

17.

György Ágoston - Sándor Orosz:

AN EXPERIMENT TO TRANSFORM THE STRUCTURE OF SECONDARY SCHOOL  
EDUCATION

Helmut Breuer:

METHODOLOGISCHE UND METHODISCHE ASPEKTE EINER FRÜHDIAGNOSE  
VON VORAUSSETZUNGEN FÜR DEN ERWERB DER SCHRIFTSPRACHE

József Veczkó:

PUPILS OPINION OF THEIR TEACHERS BEHAVIOUR FORMS

Elemér Kunsági:

AN INVESTIGATION OF THE IDEALS OF SECONDARY SCHOOL STUDENTS

SZEGED, 1974



E d i t o r s :

professor György Ágoston  
ass.professor Lajos Duró

F.k.: Dr. Kunsági Elemér egyetemi adjunktus  
Készült a JATE Sokszorosító Üzemében, Szeged  
Engedélyszám: 100 203 Méret: B/5  
Példányszám: 300 - F.v.: Lengyel Gábor



AN EXPERIMENT  
TO TRANSFORM THE STRUCTURE OF SECONDARY SCHOOL  
EDUCATION<sup>+</sup>

Prof.Dr. György Ágoston

Senior lecturer Dr. Sándor Orosz

---

+ In elaborating the experimental model we have taken into consideration first of all the statements of the Regulation of the Central Committee, Hungarian Socialist Workers' Party of 15th June 1972 concerning the grammar school and the directives concerning its development. We have studied, as well, the earlier Hungarian initiatives /Ch.References!/ and also the international experiences in respect of the transformation of secondary school education.



The secondary school has to-day, and it will probably have for a long time to come, a double task: /1/ To select and educate the students, who owing to their interest and intellectual power, are suitable for university or college studies, /2/ to prepare students, more interested in practical activities and show a higher skill in these, for practical professions that demand general secondary-school culture.

At present, the secondary school cannot carry out entirely either of its' tasks. The reasons for this are the following:

/1/ The secondary-school classes of specialized programme could not, and cannot serve satisfactorily, in spite of their popularity and unquestionable results, the function of secondary school for selecting and preparing the students for university and college:

/a/ The students, after finishing their primary-school studies, are immediately registered at classes of specialized programmes, that is to say at an age when their individual abilities are not yet developed, the field of their interest is not stabilized, and after a primary education, that gives because of its educational structure but a little possibility for clarifying the individual abilities and giving the students an orientation that corresponds to the direction of their continued education. Consequently, the majority of students get into the classes of specialized programmes not on the basis of their mental gifts but on that of ambitions and wishes of their parents.

The classes of special programmes - as proved by statistical

data - are rather the means of the social selection than those of directing the secondary-school studies according to faculties.

/b/ The present specialization of grammar-school classes pays no regard to the directions, possibilities of continuing the studies at universities or colleges, to the requirements of entrance examinations. There is no harmony between the specialization in grammar schools and the study directions and branches in higher education. The overwhelming majority of students are, for instance, registered in foreign language classes not for pushing high level language studies, literature studies but to learn elementary conversation in a foreign language. That is doubtless a useful thing in itself, and from the point of view of any advanced study as well, but it does not mean any preparation for a university or college. Not even for those who request enrolment in foreign-language studies because the greatest disharmony at present is just between the aims of the secondary-school language instruction and the university requirements in the field of foreign-language education. And even the students learning in the specialized scientific classes get in most cases no education that would prepare them in a practical sense for their future high-degree studies, or their entrance examinations.

The grammar-school specialization does not include for some obscure reason-such as important topics of social sciences as the Hungarian language and literature, history. The students who show interest in these subjects and want to continue higher studies have no possibility to get a more thorough grammar-school education.



/2/ The students who are enrolled in classes of non-specialized programme of instruction and are suitable for higher studies are deprived even of the advantages offered by the classes of specialized programmes, in spite of the inadequacies mentioned above, to the students wanting to continue their studies. The classes of non-specialized programmes impose, as a matter of course, disadvantages for the students in whom, under proper pedagogical conditions, good mental powers would develop.

/3/ According to the statistical data of the years past, on the yearly average, 65-70 per cent of secondary school students did not gain admission to higher educational establishments. This ratio will not change essentially in the following years, either. We cannot have the aim of decreasing the possibilities of secondary-school learning, and a major change in the ratio of the students in vocational secondary schools would come up against material difficulties. In the years to follow we can only strive to develop the vocational secondary schools qualitatively and not so much quantitatively. The level of grammar schools turned into specialized secondary schools is considerably behind that of schools that were originally institutions of vocational training. The grammar schools have made attempts to practically prepare students not suitable for higher studies but who can be successful in more practical professions useful for the society and at the same time maintain the level appropriate to the grammar school. These attempts, however, have failed. This difficult problem cannot be solved by the system 5 + 1 of grammar-school education and still less by the practical training in two lessons a week.

A smaller part of grammar-school students that were not admitted to a university or college succeeded, nevertheless, in enrolling in a higher institute in the years following the graduation but most of them had to accept in trustation and disillusionment mainly administrative, official positions as junior members at research works, laboratory technicians, in some type of service industry where they could use their general education and possibly their knowledge of foreign language as well. The fewest of them became manual workers.

It is, therefore, shown by the data concerning the employment of students having completed grammar-school studies that there are some spheres of work in on peoples' economy that are fulfilled willingly by young people having a general education at a grammar school and that do not demand such a degree of specialization as given by a vocational school. According to the general trend of the development in the vocational structure, the number of such vocations will not be lower in the future, either. The enterprises, productive works, scientific and medical institutions, the various branches of services /catering trade, hotels, tourism/ demand middle cadres performing some intelligent, educated, non-overspecialized mental work. The grammar-school education has not taken, so far, any notice of these real possibilities of findig jobs for its students who do not continue learning. Consequently, it could not help them adjust to that life, and it even frequently caused them and to their parents grave conflicts by keeping alive unreal expectations and neglecting the training for self-actualization, and the proper preparation for practical life.

We need, therefore, a grammar-school training struc-

ture that finds solutions to the above problems, promotes grammar-school education to perform much more than before the double task formed for it historically in this country and being valid in the long run perspective, as well.

## II.

The new grammar-school educational structure should be created, in our opinion, according to the following points of view:

/1/ In the grammar-school education the high-level general training continues to be predominant in the future, too; the grammar school cannot turn into a specialized school. At the same time, it must break with the concept of general education standardized for everybody, according to which everyone has to make himself master of everything the same degree. The new grammar-school training takes considerably into consideration the individual interests, individual aptitudes of students, ascertaining these and bringing them to light, and enabling the students to continue much higher studies than the present grammar-school level and deepened in the direction corresponding to their faculties and interests. In this way, it prepares some of the students for the professional training of the highest degree: the university-college studies. With students prepared in that way the institution of higher education can begin working at a higher level and send out better-trained specialists. And to another group of students, it can give a

specialized education that, combined with the high-degree grammar-school general education, enables them to fill vocations like administrator, scientific technician or other mentioned positions.

/2/ Students must not be specialized at the beginning of their grammar-school studies. At 14, the individual abilities of students cannot be established with due certainty, the range of their interest is not yet formed and solidified. At their entrance to the grammar school it cannot even be decided if their unsatisfactory knowledge and poor interest in certain subjects are a result of their individual natural endowments or of a poor elementary-school training.

Classes I and II of the grammar school are to be considered as a period of observation and orientation. Their main task is the general education in which the accomplishment of students is measured systematically, the development of their individual talents purposefully observed. There are organized some activities in which the students can partly test themselves, can get self-understanding concerning their individual faculties, partly they can develop and deepen their individual gifts. The participation in these activities is, of course, an important source for the school, as well, to get to know its students.

/3/ The activities for testing, clarifying, and affirming the talents, that enter the curriculum from the second half of the first year, are actually activities in that insist not on increasing their knowledge but on applying an a creative way their already existing knowledge: to achieve in this way some results at which level their talents and the development of their interest can be qualified in a real way. These

activities are chosen by students not entirely free but under direction, on the basis of the advice of the teacher-collective functioning in the class.

The direction takes place in two stages: at the ends of the first and second terms of the first year. Taking into consideration the possibilities of the school, it is necessary to organize programmes /1/ in social sciences and languages, /2/ those in mathematics and natural sciences. In the first and second half-year terms, the students choose, corresponding to the directives, either a half-year programme of social sciences and languages or that of mathematics and natural sciences. At the end of the second term of the first year, on the basis of the careful consideration of the achievements in these activities and, of course, of the observations during the general education, as well, either the teachers confirm the student in his choice or they suggest to him to try another direction /redirection from the programme of social sciences to that of natural sciences or the other way round./

In both directions mentioned, there is a possibility to try several programmes to make the specialization beginning in the third class as well-founded as possible.

/4/ Important means of testing, clearing, and affirming the individual capacities of students are the practical activities, as well, from which, both in the first and the second year, each of the students has compulsorily to choose a programme. These practical activities partly provide useful practical knowledge and abilities, making more complete and many-sided the general development of the student, and partly

help in selecting the students who have a potentially better future in a practical profession than in a theoretical one. This selection must be founded, of course, on the development of the self-understanding of students.

/5/ Class I in its first term is corrective. A possibility of catching up is to be assured to students who prove weak in any subject on the basis of measuring the level of learning at the beginning of the school year. This means keeping them occupied intensively in small groups for filling the elementary-school gaps, creating surer basis for making possible successful grammar-school studies. This corrective occupation must show to what extent the weaknesses of a student in certain fieldings are a consequence of the unsatisfactory elementary-school education and to what extent that of his capabilities. We hold this corrective period an indispensable prerequisite of the direction at the end of the first term. Taking into consideration that, as a result of the environment poor in stimuli, certain deficiencies, backwardnesses can be reproduced, we regard the compensating occupations, similarly to those in the first term, as an organic part of the whole education and, therefore, we want to make them function in a later period of studies, too.

/6/ On the basis of the data observed and recorded in the course of the general training of the first two years, the activities revealing the capabilities of the students and their accomplishments in the practical occupations. The school should then suggest some directives of specialization for its students at finishing class II.

It may be hoped that the two-year period of observation and direction does not only develop the self-understanding of students but furnishes to the parents, too, convincing facts about the actual abilities of their children, forming a clearer picture for them, too, concerning the future studies, the profession in which their children will be able to realize themselves best, to arrive at the highest possible achievements, and in this way - the expression is perhaps not exaggerated - they may be happy. We hope to achieve that the continuation of studies and the choice of future profession will be determined more by their mental power and less by the ambition, ideas and force of their parents. In that way, the grammar-school may serve better the cause of the normal and necessary social mobility, as well, than it did herebefore.

It is imagined by nobody, of course, that the advice of the school concerning the choice of specialization beginning from class III could be of obligatory, compulsory force. It is, in fact, only a well-founded advice for success and prosperity of the child; the choice, however, remains a right of child and parents.

In classes III and IV of the grammar school, the volume of general training decreases although, retaining its primacy, it fills about two-thirds of the weekly time allotted for training. In one-third of the time a specialized training is going on, that - as outlined above - divides into two main branches: /1/ preparation for university-college studies, and /2/ preparation for certain professions.

The possible specialization of the preparation for university and college studies takes into consideration the

actual university and college study fields, the requirements of entrance examinations, the basic subjects of studies. Just therefore, the specialization always means the more intensive study of a so-called subject-block /two or three subjects/. These are the blocks of social sciences . foreign languages and the natural sciences. There would be no justification for any narrow specialization. The specializing subject- block is, therefore, to be formed in such a way that it assures the possibility of continued study at several /3 to 4/ university faculties, branches, or colleges.

The specialization preparing for professions cannot mean a degrading specialization of "lower rank", creating inferiority complex as but a practical training that also furnishes theoretical knowledge of high level; a training that is not of lower level than the subject-block training preparing for university-college, only it demands other capabilities. The ability manifested in the practical training has the same value as that manifested in theoretical training. The specification preparing for administration involves, e.g., the strengthened studies of the mother-tongue, and the thorough study of a foreign language. The training of a laboratory technician or scientific assistant goes intensively into the corresponding scientific knowledge, too, providing also the theoretical technical knowledge needed for drafting.

/8/ The new grammar-school training structure necessarily entails the transformation, modernization of the programme of instruction. As it would not be suitable to increase the present number of students hours, it is evident that the base-material of general education, what is compulsory for everybody,



must be drastically decreased, or more exactly: must be structured in a new way so that it really includes only the fundamental facts and connections that are indispensable to form the scientific Weltanschauung and scientific thinking, as well as the interdisciplinary outlook and further self-education. It will not be an easy task to select, establish, and present in a proper logical structure the base-material of education that is compulsory for everybody. Some knowledge systems, previously dealt with in separate subjects, will certainly be integrated - even if gradually.

It will similarly be a great task to arrange the curriculum of the specializing subject-blocks and treat it in an up-to-date structure.

/9/ The new grammar-school training structure, both within the scope of general education and that of specialized training, attributes a great importance to the study of foreign languages. We have hardly to prove that a more and more important condition of the development of a small nation is that its intellectual have as vast a knowledge of foreign languages as possible. The students of grammar schools must get the solid linguistic basis /the active use of a definite vocabulary, thorough knowledge of grammatical rules, the basics of translating simple texts precisely from a foreign language into Hungarian and vica versa/ in two foreign languages for using these well both orally and writing in their profession. For this reason, in the general education, as well, the study of the Russian language and that of a Western foreign language will be allotted adequate number of hours, and in each of the

specializations preparing for higher studies one of these will have a strengthened part, on the basis of free choice.

In the specialization preparing for immediate professions we consider possible that the student stops studying one of the foreign languages and continues the other in a high number of hours.

In specializations in social sciences and languages we suggest the study of the Latin and literature, partly because it deepens every higher philological study and partly because, taking into consideration our particular traditions one can hardly imagine who does not know the Latin language.

We regard similarly important that the knowledge of mother-tongue of those specializing foreign languages should be of higher level than the average.

/10/ The new structure entails considerable changes both in teaching forms and in teaching methods. The class system can only function as an organizational form of a general education that is compulsory for everybody. The aptitude - revealing activity and the specializing training with subject-blocks will go on in smaller groups formed by students from parallel classes. If the possibilities of the school permit 10 to 12 students can form a group but no more than twenty. As integrated instruction develops, so do the certain forms of the so-called team-instruction.

As to the methods, we have to strive that the students make themselves master of the most various study techniques that they will need both in the course of their higher studies and in the practical profession. We have to prepare them for being able, even after finishing their studies

in the grammar school, to use the diverse ways and measures of acquiring knowledge. These all mean that the study under the immediate direction of a teacher /lecture, comment, discussion, demonstrations/ will not fall out of fashion but that the stress will be shifted - particularly in classes III and IV - to the independent acquisition of knowledge coming from different sources, to the discussion in groups of the results of acquisition under the guidance of the teacher or a student, study the things and phenomena by means of independent observation. The group-work and the participation of students in the role of teachers will have much more importance than they have had so far. The students learn how to take advantage of up-to-date technical instruments. All this follows, of course, not immediately but parallel with the development of the pedagogical outlook of the management at school and of teachers and of the objective conditions of the school. This development is facilitated by the recent structure of instruction.

/11/ There may, and should, be raised the problem that the conditions of bringing about the possibility of every specialization in social sciences, languages, natural sciences, and practice will not be given in many grammar schools and, in this way, the principle of specializing the students according to their aptitude will suffer damage.

The structure of instruction at a new grammar school may be generalized at the earliest only after being experimentally tried for 4 to 5 years. That means that for a general realization of the grammar-school structure of instruction outlined above we need at least 6 to 7 years. During that time, there can be expected in grammar schools a great development both in the

personal and objective conditions. The college network of secondary schools will be enlarged, too, in every county. It is not unrealistic, therefore, to imagine that, e.g. a student at Makó will go on with his studies after finishing the first two grammar-school class, as in a grammar school at Szeged in which the specialization suitable for him can be found. And in a town where several grammar schools are functioning, every claim to specialization can be met by the co-operation of grammar schools. The precondition of this is, of course, a real co-operation of the schools of identical type, instead of saving face with an unhealthy rivalry that can often be noticed among them at present.

/12/ We are referring only briefly the fact to that the domestic demands on developing the educational structure of grammar schools coincide with the international tendency of developing the secondary educational structure.

The necessity for lifelong education is recognized in the whole world. It has become evident, too, that the desire for learning till the end of life can only be formed by a kind of secondary instruction that undertakes to observe the talent for learning, to reveal the most favourable individual abilities /periods of observation and orientation in the school-system/ and enables them to choose from mixed programmes of instruction to the degree of the development of their individual capabilities. The age of a standardized general secondary-school education leaving the individual abilities out of consideration is over, for it is not suitable for arousing the motivation for learning demanded by lifelong education /interest, thirst for knowledge, desire to investigate/.

Its age is over also because in the age of the scientific-technical revolution a raising of the level of secondary-school education, the strengthening of its function to prepare for university studies can only be imagined if not everybody has everything to learn to the same degree. The common base education may at any rate be very essential from various points of view but its subject - as already mentioned - must be rationalized, limited to the essential bases and, at the same time, in the direction corresponding to the individual abilities and interest, the students must reach the highest possible level. This may be the solution of the problem, too, known in the whole world as the problem of transition from the secondary school to the university.

### III.

In the subdivision of the Pedagogical Research Group of the Hungarian Academy of Sciences established at the Pedagogical Institute of the Attila József University, Szeged, on the basis of the above-mentioned considerations, the experimental research work of a new organizational form for grammar schools has been started that satisfies the social demands better than the present form and is also more suitable for the individual claims. This experiment is a component of partial task No.1 of the national main direction No.6 in the long-range research plan.

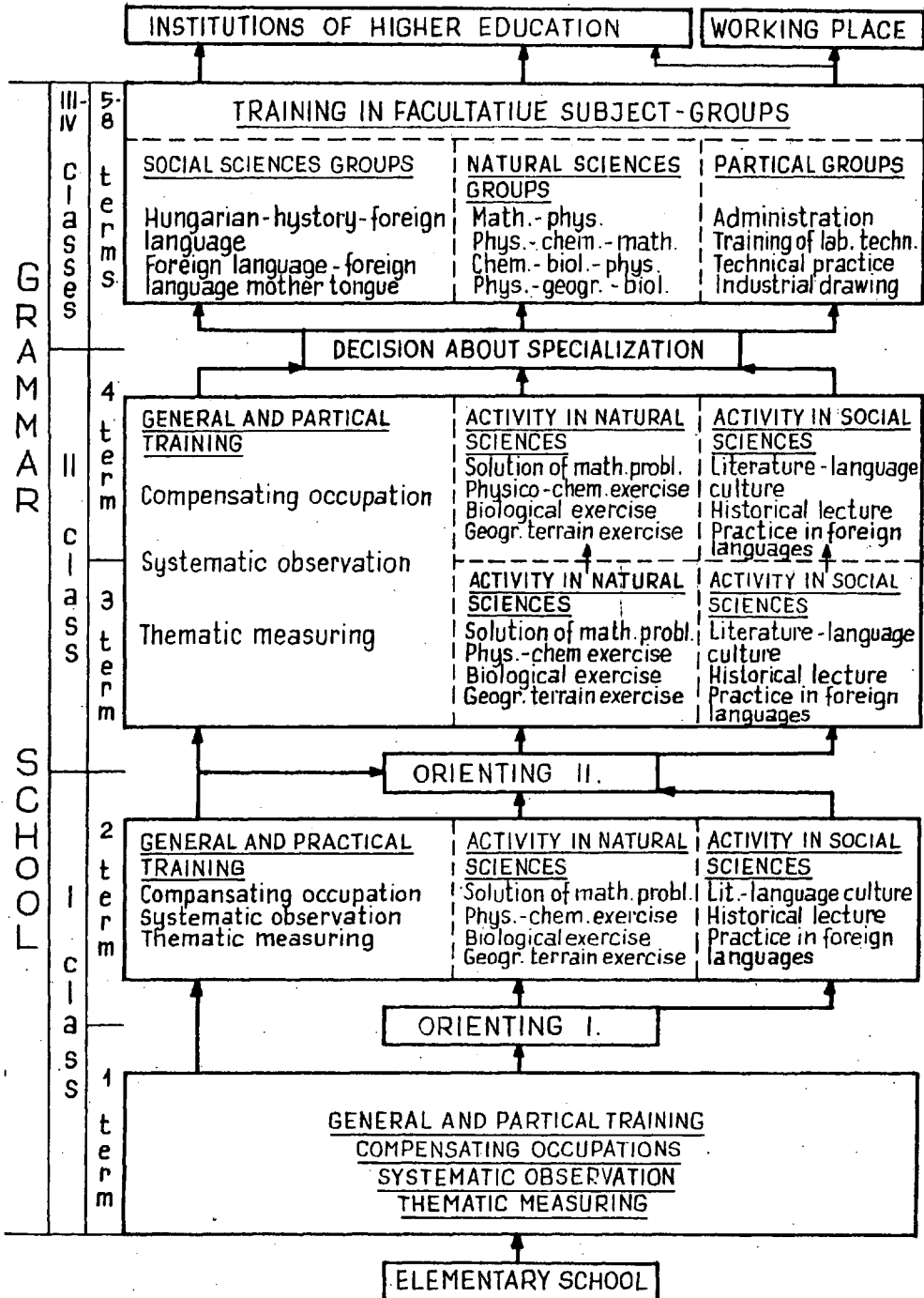
Further on, a short demonstration of this research work follows.

1. The experimental model

1.2. In the experimental model of grammar schools, the four-year education is divided into two periods that functionally differ but organically are built upon each other: into the orienting and generally educating period of classes I and II, and into the differentiated training period of classes III and IV, with subject groups.

The following table of the whole organizational form is easy to survey:

# EXPERIMENTAL MODEL



It is to be seen from the model that the essence of our statement is the experimental investigation of an organizational form that goes far to assure the development and unfolding of individual abilities, being adaptable enough for making sure the proper frame of training even in case of changes in the programme of instruction that are necessary at some intervals.

The aim is, therefore, not a reform of a single subject in the programme concerning its contents. In this way, we take for basis in the experiment the reduced programmes of instruction that are valid at present.

For realizing the activities that reveal the natural endowments of students, as well as for organizing the training with subject-groups instead of the earlier studies specializing in only one subject of instruction /in so-called branches/, we had to transform the lesson-plan for the term and remodel to some extent the subject of programme.

The syllabuses of activities and the programmes of subject-groups are, of course, thoroughly new.

All these modifications may, anyhow, give some basis for preparing the new programmes of instruction to be introduced in 1987.

2. The main characteristics of the orienting period in classes I-II can be summarized as follows:

2.1. In both classes, a general education containing the practical instruction, too, and including everybody, is



going on, with remedial activities built in organically, for assuring a possibly homogeneous knowledge of the material and capacities indispensably necessary for a general education to every student. That assures equal chances for specialization as well. The precondition of this is that the level of knowledge brought from the elementary school in the field of every subject is established with an objective measurement at the beginning of the school-year. The occupations compensating for the insufficiencies are to be organized outside the lesson and even for very small groups /of 3 to 4 members/ but only so long as the deficiencies have not been remedied.

2.2. The practical occupation of 1 hour weekly is to be organized biweekly, in double lessons, and it can be chosen, according to the students' desire and interest, as well as the possibilities of schools, from among the following: the elements of typewriting, training of laboratory technicians, metal-work with elements of industrial design, motor repair with elements of industrial design. Out of every practical programme a yearly programme is made; during the first two years, therefore, every student takes part in two kinds of training of practical direction, enlarging in this way, too, the sphere of activities serving their self actualization + self recognition. The occupations continue by breaking up the classframe, in to groups of 12 to 18 members. We should consider making typewriting compulsory for everybody in one of the classes as this knowledge is very important nearly in every field of our present life, and in some the intellectual professions as well.

2.3. Intermittantly during the acquisitions of the subjects of the grammar-school programme, at the end of every thematic unit, achievement tests are administered in every subject for establishing the level of knowledge in a differentiated way.

If the attainment of a knowledge is not satisfactory, its deepening takes place in the regular classes. This demands partly a minor rearrangement of the following thematic unit, in a larger part, however, the application of more efficient methods and tools. For remedying the deficiencies manifested in smaller groups, a compensating occupation, characterized above, is organized.

2.4. An organic part of instruction is, similarly, the systematic observation of students and a systematic recording of experiences for recognizing the individual endowments, inclinations and abilities. For this observation every specialist teacher receives particular guidelines.

On the basis of the work described above, till the end of term I, enough information will supposedly be available for the teaching staff so that they can give advice to each of the students for choosing in term 2 an aptitude-revealing activity in the field of social or natural sciences. This means the first orientation of students.

2.6. In term 2, the course of instruction and learning - as seen in the table - essentially corresponds to that in

term 1, in so far as the general and practical training including everybody continues, as well as the compensating occupation, observation, thematic measurement. This is completed with an activity serving for revealing the endowments and abilities in two hours weekly. There is made for every activity a term-programme. In this way, till the end of class II, each of the students necessarily tests his abilities in two practical occupational branches, and in three kinds of activities, as well.

2.7. The aptitude-revealing activities are arranged by means of a thematic term programme. For constructing these programmes, the main point of view was to select a stock of learning and activities that are independent to a high degree of the material of the programmes of instruction in classes I and II, i.e., that are only founded on the elements of knowledge obtained in the elementary schools.

The activities show if the student is able to learn the given subject at high level and with good results, if he has the skills necessary for learning. They show if he has general and special mental gifts, the needed interest, persistence and the necessary force for carrying out a continuous activity, if he has the necessary forms and techniques of thinking or these can be developed in him etc.

Corresponding, the teachers in charge of these activities perform continuous observations, arrange measurements of the power-factor, evaluating permanently the students' results, without, however, giving them marks.

2.8. At the end of term 2, the second orientation show in the Table gives information, on the basis of increased informative sources, about whether the activity directed towards the natural or social sciences and carried out for half a year corresponds to the inclination and abilities of the individual students. If it does, then he learns two more spheres of activity of the branch originally chosen in the two terms of class II; if, however, it does not, then he will be directed to the other branch, in which he can test himself in two more spheres of activity.

The aptitude-revealing activities are arranged in groups of 12- to 18-member groups, breaking up, of course, the class-frame.

2.9. At the end of the 4-term learning process, therefore, the information is collected systematically and originating from the following sources, concerning every student: the results of the generally educating subjects /numerically about 13 to 14/ as a thematic unit; one-year old experiences, measured results of two kinds of activities of practical direction? the experiences, results of the possible compensating occupations; the recorded experiences of systematic observations; particular information originating from every subject and activity and, finally, the experiences of the form-master lessons and occupations outside of the lessons. There are, therefore, about twenty kinds information originating from various sources and various domains.

2.10. On the basis of these, the decision is made concerning the choice of the differentiated training direction classes III and IV. subject groups. The parents and students can make their decisions in definitely on the basis of the advice of the teaching staff.

3. The education with subject-groups in classes III and IV is characterized by the following:

3.1. Differentiation means that, on the basis of advice obtained at the end of class II /orientation II/, every student may freely choose studies confirmed in a subject-group within the branches of natural sciences, social sciences or the practical branch. /We notice that he or she may choose freely even a subject-group different from the advised one/.

3.2. Whichever subject group the students choose, they get identical basic training from the generally educating subject of instruction. That is to say, the enlarging-deepening of the general education continues till the final examination at the secondary school. We have therefore made a so-called basic lesson-plan to instruct the generally educating subjects that are to be taught in 24 hours weekly, for classes III and IV. /Cf. the included lesson-plan/, and the programme of these subjects is also common in all three blocks. Accordingly, the students obtain certificates of legally identical value for their final examination in the secondary school, the same

qualifications in all three subject-groups. In this way, every student, coming from all the three directions, is authorized to participate in any high-degree studies.

This status does not mean, of course, identical changes that a student studying in a strengthened social-science subject-group is disadvantaged compa to those making studying in the direction of natural sciences if they want to continue their studies in a higher institution in which the entrance examination is on natural sciences, and this is valid the other way round, too. In such cases, they need to prepare themselves specially for entrance examination.

It may come into question that, of the everyday practice requires it, the students intending to continue their studies in a direction that differs from the learned subject-group are built organically in the model of class IV. This preparation could continue similarly to the organizational form of compensating occupations.

3.3. The specialization in the branches of social and natural sciences does not mean the inclusion of new subjects in the programme of instruction but it means that beyond the 24-hour load of the basic lesson-plan, 10 hours weekly will be used for learning more intensively the subject corresponding to the specialization.

In the practical special direction, of course, these ten extra-lessons are added for teaching new special subjects that are not part of the basic lesson-plan.

3.4. It does not call for explanation that in the training with subject-groups the instruction of a single subject cannot be assured in as high number of weekly hours as in the classes with branches specialized in a single subject of instruction. What we lose in time owing to this will be recovered by structuring reasonably the new programmes of instruction, by putting an end to the "neutral gears" eliminating the superfluous overlaps with an increased subject concentration, with more integrated, comprehensive knowledge, more intensive methods to be expected due to laying stress upon the development of capacities, and last but not least, by the fact that the study on a subject group qualifies for studying in at least five or six various higher institutions.

3.5. It is a novelty opposite to the lesson-plan of grammar schools till now that the instruction of the subject Basics of our ideology begins as early as in class III, on the other hand, in class IV it is taught only in two hours weekly instead of the earlier three. In the full training period, however, the total number of the weekly hours has increased by one.

Accordingly, the programme of its instruction has been modified, too. Our intention is that it deals integratedly with the human being as a social creature having psychic nature, including in this way psychology, logics, ethics, philosophy, and the basics of ideology. Due to this character of the subject, a so-called team-instruction can be imagined: being taught not by a single teacher but by several ones specializing in

SUBJECT OF INSTRUCTION	BASIC LESSON PLAN					BRANCH OF SOCIAL SCIENCES LANGUAGES					
						Hung.-History-foreign lang.			Foreign lang.-Foreign lang. mother tong.		
	I.	II.	III.	IV.	S	III.	IV.	S	III.	IV.	S
Literature	2	2	3	3	10	4	4	12			10
Grammar	2	2	-	-	4	2	2	8	2	2	8
History	2	3	2	2	9	5	5	15			9
Base of our ideology	-	-	2	2	4			4			4
Russian language	3	3	3	3	12	3,7	3,7	12,20	3,7	3,7	12,20
2 foreign languages	3	3	3	3	12	3,7	3,7	12,20	3,7	3,7	12,20
3 foreign languages	-	-	-	-	-	4	4	8	4	4	8
Mathematics	4	4	3	3	14			14			14
Physics	-	2	3	3	8			8			8
Chemistry	3	2	-	-	5			5			5
Biology	2	2	2	-	6			6			6
Geography	3	3	-	-	6			6			6
Singing-music	1	1	-	-	2			2			2
Drawing-history of art	2	-	-	2	4			4			4
Physical training	3	3	3	3	12			12			12
Practical training	1	1	-	-	2			2			2
Form-master's lesson	1	1	-	-	2			2			2
Activity of orientation	0/2	2	-	-	3			3			3
Facultative subjects	-	-	10	10	20						
Together	32/34	34	34	34	135			135			135



BRANCH OF NATURAL SCIENCES - MATHEMAT.												PRACTICAL BRANCH								
Math.-phys.			Phys.-chem-math			Chem.-biol.-phys.			Phys.-geogr.-biol.			Admini-stration			Training of lab. technic.			Ind. desing and practice		
III.	IV.	S	III.	IV.	S	III.	IV.	S	III.	IV.	S	III.	IV.	S	III.	IV.	S	III.	IV.	S
		10			10			10			10			10			10			10
		4			4			4			4	2	2	8			4			4
		9			9			9			9			9			9			9
		4			4			4			4			4			4			4
3,5	3,5	12,16	3,5	3,5	12,16	3,5	3,5	12,16	3,5	3,5	12,16			12,18			12			12
3,5	3,5	12,16	3,5	3,5	12,16	3,5	3,5	12,16	3,5	3,5	12,16			12,18			12			12
		14	8	8	24	5	6	19			14			14			14			14
5	5	12	6	6	14	6	6	14	5	5	12			8			8			8
		5			5	3	2	10	3	2	10			5	2	2	9			5
5	4	13			6			6	5	4	13			6			6			6
3	2	11			6			6			6			6			6			6
		2			2			2			2			2			2			2
		4			4			4			4			4			4			4
		12			12			12			12			12			12			12
		2			2			2			2			2			2			2
		2			2			2			2			2			2			2
		3			3			3			3			3			3			3
												8	8	16	8	8	16	10	10	20
		135			135			135			135			135			135			135

various subjects.

3.6. In class III and IV, the separate class-master's task comes to an end. His function is taken over by the subject "Basics of our ideology". For performing the administrative functions of the class-master other possibilities are being considered.

3.7. In class IV, the history of art is taught in raised two hours weekly since we think it is very important that every student after finishing grammar-school studies has a thorough acquaintance with arts and music. In our opinion, this subject also contributes to laying the foundations of ideology.

3.8. In subject-group social sciences, as well as in the administrative branch of the practical group, the instruction of the Hungarian language continues in the frame of a separate subject, in class III and IV. In the block of social sciences and languages, the linguistic foundation, and in the administrative branch the language-practice /development of the power of oral and written expression, construction of documents, etc./ is going on.

3.9. The instruction of foreign languages shows a peculiar picture.

3.9.1. Within the branch of social sciences and lan-

guages, in the subject-group Hungarian-History, we added four hours weekly for their study. The utilization of this can take place according to the following three variants:

a/ The additional of 4 hours are assured for instructing the Russian language.

b/ A second foreign language gets the additional of 4 hours.

c/ In these 4 hours, a third foreign language may be taught.

In the latter case - as the students in question are mostly studying philology and history - it is advisable to teach Latin as a third language. In the subject-group "Foreign language - Foreign language - Mother tongue" we assure four additional hours each for studying both foreign languages. That can be used in such a way, too, that they get on with studying one of the languages in three hours weekly as before, and the remaining four hours are used for instructing a third foreign language. In this case, too, it is advisable to teach Latin.

3.9.2. In the subject-group natural sciences and mathematics we can assure two additional hours weekly for studying foreign languages. They can be used in such a way that the students study either the Russian language or the second foreign language in five hours weekly instead of the three hours according to the basic lesson-plan.

3.9.3. In the administrative branch, we cannot assure any additional hour for studying foreign languages but - as we

consider it essential that the cultivated administrators working for public instruction know a foreign language, at a proper level - we regard it as a possible solution that the students, from class III on, cease learning one of the foreign languages and devote all the six hours weekly, that were destined for studying both languages, to the study of one of the foreign languages.

3.10. In the lesson-plan of the optional subject-groups, the hour-numbers that differ from the basic lesson-plan are presented framed /in a box/ for an easier survey. Concerning these, we notice only generally: we have striven not to increase the number of programme-variants due to the changing lesson-numbers as a result of the different special joinings. This, for instance in mathematics, there is to be prepared a lesson-plan corresponding to the basic lesson-plan and to two specialized lesson-plan variants. In physics, similarly, with the deviation that the difference between the two specialized lesson-plan variants does not exceed 1 hour. It is not necessary, therefore, to arrange a separate programme for teaching these but the programme of the 6-hour physics course differs from that of 5-hour course only in the number of exercises. At the same time, we succeeded in achieving that chemistry and biology have got identical lesson-numbers in both specialized subject-groups.

3.11. In the branch of the practical-group training laboratory technicians, the weekly 2-hour chemistry indicated

in classes III and IV has to provide the theoretical education that corresponds to the character of the branch.

3.12. At present we cannot elaborate in details the programme of the practical subject-groups, the number of hours assured for teaching the special subject is therefore given in a total sum.

The schedule of the experiment is the following:

/1/ School-year 1973/1974 is the period of preparation. This covers the final clarification of the concept, the arrangement and testing of the thematic programmes of the activities, the preparation and tryout of the tests concerning the beginning level of class 1., the set up of the points of view of observation and the personality files, and the preparation of the teachers participating in the experiment.

The participants of the experiment are; two parallel classes of the schools Radnóti Miklós Gimnázium at Szeged and Ságvári Endre Gimnázium at Szeged, and all three parallel classes of József Attila Gimnázium at Makó.

/2/ The experiment begins in September 1974, with the classes indicated in above.

/3/ The period of the experiment is 5 years, that is to say, after the experimental classes starting in September 1974 we are starting another experimental class. In the experiment to be carried out with this second class. we want to utilize the experiences obtained in the previous class. In this way, in the course of the experiment the original

organizational forms, the subject-matters of instruction, etc. may be somewhat modified, enlarged or narrowed.

/4/ The experimental instruction will therefore be finished in July 1980.

/5/ We want to evaluate the results continuously and the experiences will also be analysed continuously. This, the evaluation of the full experiment will be finished expectably by the end of July 1981.

/6/ Finally we want to emphasize that our experiment is one of the experiments that investigate the possibilities of grammar-school education in the future. We think by no means that this is the model of the future. We only hope that, together with the other experiments, it may contribute to developing the model of the future.

## REFERENCES

- The situation of state instruction and the tasks of its development. A collection of selected documents. Tankönyvkiadó, Bp. 1973. /Ed.: Gyula Kálmán/, p.416.
- Ágoston, György: Condolatok a korszerű oktatásról /Thoughts on modern instruction/. Szemle, 1973. 4. pp.308-313.
- Bakonyi, Pál: Tanterv és képességfejlesztés /School curriculum and the development of individual abilities/. Köznevelés, 1973. 37.
- Gáspár, László: Világnézetünk struktúrája és a komplex tárgyak /The structure of our ideology and the complex subject/. Köznevelés, 1973. 28.
- Grezsa, Ferenc: A tantárgyi integráció lehetősége /Possibilities of the subject-integration/. Köznevelés, 1973. 17.
- Győri, György: A természettudományos nevelés távlatai /Prospects of scientific education/. Discussion with Prof.Dr.György Marx. Köznevelés, 1973. 16.
- Jóboru, Magda: A középiskola holnapja /The future of the secondary school/. Köznevelés, 1973. 13.
- Kelemen, László: Iskola, hivatás, tehetség /School, vocation and talent/. Ped.Szemle /Pedag.Rev./, 1974. 6. pp. 570-574.
- Kelemen, László: Pszichológiai szempontok a tananyag bevezetésében /Psychological points of view in introducing the subject-matter of instruction/. Ped.Szemle, 1973. 4. pp. 314-318.

- Kiss, Árpád: Iskolarendszerünk fejlődése és a középiskola  
/The development of our school-system and the secondary school/. Köznevelés, 1973. 3.
- Kiss, Árpád: Korszerű műveltség - tananyagkorszerűsítés  
/Modern education - modernization of the subject-matter of instruction/. Ped.Szemle, 1973. 4. pp. 291-300.
- Lukács, Sándor: Beszámoló egy reformkísérletről /Report on a reform-experiment/. Budapesti Nevelő /Pedag.of Budapest/, 1972. 2. pp. 31-45.
- Lukács, Sándor: Zárt osztálykeret vagy választható tárgyak?  
/Closed classes or optional subjects/. Köznevelés, 1973. 4.
- Nagy, Sándor: A korszerűség értelmezése az oktatásban /Interpretation of modernity in education/. Ped.Szemle, 1973. 4. pp. 301-307.
- Nagy, József: A középfokú képzési rendszer fejlődési tendenciái és távlati tervezése /Development trends and long-range planning in the secondary training system/. Kossuth Könyvkiadó /Ed.Kossuth/, 1972. p. 110.
- Simon, Gyula: A gimnázium kettős szerepe /The double role of the grammar school/. Köznevelés, 1973. 9.
- Takács, László: Merre tartanak a közös szervezésű iskolák?  
/Where are the schools of joint organization/. Köznevelés, 1973. 12.
- Zárt osztálykeret vagy választható tárgyak? /Closed classes or optional subjects/. - Comments on Sándor Lukács's paper/. Köznevelés, 1973. 11.



Welker, Ottó: Merre tart a ginnázium? /Where is the grammar  
school headed?/ Köznevelés, 1972. 18.

## Опыт преобразования системы обучения в гимназии

Дьёрдь Агоштон - Шандор Орос

Гимназия в Венгрии имеет двойную функцию: 1. подготовить учащихся посредством подачи общего образования широкого профиля к высшему образованию, 2. дать не продолжающим учение такое специальное образование, которое делает возможным поступить на работу по какой - либо специальности.

По опыту в настоящее время гимназия неспособна целиком выполнить ни одной функции. Главные причины этого заключаются в следующем:

1./ Не имеется подходящей организованной системы для раскрытия и развития индивидуальных способностей.

2./ Специальное обучение, соответствующее индивидуальным способностям, является в гимназии маловозможным.

3./ Если такое обучение и есть, оно способствует в большинстве случаев только односторонней специализации, и специализация не соответствует отраслям высшего образования.

4./ Не выяснено, какую квалификацию учащиеся приобретают на выпускном экзамене, на какую работу они могут поступить без высшей квалификации - таким образом подготовка к поступлению на работу является неудовлетворительной.

На таком основании в запланированном и руководимом/управляемом/ авторами эксперименте срок обучения в гимназии / 4 года /, заканчивающегося выпускным экзаменом, разделяется на две главные фазы:

1./ На первых двух курсах/ 15-16-летний возраст / ведётся единое общее и специальное обучение, помимо этого учащиеся принимают участие по два занятия в неделю в разнообразной деятельности, организованной в форме полугодичных курсов. На этом основании в конце второго года даётся им рекомендация на выбор специальной отрасли обучения, ведущейся в высших классах.

2./ На высших двух курсах в пропорции 2/3 - 1/3 ведётся общее и дифференцированное обучение в трёх специальных отраслях / в области общественных наук, естественных наук и в области профессиональной /. Во всех трёх отраслях учащиеся имеют возможность выбрать среди нескольких комбинаций комплексов предметов. Изучени любой комбинации комплексов предметов подготавливает одновременно к продолжению учения с разнообразной направленностью и в специальной отрасли к нескольким различным профессиям.

Экспериментальное обучение, подготовленное в 1973-74 гг., начнётся в 1974 - 75 гг. в семи параллельных классах трёх гимназий, и в нём участвуют два следующих курса. Таким образом, первый курс закончит учение в 1978 - 79 гг., а последующий в 1979 - 80 гг. Авторы собираются опубликовать анализ результатов эксперимента к концу 1981 г.

Ein Experiment mit dem Zweck, die Struktur der  
Gymnasialstudien umzugestalten.

György Ágoston - Sándor Orosz

Das Gymnasium hat in Ungarn eine doppelte Funktion:

1. Vorbereitung der Schüler für das Hochschulstudium durch eine Allgemeinbildung von hohem Niveau, 2. Vermittlung von praktischen Kenntnissen für nicht weiterstudierende Schüler, damit sie eine adequate Arbeitsstelle finden können.

Nach den allgemeinen Erfahrungen kann das Gymnasium zur Zeit weder die erste, noch die zweiterwähnte Funktion erfüllen. Als Ursachen können folgende Faktoren erwähnt werden:

1. Es gibt kein adequates System im Rahmen der Allgemeinbildung für die Aufdeckung und Entwicklung von individuellen Fähigkeiten bzw. Begabungen.

2. Es gibt nur geringe Möglichkeiten, den individuellen Begabungen und Interessen entsprechende spezielle Studien im Rahmen der Gymnasialbildung durchzuführen.

3. Wenn es überhaupt solche Möglichkeiten wie die oben erwähnten gibt, ermöglichen sie vorwiegend nur eine enge Spezialisierung, die den Hochschulfächern nicht völlig entspricht.

4. Die Frage, zu welchen Berufen man im Gymnasium - ohne Hochschulstudien - qualifiziert wird, ist bisher nicht geklärt. Deswegen gilt die Vorbereitung zum Beruf nicht als beruhigend.

Auf Grund der oben erwähnten Überlegungen wird die von den Verfassern geplante und geleitete, sich mit Reifeprüfung abschliessende vierjährige /15-18. Lebensjahr/ Ausbildung im Gymnasium in zwei Phasen geteilt:

1. In den ersten zwei Schuljahren /15-16. Lebensjahr/ gibt es eine einheitliche allgemeine und praktische Ausbildung; ausserdem nimmt jeder Schüler an in Halbjahrkursform zu organisierenden sogenannten Orientierungstätigkeiten teil. An Hand der im Laufe der erwähnten Tätigkeiten gewonnenen Erfahrungen werden die Schüler am Ende des zweiten Schuljahres /der zweiten Klasse/ beraten, um den ihnen entsprechenden Spezialisationszweig der oberen Klassen wählen zu können.

2. In den zwei oberen Klassen findet eine allgemeine und parallel dazu eine differenzierte Bildung in drei Fachrichtungen /Gesellschaft- und Sprachwissenschaften, Mathematik und Naturwissenschaften, Praktikum/ statt. In allen drei Richtungen können die Schüler von mehreren Fachgruppenkombinationen wählen. Durch das Absolvieren einer solchen Kombination wird man zum Studieren an mehreren Hochschulen bzw. durch die praktische Ausbildung zu mehreren Berufen befähigt.

Nach der Vorbereitungsphase /1973/74./ beginnt das Experiment in 7 Parallelklassen von 3 Gymnasien am Anfang des Schuljahres 1974/75. Zwei nacheinander folgenden Jahrgänge werden am Experiment teilnehmen, so dass der erste Experimentaljahrgang sein Studium am Ende des Schuljahres 1977/87., der zweite um ein Jahr später /1978/79./ beendet.

Die Verfasser haben es vor, die Ergebnisse bis Ende 1981 zu analysieren und zu publizieren.