme for international pupil assessment (PISA)

Since joining the European Union, Bulgaria has also taken part in the **Programme for International Pupil Assessment** (**PISA**). **Figures 3, 4** and **5** illustrate the comparative performance of 15-year-old Bulgarian pupils in the 2018 reading, mathematics and science tests.

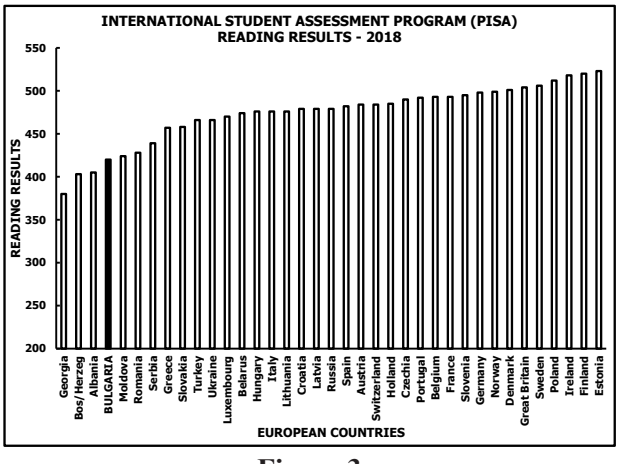


Figure 3

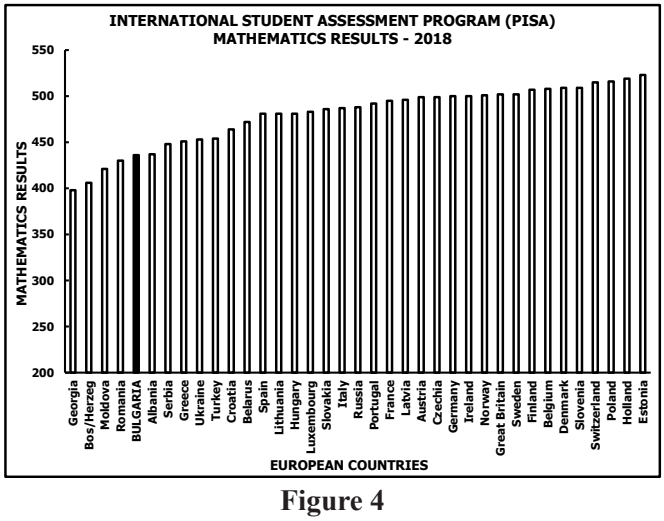


Figure 4

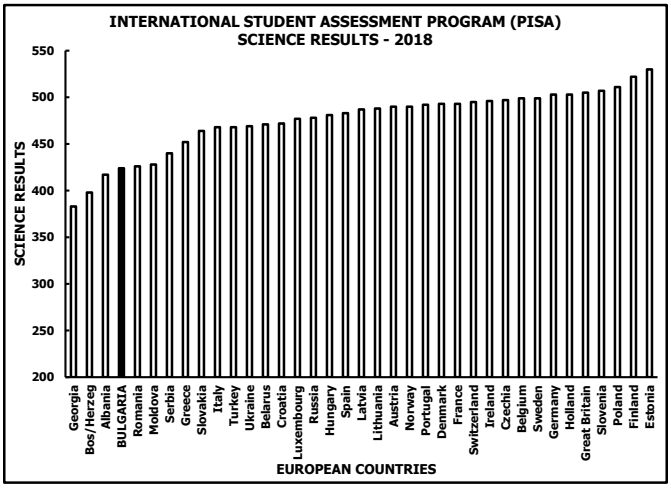


Figure 5

The Average Test Scores in reading, mathematics and science in the **2018 PISA** tests are summarised below in **Table 2**.

Table 2

	Average Intelligence Quotient	Average Reading Score	Average Mathematics Score	Average Science Score
Minimum	**89**	**380**	**398**	**383**
Bulgaria	**91**	**420**	**436**	**424**
Median	**98**	**479**	**488**	**487**
Maximum	**102**	**523**	**523**	**530**

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

Almost half of young Bulgarians lack basic skills in reading, mathematics and science.

– 47% of 15-year-old Bulgarian pupils have difficulty understanding texts of moderate length and complexity or unfamiliar material.

– 44% had difficulty interpreting and recognizing the mathematical representation of simple situations,

– 47% showed 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% per reading;
– 22.9% in mathematics: and
– 22.3% in natural sciences.

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

– 2% per reading (EU average: 8.5%),
– 4% in mathematics (EU average: 11%) and
– 2% in natural sciences (EU average: 6.3%).

EU Education and Training Monitor 2020 Bulgaria

The basic ability distribution has a major impact on the basic skills in reading, mathematics and science.

The school

School attendance began to become compulsory in the 18th century. National and local governments began to take a greater role in the direction of what had previously been considered a parochial responsibility. Most countries now have systems of formal compulsory education - a period of education that is required of for pupils and is imposed by the state.

In these systems, pupils progress through a series of schools. The names for these schools vary by country but generally include primary schools and secondary schools. A secondary school is a school in which pupils from the age of 11 until at least age of 16 and sometimes 19, receive the second and third stages of formal compulsory education: lower and upper secondary education. Some secondary schools can provide both lower secondary education and upper secondary education but these can also be provided in separate schools.

Secondary education typically takes place after six years of primary education and is followed by higher education, vocational education or employment. Every country aims to provide basic secondary education and attendance is compulsory in most countries for pupils between the ages of 11 and 16.

The Bulgarian government adopted an entire programme of reform in education in 1979. In resolving the largely unrecognized philosophical opposition between:

– the idea that education should build up of the capacity of the individual; and
– the belief that it should train the individual to meet societal goals, (Hargadon, 2015);

the Bulgarian government clearly decided that:

– the *primary purpose of education is to benefit the collective society;*
– Bulgaria needs citizens with a certain set of skills so that when they are told what to do, they are able to do it?
– pupils moving from Grade 7 to Grade 8 go through a state-controlled admission process;
– the state plans how many pupils will follow each profile (pathway) in every school;

– pupils have to choose which profile they will follow at the age by the age of 14;

– in vocational/professional schools, these pathways lead to specific professions; therefore

– pupils who go to vocational/professional schools are (notionally) choosing their career by the age of 14.

For such a centralised, top-down system to be successful:

– vocational education must be at least as beneficial to pupils as general upper secondary education;

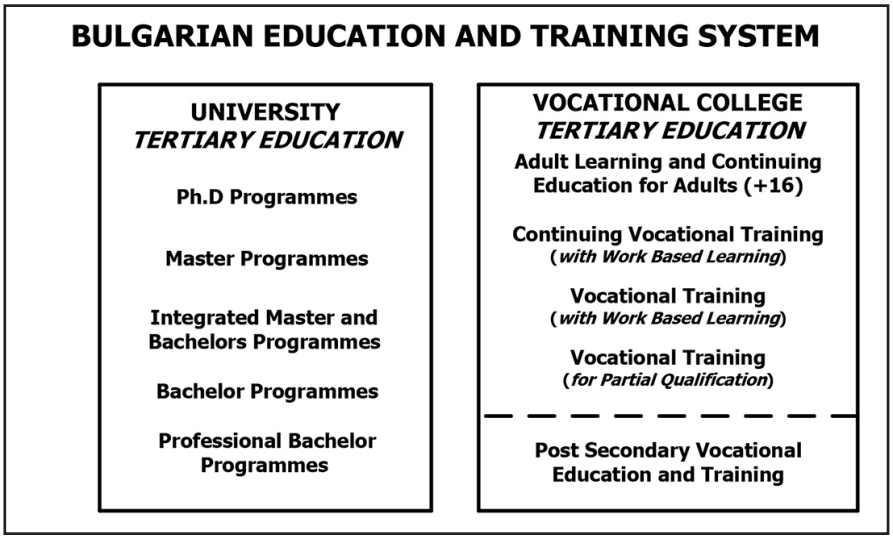
– the quality and labour market relevance of vocational education and training must be sufficient to ensure that it does not lead to poor employment prospects for many low ability pupils.

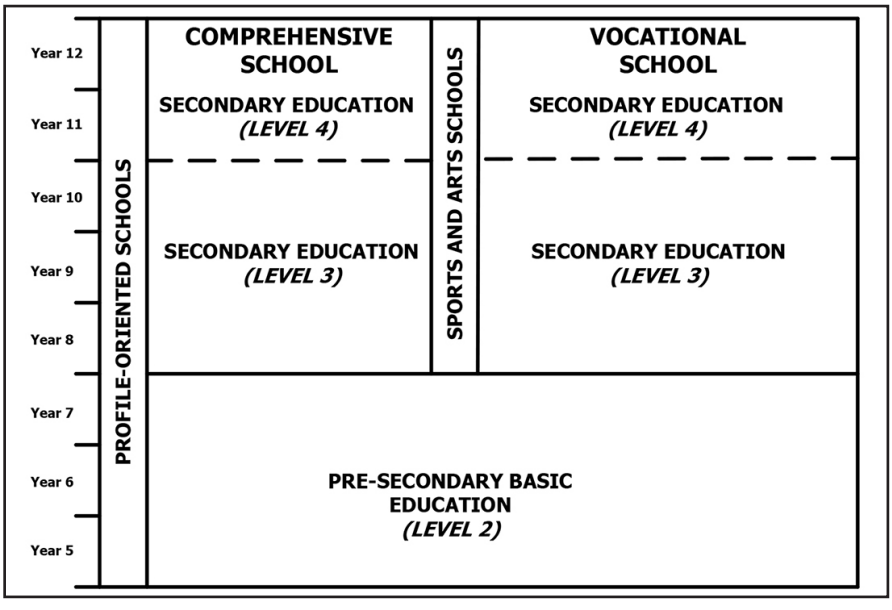
The education system in Bulgaria is designed to meet the government's perception of societal goals. At the age of 14, pupils are channelled into profiles determined by the government. The pupils have little choice over what they study.

The structure and organisation of schools in bulgaria

The formal structure and organization of schools is illustrated in **Table 3**. Primary schools, community schools and high schools are funded and administered by the municipalities; whereas vocational/professional schools, arts schools and sports schools are funded and administered directly by the Ministry of Education and Science.

Table 3





The structure and organization of schools in one municipality: ruse

In order to really understand how the Bulgarian system functions, this paper examines one municipality in detail. Like many municipalities in Bulgaria, the population in Ruse has declined significantly (by around 30,000 inhabitants) in the last twenty years. During that period however, there has been no significant change in the structure and organization of the schools. Therefore, there are significant surplus places in the system.

Schools funded and adminstered by the municipality

Table 4

		Primary Classes in Ruse	
		Average Number of Pupils per Grade	Average Class Size
Rural Primary Schools	Rural Primary School 1	3	11
	Rural Primary School 2	8	14
	Rural Primary School 3	10	10
	Rural Primary School 4	10	10
	Rural Primary School 5	11	13

	Rural Primary School 6	**13**	**13**
	Rural Primary School 7	**24**	**21**
Urban Primary Schools	**Urban Primary School 1**	**24**	**17**
	Urban Primary School 2	**25**	**20**
	Urban Primary School 3	**37**	**20**
	Urban Primary School 4	**38**	**22**
	Urban Primary School 5	**41**	**22**
	Urban Primary School 6	**47**	**21**
	Urban Primary School 7	**48**	**21**
	Urban Primary School 8	**66**	**24**
	Urban Primary School 9	**87**	**24**
	Urban Primary School 10	**101**	**25**
Community Schools	**Community School 1**	**43**	**23**
	Community School 2	**89**	**23**
	Community School 3	**96**	**23**
	Community School 4	**104**	**23**
	Community School 5	**113**	**23**
	Community School 6	**166**	**22**
High Schools	**High School 1**	**35**	**26**
	High School 2		
Average for Primary Aged Pupils		**1219**	**22**

Taken from the Municipality's Funding Formula (Budget_Ruse_2020), **Table 4** illustrates:

– the Average Number of Pupils in each grade; and
– the Average Class Size

across the four categories of schools with primary aged pupils:

– Rural Primary Schools
– Urban Primary Schools
– Community Schools; and
– High Schools.

This information is also presented graphically in **Figures 6 and 7**.

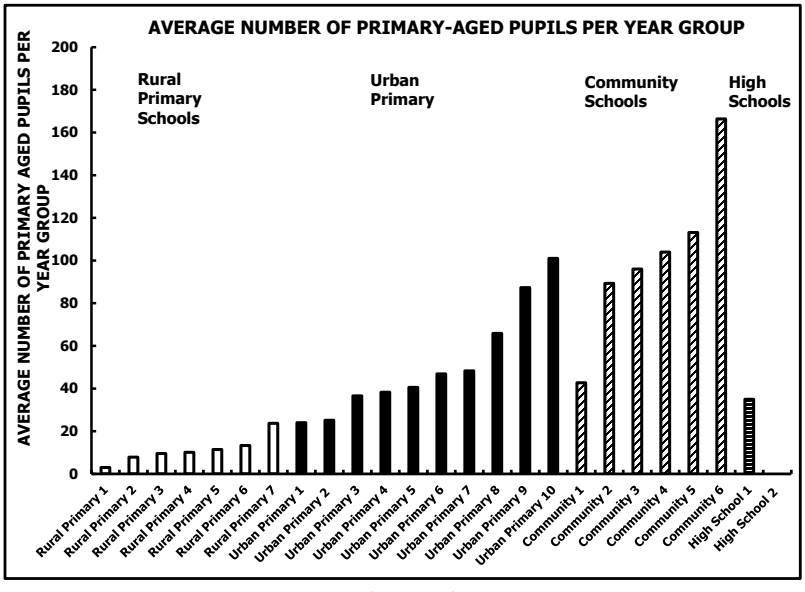


Figure 6

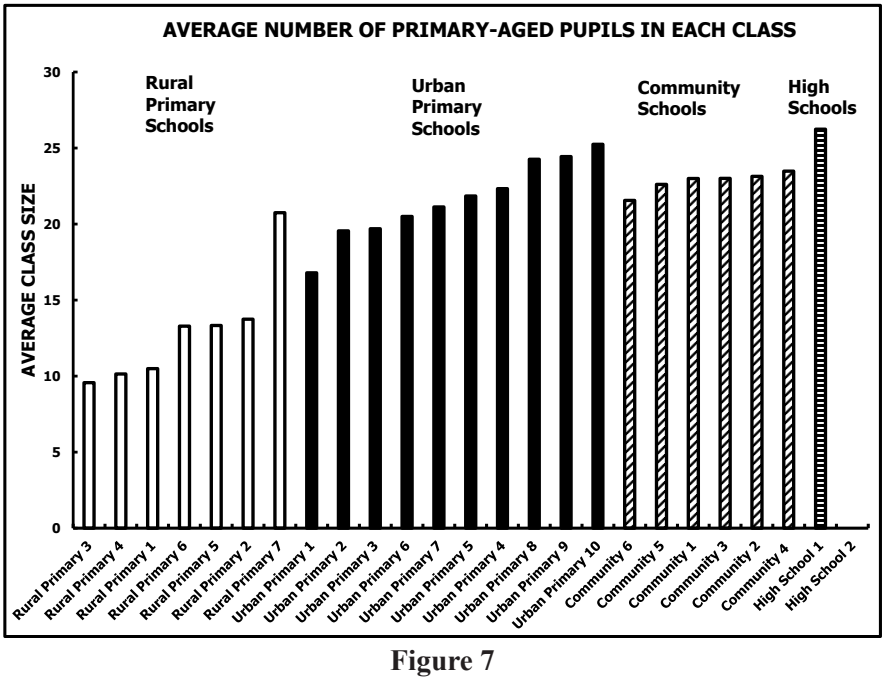


Figure 7

Table 5

		Secondary Classes in Ruse	
		Average Number of Pupils per Grade	Average Class Size
Community Schools	Community School 1	14	17
	Community School 2	34	24
	Community School 6	65	25
	Community School 3	69	23
	Community School 4	70	25
	Community School 5	105	25
High Schools	High School 2	102	26
	High School 1	119	26
Average for Secondary Aged Pupils		579	25

Similarly, **Table 5** illustrates:
– the Average Number of Pupils in each grade; and
– the Average Class Size
across the two categories of schools with secondary aged pupils:
– Community Schools; and
– High Schools.
This information is also presented graphically in **Figures 8** and **9**.

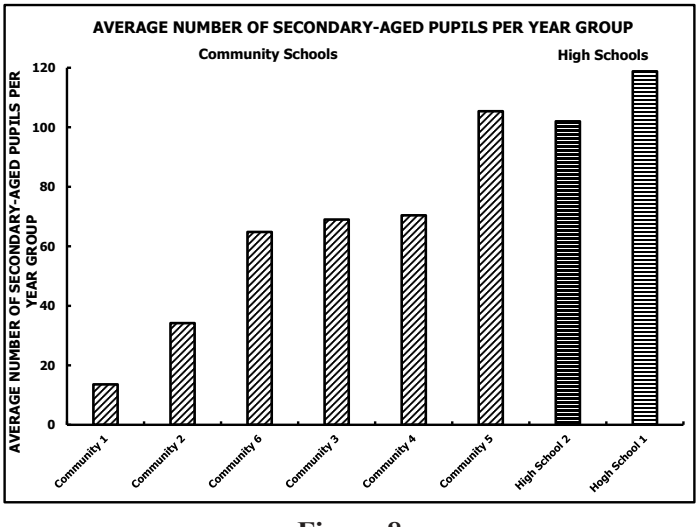


Figure 8

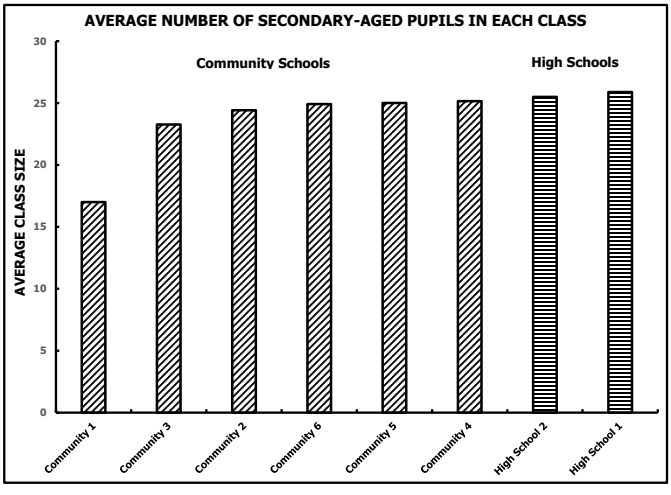


Figure 9

The information presented above already indicates the inefficiencies in the structure and organisation of the schools administered by the Municipality. If all the schools admitting pupils into Grade 8 had admission limits of 104 (i.e., 4-form-entry), only 6 schools rather than 8 would be necessary.

There are some very small community schools which offer a limited curriculum for the pupils.

All schools in the municipality

Given that Vocational/Professional Schools are funded directly by the Ministry of Education and Science, they are not included in the Municipality's Funding Formula and therefore not in **Tables 4** and **5**. However, an independent analysis of pupils entering (Grade 8) in September 2020 (Kunchev 2021) is shown in **Table 6**; and illustrated in **Figures 10** and **11**.

Table 6

		Pupils Entering Secondary Schools in Grade 8 in 2020	
		Number of Pupils per Grade	Average Class Size
Vocational Schools in the City of Ruse	Vocational School 1	25	13
	Vocational School 2	27	14
	Vocational School 3	38	19
	Vocational School 4	40	13
	Vocational School 5	46	23

Vocational Schools in the City of Ruse	Vocational School 6	51	17
	Vocational School 7	78	20
	Vocational School 8	78	26
	Vocational School 9	103	26
	Vocational School 10	104	26
	Vocational School 11	104	26
Community Schools	Community School 1	25	25
	Community School 2	26	26
	Community School 6	77	26
	Community School 3	78	26
	Community School 5	78	26
	Community School 4	78	26
High Schools	High School 1	104	26
	High School 2	104	26
Average for Grade 8 Pupils		1264	23

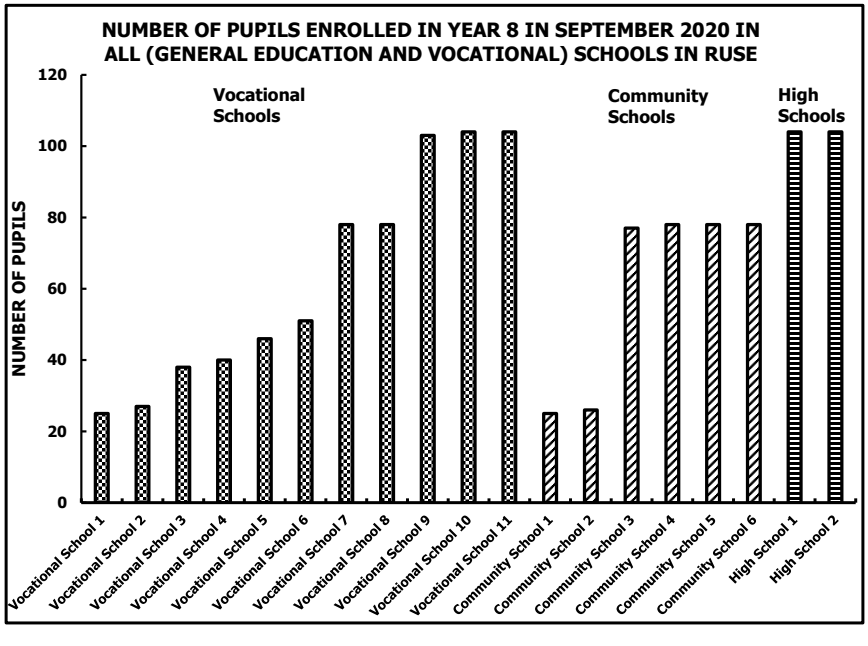


Figure 10

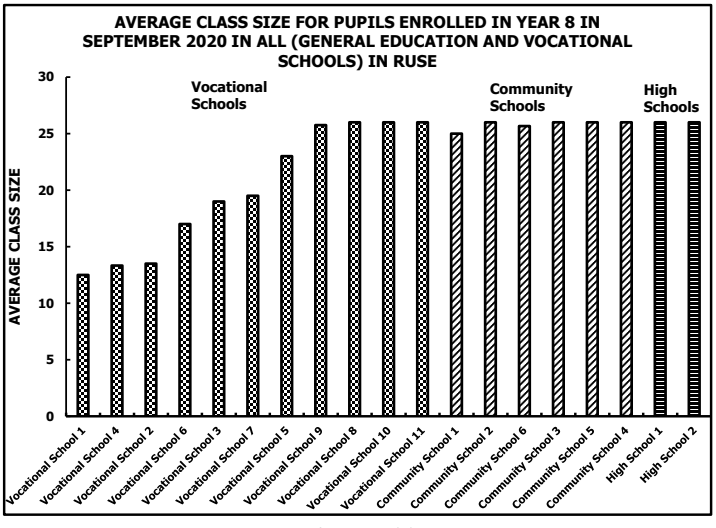


Figure 11

In September 2020, 1264 pupils entered Grade 8:

– 208 (16.5%) transferred to High Schools (Grammar Schools);

– 694 (54.9%) transferred to Vocational/Professional Schools; and

– 362 (28.6%) continued their education in Community Schools.

Of the 1264 pupils who entered Grade 8 in 19 different schools:

– 208 pupils entered two High Schools – 104 pupils in each school;

– 694 pupils entered 11 Vocational/Professional Schools – minimum 25 pupils, average 63 pupils, maximum 104 pupils;

– 362 pupils continued their education in 6 Community Schools – minimum 25 pupils, average 60 pupils, maximum 78 pupils.

Table 7

	The Size of Schools in Ruse (as Illustrated by the Number of Pupils Entering Grade 8 in September 2020)			
	1-form Entry 0-26 Pupils	2-form Entry 27-52 Pupils	3-form Entry 53-78 Pupils	4-form Entry 79-104 Pupils
Schools Administered by the Ministry of Education and Science	1	5	2	3
Schools Administered by the Municipality	2		4	2
All Secondary Schools in Ruse	3	5	6	5

The implication of so few pupils entering Grade 8 in so many schools is illustrated in **Table 7**. This does not necessarily have major implications for the size of the classes in Grade 8 in the schools:

– the average class size in the 2 High Schools was 26;
– the average class size in the 11 Vocational/Professional Schools was 23.9; and
– the average class size in the 6 Community Schools was 25.9.

It does, however, place serious restrictions on:

– the breadth and balance of the curriculum; and
– student choice.

This is represented pictorially in **Figure 12**.

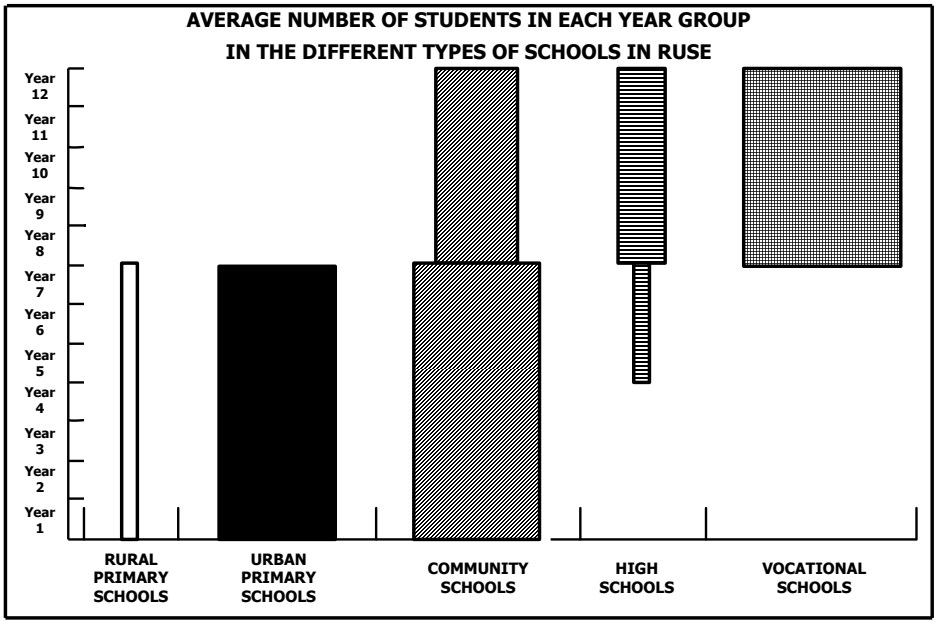


Figure 12

When all the schools in the municipality are included, there are far too many small schools. This severely limits the range and choice of the curriculum.

The efficiency of the education system in Ruse

The data presented above also raises questions about the number and size of the schools. Assuming that 1264 represents an average for the pupils transferring into Grade 8; why are they distributed across 19 schools?[2)]. This means that the average number of pupils transferring to each school is 66.5:

– if all schools were 4-form entry, the average would be 104 and only 12 schools would be needed; and

– even if the schools were 3-form entry, the average would be 78 and only 16 schools would be needed.

Twenty years ago, there was approximately 2000 pupils in each grade:

– if all the schools had been 4-form entry, 19 schools would have been necessary.

This figure of 19 is not a coincidence. The current number of schools reflects the population of Ruse 20 years ago. The inefficiency in the system is not a function of mismanagement by the school directors. It results from inaction on the part of the Municipality and the Ministry of Education and Science: the refusal to address the problem of surplus places. There were almost 750 surplus places in just one grade in 2020. If this figure applies across the age range, there are up to **3,750** surplus places in secondary schools in Ruse.

The problem for Ruse (and Bulgaria as a whole) is that the refusal to address the problem of falling roles has rendered the system grossly inefficient:

– too many small schools

– a range of schools makes funding them equitably both complex and expensive.

Experience in more open, democratic countries where pupils are offered real choice as they mature, indicates that schools need to be much bigger than they are in Bulgaria – a minimum of 5/6 classes in each grade – the bigger they are, the greater the choice available to the pupils. If all the secondary schools were 6-form entry (the minimum number necessary to provide effective choice) Ruse would only need 8 secondary schools rather than 19.

For a relatively poor country, the structure and organisation of schools leads to the education system remaining chronically inefficient.

The effectiveness of the education system bulgaria

The information presented above on:

– the ability distribution of the Bulgarian population;

– the placement of pupils in different types of schools in Grade 8; and

– the lack of basic skills

can be combined. **Figure 13**, for example, is a re-interpretation of **Figure 2**: it illustrates the placement of pupils in Grade 8 superimposed on the ability distribution of the Bulgarian population. This information is also summarised in **Table 8**.

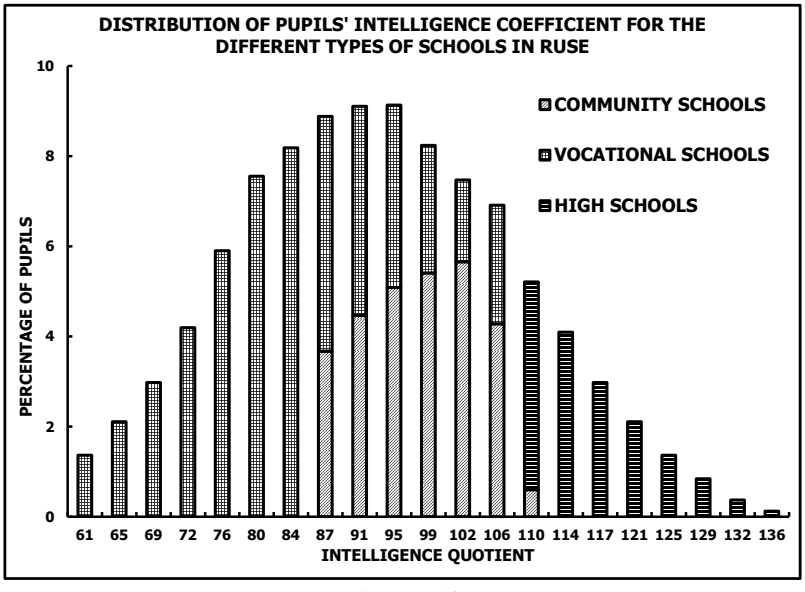


Figure 13

Table 8

	Percentage of Pupils in Three Ability Bands		
	Vocational/Professional Schools	Community Schools	High Schools
< One Standard Deviation below the Mean	33.7%		
Between one Standard Deviation below and one Standard Deviation Above the Mean	21.2%	28.6%	4.6%
> One Standard Deviation above the Mean			11.9%
TOTAL	54.9%	28.6%	16.5%

From **Figure 13** and **Table 8**, it can be concluded that:

– of the 208 pupils that transferred to High Schools, 150 were in the top ability band and 58 were in the middle ability band;

– the 362 pupils who continued their education in their Community Schools were all in the middle ability band; and

– of the 694 pupils that transferred to Vocational/Professional Schools, 268 were in the middle ability band and 426 were in the lower ability band.

That is to say, over 60% of the pupils that transferred to the Vocational/ Professional Schools were in the lower ability band. This reinforces the conclusions reached in the EU Education and Training Monitor 2020 Bulgaria, that:

– pupils are highly concentrated in schools based on their performance.

In **Figure 14** (Reading), **Figure 15** (Mathematics) and **Figure 16** (Science), the results in the most recent **PISA** tests have been plotted against the results in the **World Population Overview 2020**. On each chart a 'Line of Best Fit' has been drawn to illustrate the relationship between the two indicators.

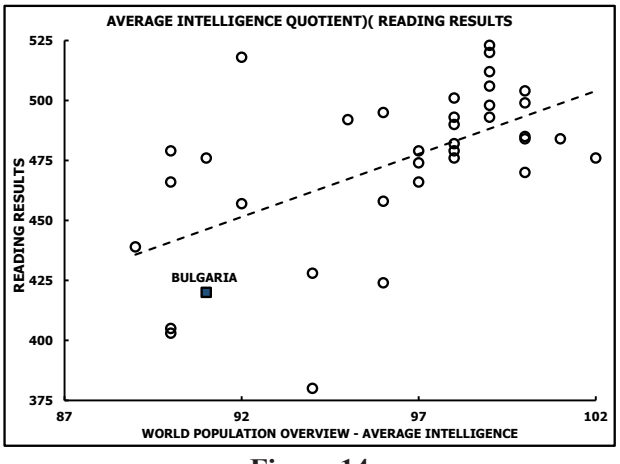


Figure 14

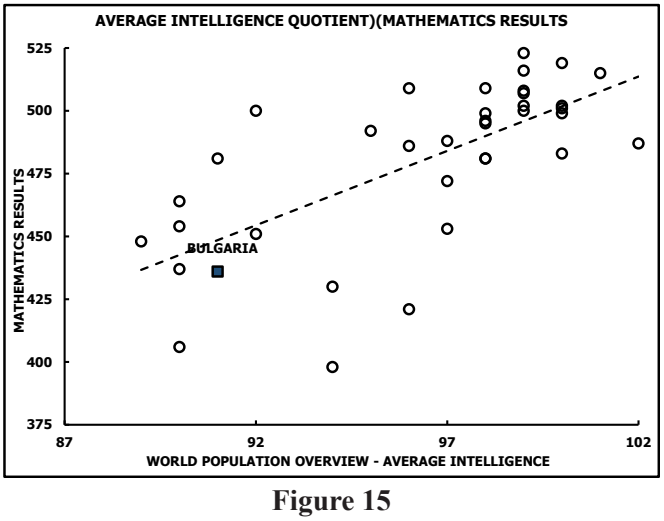


Figure 15

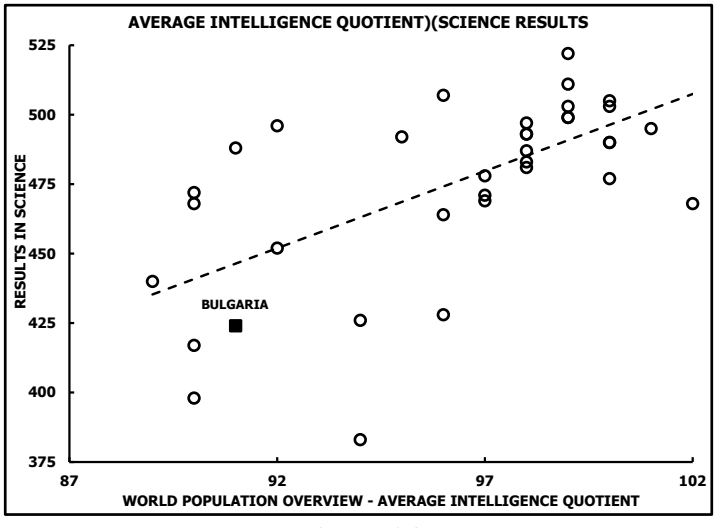


Figure 16

All three charts reinforce the picture painted in **Figures 2, 4** and **5**, that the performance of Bulgarian 15-year-old pupils in the **PISA** tests in amongst the lowest in Europe. However, the introduction of a 'Line of best Fit' into **Figures 14, 15** and **16** indicates that the performance of Bulgarian pupils is low even given the ability distribution. That is to say, the poor performance of Bulgarian pupils in the PISA tests cannot be totally explained by the low general ability of the pupils – it is also a reflection of the quality of education.

Table 9

	Most Recent Results in the Programme for International Pupil Assessment (PISA)		
	Reading	**Mathematics**	**Science**
Minimum	**380**	**398**	**383**
Bulgaria	**420 (34th)**	**436 (33rd)**	**424 (34th)**
Bulgaria (Derived from the 'Lines of Best Fit')	**446**	**448**	**446**
Lower Quartile	**466**	**454**	**468**
Median	**479**	**488**	**487**
Upper Quartile	**495**	**502**	**497**
Maximum	**523**	**523**	**530**

The results illustrated in **Figures 14, 15** and **16** are summarised in **Table 9**; this illustrates the performance of the Bulgarian pupils in all three tests along with the

minimum, the lower quartile, the median, the upper quartile, the maximum and the performance of the Bulgarian pupils if that performance had been derived from the 'Lines of Best Fit'.

Table 10

	Comparative Results for Bulgaria in the Programme for International Pupil Assessment (PISA)		
	Reading	Mathematics	Science
Above the Minimum	+40	+38	+39
Below Results Derived from the 'Lines of Best Fit'	-26	-12	-22
Below Lower Quartile	-46	-18	-44
Below Median	-59	-52	-63
Below Upper Quartile	-75	-66	-73
Below Maximum	-103	-87	-106

Table 10, takes the data from **Table 9** and re-presents it illustrating the difference in the Bulgarian pupils' performance:

– above the minimum;
– below the performance derived from the 'Lines of Best Fit';
– below the lower quartile;
– below the median;
– below the upper quartile; and
– below the maximum.

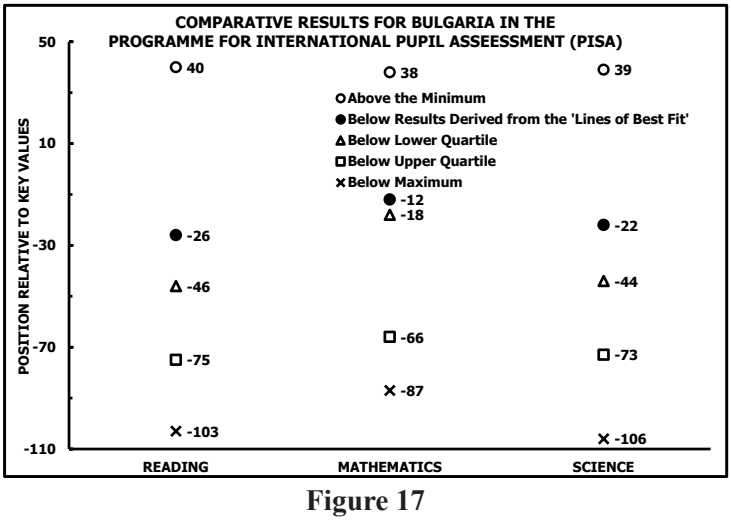


Figure 17

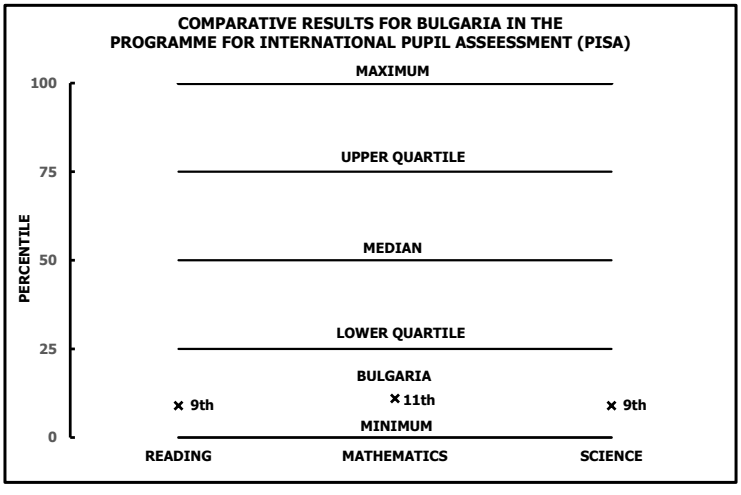


Figure 18

Figure 17 illustrates the data in **Table 10**, while **Figure 18** illustrates the rank order of the performance of Bulgarian pupils with the minimum, the lower quartile, the median, the upper quartile, the maximum performance of pupils across Europe.

All the charts and tables derived from **Figures 14, 15** and **16** indicate that compared with:

– the performance of pupils across Europe; and

– the performance derived from the 'Lines of Best Fit'

the performance of Bulgarian pupils in very low in all three subjects. However, it is marginally better in mathematics than it is in reading and science.

The overall ability distribution in the Bulgarian population cannot totally explain the lack of basic skills in reading, mathematics and science.

Vocational education and training

It was suggested earlier that for such a centralised, top-down system, to be successful:

– vocational education must be at least as beneficial to pupils as general upper secondary education;

– the quality and labour market relevance of vocational education and training must be sufficient to ensure that it does not lead to poor employment prospects for many low ability pupils.

Every year the European Union produces a report on education and training. The most recent annual report on Bulgaria combined with the data presented above leads to inevitable conclusions.

– Early school leaving remains problematic in Vocational/Professional Schools.

– Pupils who attend Vocational/Professional Schools are low attaining pupils from lower socio-economic backgrounds and this has a significant impact on their learning outcomes.

– Very few pupils who attend the Vocational/Professional Schools have parents who have higher levels of educational attainment.

– Value added is lower for pupils whose parents do not have higher levels of educational attainment.

– Vocational education and training provides less benefit to pupils than general upper secondary education.

– The poor labour market relevance and quality of vocational education and training leads to poor employment prospects for many low ability pupils.

– the employment rate of recent vocational education and training graduates is still below the EU average.

In addition, almost half of young Bulgarians lack basic skills in reading, mathematics and science.

– 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.

– 47% show a lack of basic understanding in the field of natural sciences.

Furthermore, the majority of those pupils who lack basic skills, will be from Vocational/ Professional Schools.

The majority of low ability pupils, who lack basic skills, are concentrated in Vocational/Professional Schools. Vocational education and training is less beneficial than general secondary education. The government is failing to ensure the labour market relevance and the quality of vocational education and training.

Interim summary

The basic ability distribution of the Bulgarian population has huge implications for the structure and organisation of the education system.

The basic ability distribution has a major impact on the basic skills in reading, mathematics and science.

The education system in Bulgaria is designed to meet the government's perception of societal goals. At the age of 14, pupils are channelled into profiles determined by the government. The pupils have little choice over what they study.

There are some very small community schools which offer a limited curriculum for the pupils.

When all the schools in a municipality are included, there are far too many small schools. This severely limits the range and choice of the curriculum.

For a relatively poor country, the structure and organisation of schools leads to the education system remaining chronically inefficient.

The overall ability distribution in the Bulgarian population does not totally explain the lack of basic skills in reading, mathematics and science.

The majority of low ability pupils, who lack basic skills, are concentrated in Vocational/Professional Schools. Vocational education and training is less beneficial than general secondary education. The government is failing to ensure the labour market relevance and the quality of vocational education and training.

The future of vocational education and training

The emphasis of the education system in Bulgaria needs to change.

– Its primary purpose must be to benefit the **individual**.

– It should enable pupils to maximize their potential and become well-adjusted members of society.

– "Education should be a means to empower children and adults alike to become active participants in the transformation of their societies." UNESCO (2017)

– It must "empower the **individual** to become smarter; to be more capable of thinking clearly; to have the tools of industry and to enable them to create a better lived experience". Shapiro (2015).

All schools should be brought within a common financial structure, administered by the municipalities.

Education can no longer be primarily about community needs. It's about how **individuals**:

– become more intellectually capable;

– are able to work together with other people; and

– contribute to building their community.

Schools taking pupils from Grade 1 to Grade 12 should be deconstructed. There should be a clear break between Grade 7 (Level 2) and Grade 8 (Level 3).

For the education system to become more cost-efficient, there must be a smaller number of larger schools. For example, in a municipality like Ruse, there should be only 8-10 schools taking pupils from Grade 8. The schools would have admission limits of 130-156 pupils in 5-6 classes. This would replace the current system of 19 schools admitting 26-104 pupils in 1-4 classes.

Larger schools would allow for

– the gradual deconstruction of the system of profiles (pathways); and

– a far greater free choice of subjects that can be studied as the pupils get older. Budgell (2019)

Vocational training should be delayed until Grade 11 and should take place in larger Vocational Colleges after the age of 17. This would have a number of major benefits:

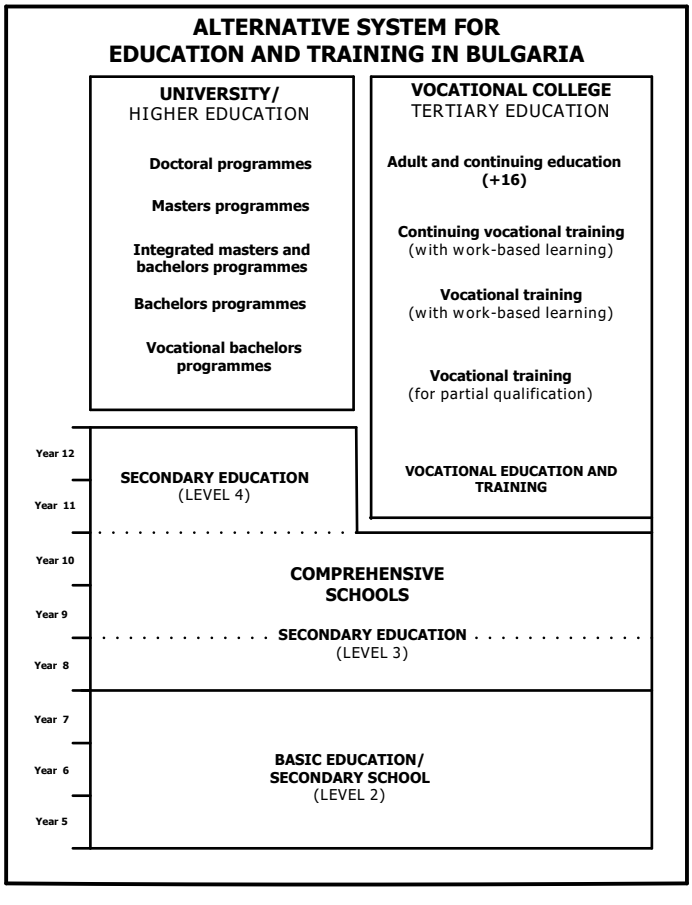
– it would postpone the age at which pupils would have to make choices about their future careers;

– it would provide a far wider range of courses for the pupils to follow; and
– it would leave the choice to the pupils.

More generic vocational educational courses could still be made available in the option choices for older (Level 4) pupils in the general secondary schools.

The closure of specific Vocational/Professional Schools and the incorporation of some very low ability and low attaining pupils into general secondary schools would allow for a far greater concentration of their basic skills of reading, mathematics and science.

Table 11



This alternative structure is illustrated in **Table 11**. This structure does not imply that all secondary schools will be the same. It allows for schools to develop (or

maintain) their own specialisms by concentrating on those specialisms in the Level 4 curriculum – mathematics and science; modern foreign languages; electronics; construction. It will, however, have implications for how the admission of pupils into Grade 8 will be managed.

NOTES

1. Figures from the Normal Distribution are shown in brackets.
2. Yes, they are distributed across 19 schools because there are 19 schools; but why, therefore are there 19 schools. Why has there been no rationalisation of school places?

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