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Health Education – syllabuses, methods and results in the secondary school

One of the Polish poets, Jan Kochanowski, who wrote over 400 years ago about 'health' as the most precious, the dearest and the most irreplaceable value, was right. As long as people are healthy, they are not really interested in their own body. The situation changes dramatically when the disease appears.

The answer to the question: "what does it mean to be healthy and/or what does it mean to be ill?" is not simple. It is, inter alia, due to the fact that a person is not only a biological entity but also has a great mentality. As a result, it happens that people with a strong psyche, despite their illness, consider themselves to be healthy, while a person with a weak psyche and healthy body may feel physically ill.

Referring to the past of the human history and analysing it, special attention must be paid to the various attempts to cope with the infectious diseases. They appeared to be the most dramatic for the humanity of the past periods since they could be observed as the epidemic or even the pandemic.

The diseases that occurred suddenly made people equal since the representatives of all social classes were vulnerable to them. The only chance to survive was to escape from the areas where the sickness was present, however, it also involved the risk of new outbreaks. Gradually, people started to realise that importance of applying to the principles of hygiene as the cause of being healthy and of well-being in general.

Medicine in the recent years has seemed to be one of the fastest growing areas of the research. The conducted numerous studies have provided people with the knowledge which is necessary in order to control many diseases and to cure them.

Yet there are still new ones, which create new challenges, and the attempts to fight them are not yet effective.

The fight against many diseases will not bring the expected results if human beings do not acquire the appropriate health-related knowledge. It allows people

to undertake a number of preventive actions to avoid falling ill and to reduce the impact of diseases.

From the very early age, people should learn the principles of the personal hygiene and how to take care of their own safety, which in the future will prevent them from many dangerous diseases and will help maintain a good health.

In schools, a very important role is played by the classes conducted in the range of the first aid, which supply students not only with the knowledge in this field, but also with some practical skills. They allow, if necessary, to undertake a quick action – often the action that could save someone's life.

Health Education should be an integral part of the school education in all school types. For that reason, 'the basic work' is very important; such work focuses on repeating certain behavioural patterns so as to take care of the physical and mental health. It should be started at the very young age. Together with the development of children and young people, the health-related contents should be improved, making them suitable for the age and needs of young people.

Therefore, the degree of the realisation of Health Education at the 4th stage of education is the subject matter of this article, which discusses the familiarity with the health-related issues in secondary schools, and specifically in the Polish lyceum – the upper secondary school.

Apart from the information provided, concerning 'health' issues, an important aspect of the education is the role of upbringing. The realisation of the basic syllabus contents is, though, very essential. However, "is it always realized by Biology teachers to such an extent as they would like it to be taught themselves?" It will be possible to answer this question after conducting the relevant research in schools and providing the analysis of the results.

The health-related knowledge can be acquired by different types of educational activities of the interdisciplinary character, which can be compared to the way in which students move through different areas of education with the guidance of teachers - guides. Students, by following this path, integrate the knowledge associated with the specific concepts, facts, issues and, in the end, they build a holistic picture of the surrounding reality.

The direction of the realisation of the health-related issues should be based on the syllabus bases in the range of the general education, including:

- educational goals
- educational activities
- contents that should be included in the syllabuses of various subjects
- students' achievements and learning outcomes, which should result from the realisation of the discussed areas of education.

On the foundation of the syllabus bases, teachers develop the teaching plans, they determine how to realise them, as well as create classes by the use of the new contents, and they summarize educational activities.

Acquiring the health-related knowledge by students should appear as the result of the cooperation of several teachers in the interdisciplinary integration. However, it requires a close cooperation of teachers during the planning and the realisation stages.

Many contents are realised by the use of the activating methods, which enable students to plan and organize their own work independently as well as to undertake creative activities (Żeber-Dzikowska 2000). In this way, students not only have the conditions to develop their knowledge but also possess the ability to develop necessary skills and attitudes.

Such kind of education meets the requirements of the interdisciplinary integration, which is usually realized in one of three forms.

Such forms are known as models and fall into three different types, namely, linear, divergent, and flow models (Smolińska, Wójtowicz 2012).

Therefore, schools should consider three educational models of cooperation that are based on the subject proportions:

- Linear model – one subject (monodisciplinary). It relies on creating the holistic picture of the world and knowledge integration (from various disciplines); it can be realised by one or many teachers in the range of classes dealing with one school subject (e.g. Ecological Education, Health Education, Regional Education);
- Divergent model (multidisciplinary) – can be realised during the classes of many different school subjects with their complete autonomies and without time synchronization. This model requires the cooperation of teachers in the interdisciplinary team. The determination of reason-cause relations as well as the synthesis of the complete knowledge and skills must be realized during different school subjects.
- Flow model (interdisciplinary) – is realised by all teachers in the ordered way. Due to the synchronisation of the model in time, it becomes a part of the upbringing syllabus of the school (Buchcic, Żeber-Dzikowska 2003; Smolińska, Wójtowicz 2012).

The unsatisfactory health condition of the Polish society, including children and the youth, as well as the phenomenon of social pathology oblige teachers to start the so-called 'basic work', namely, Health Education in the school environment.

It is, therefore, necessary to define the concept of 'health' and the concept of 'disease' as the opposite phenomena first. According to WHO¹, 'health' is a state of physical, mental and social well-being, it is the efficiency and accuracy of homeostatic mechanisms of the body, adapting it to almost any situation.

'Disease', however, is a state of disorder in the range of the homeostatic mechanisms. To be precise, 'disease' impairs the harmonious cooperation of cells, tissues, organs and systems. It weakens the life forces, and consequently the physical and mental efficiencies of the body.

¹ WHO – the abbreviation: World Health Organisation

The average person quite often wonders when the preventive medicine in its actions will achieve the desired results. It will be possible only when people can keep consciously trying to change their behaviour in the range of 'health', in favour of the prevention of principles of hygiene.

A huge role in this sphere can be played by Health Education, which teaches how to take care of personal health and the health of others. It gives people the opportunity to acknowledge better and understand the way of functioning of one's own body and its environment. It enables people to distinguish the factors influencing the health and well-being positively and negatively. With its presence, any human-being can acquire skills of living according to the principles of a healthy lifestyle.

There is no need to persuade anyone that Health Education is the most cost-effective investment in the public health. The school environment tends to be a huge sphere for acting in the field of Health Education, which not only focuses on providing the knowledge about 'health', but also on undertaking a variety of ad hoc actions. Therefore, the main goal of the school in this regard is to inculcate students with the principles of hygiene and to shape their attitudes of responsibility for their own health and health of others at the appropriate stages of the educational way.

The topics associated with the health-related issues should be introduced from the nursery, and gradually expanded at the early-schooling learning stage – forms 1–3 – followed by forms 4 – 6 of the primary school, and at the 3rd and the 4th stage of education. The health-related contents should be complementary to the prophylactics and its syllabus, which can be considered as the integral knowledge taught in schools at various stages of education. They should be understood as a set of contents and skills that play an important role in the range of the health-related, preventive, and educational realisation, which can take place in the teaching process of different subjects.

Health Education should have its own syllabus bases, which would be included in the curriculum together with its realisation in terms of 'health', prevention and education aspects.

The suggestions of the syllabus bases for Health Education

Educational aims

1. Improving the knowledge about the realisation of the health-related contents in the range of behaviours to protect, maintain and improve the health of the individual and the public;
2. Developing life skills appropriate to the physical, mental, social and spiritual improvement;
3. Developing an active and responsible approach towards personal health and health of others;
4. Developing the need for action in favour of creating the healthy environment.

School tasks

1. Increasing students' interest in the health-related issues and providing them with reliable information about the various aspects (physical, mental, social and spiritual) of health and the factors in favour of 'health', and the most common health risks and possibilities of their elimination;

2. Creating school environment that enables students to practice healthy lifestyle, to improve student's self-esteem, self-confidence and capabilities, as well as to provide students with support in difficult situations;

3. Developing the cooperation with parents and the local community in the range of Health Education as well as solving students' health problems.

Educational / teaching contents

1. The lifestyle and its relations with health and diseases; the concepts and aims of health promotion. 'Health' as a value for the human and the society;

2. Personal beauty care; caring for maintaining the appropriate body weight, body shape, good performance and physical fitness; protecting the environment from the pollution;

3. Work and leisure time, active ways of spending free time; physical activity, fun and a sense of humour as factors referring to 'health';

4. Identifying and taking risks; safe behaviour patterns in everyday life; concern for the safety of others;

5. Principles of rational nutrition in different periods of life; nutrition and well-being as factors referring to the ability to work and prevent the body from diseases; effects of inappropriate weight loss, consequences of elimination diets; selection of health promoting food products and their storage; the rights of food consumers;

6. The use of medical, psychological and other forms of support; the importance of prophylactics and medical testing; the behaviour during the disease; attitudes towards the chronically ill, the disabled and the elderly;

7. Conditions of the supply and demand for psychoactive substances; types of such substances and their effects on the body, psyche and social and spiritual development of people; legal regulations dealing with the use of psychoactive substances; forms of assistance and support for the experimenting people and addicts;

8. Personal and social skills necessary for the protection of life as well as the improvement and maintenance of 'health'.

Achievements

1. The knowledge of the main factors in favour of health and creating risk for human health, and the basic principles of prophylactics in the range of the most common disorders and diseases; the realisation of health-related values;

2. The ability to use the medical and psychological care, to cope with difficult situations and to support others;

3. The ability to communicate and maintain good relationships with other people, and to function and cooperate within a group, dealing with the pressures of the environment;

4. Conscious aspiration to protect, maintain and improve the personal health, and the health of others, among whom the student lives.

The sources of knowledge in the range of the health-related contents should belong to the interdisciplinary contents. To its complete realization, Health Education is required to be included in the curriculum and involves the presence of the school coordinator. Such a function should be associated with the teacher of specific competences, who can be observed as a person, who is very interested in the problem of 'health' and is motivated to face such a task. Under the supervision of the coordinator and with his/her practice, a school syllabus of the Health Education should be created. Such syllabus is to be realised during Biology and P.S.E.²

The introduction of the health-related contents requires:

- cooperation with the staff of the National Health Centre;
- new, willing cooperation with the office staff, canteen workers, and the supportive staff;
- creating the environment that supports Health Education;
- cooperation with parents
- cooperation with the local community
- investment in the teachers' personal, social and health development;

Health Education, realizing the suggested goals, is the way to complete and consolidate the knowledge among young people that deals with the mentioned issues, namely, developing and improving skills to take care of and respect personal health and the health of others.

One of the conditions to undertake any kind of the examination is to create the appropriate problems and to form working hypotheses, which enable and direct the research towards the aims as well as examination ranges.

The present article makes an attempt to answer the formulated main problem and the resulting specific problems.

The main problem: In what way is Health Education realised at the 4th educational stage?

The specific problems:

1. Are the teachers involved in the realisation of the health-related contents in upper secondary schools?
2. What kind of educational syllabus is realised?
3. Does the realisation of the health-related contents influence the state of knowledge and students' attitudes?
4. Is there a correlation with other subjects in the range of the realised health-related contents?
5. What educational model is used during the realization of the health-related issues in upper secondary schools?

² Abbreviation: Personal and Social Education, the lesson also known as: weekly class meetings, or tutor's lesson – performance and discipline analysis.

The investigated issues refer to the following hypotheses:

Main Hypothesis: Health Education is included in the curriculum and realised at the 4th stage of education.

Specific hypotheses:

1. Teachers are committed to the realisation of the health-related contents;
2. The realization is mainly based on the individual professional syllabuses due to the lack of syllabuses created by the Ministry of National Education;
3. The realization of the health-related contents increases the knowledge and develops the appropriate attitudes;
4. In the range of the realisation of the health-related contents, there is a correlation with some other subjects;
5. In upper secondary schools, there is the divergent / multidisciplinary educational model realised related to the health-related issues;

The study used a questionnaire for teachers. The survey examination was prepared to investigate the extent and the way of the realisation of the health-related contents in upper secondary schools.

The appropriate structure of questions created the possibilities for the respondents to provide the complete answers, which created a valuable material for the analysis, and the analysis allowed obtaining the results and drawing conclusions.

The survey examination was conducted among the teachers of Biology and the related specialties, namely, Chemistry, Physics and Civil Defence Course, Physical Education, Religious Science, from upper secondary schools located in the Świętokrzyskie Province.

The study involved 179 teachers of different subjects, i.e., Biology, Chemistry, Physics, and Physical Education. Among the respondents, there were 142 women and 37 men. The most of the respondents, 95 people, had the work experience in a range from 16 to 25 years (53.07%), 58 teachers worked from 6 to 15 years and the fewest number of teachers, i.e. 26, had the experience of more than 25 years (14.53%).

The demonstrated data specify that the respondents are teachers with extensive experience in the classroom. All of them have a higher degree qualification (Master of Arts or Master of Science) in the field of teaching, which means gaining the appropriate content-related preparation for teaching,

The certified teachers created the majority (i.e. 72 teachers – 40.22%) and 66 (36.87) of the teachers were the appointed ones, however, 41 of the respondents (22.91%) were at the lower level of the career promotion. Thus, such a small number of the respondents at the level of career advancement lower than the appointed teachers confirms the high competences and great experience of the respondents in teaching career and didactic work.

The first question concerned the extent to which the health-related contents were realised, according to the evaluation of teachers. Most of them believed that

it proved to be on a good level (47.49%) and sufficient level (26.26%) (table 1, figure 1).

Tab. 1. The level of realisation of the health-related contents at school

The level of the realisation of the contents in the point-based scale	N	% N
0–1 insufficient/unsatisfactory level	11	6.15
2 – adequate level	18	10.06
3 – sufficient/satisfactory level	47	26.26
4 – good level	85	47.49
5 – very good level	18	10.06

N – Number of teachers

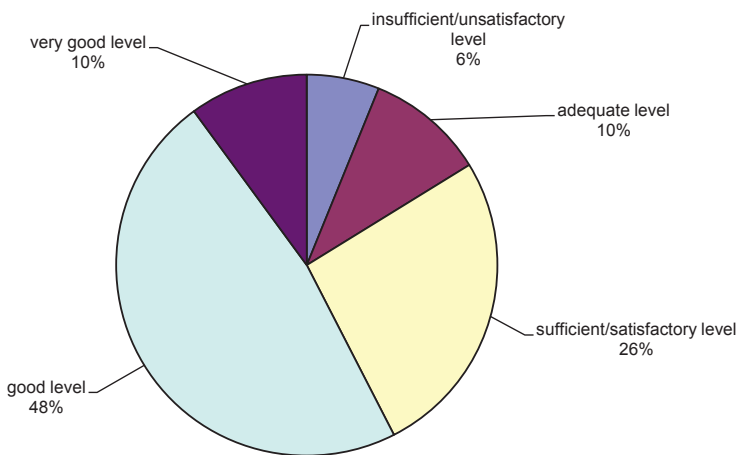


Fig. 1. The level of the realisation of the health-related contents at school according to the respondents

The next question was to determine what percentage of the respondents realised the health-related issues. As it can be seen from the data, 100% of them realised such issues.

When asked about the patterns according to which the health-related contents were realised, 66.48% of the teachers indicated the syllabus bases, 20.67% of them introduced some elements, based on the syllabuses developed by a group of authors and approved by the Ministry of National Education, which was not a typical syllabus of Health Education, but only in the syllabus of Biology with the elements of Health Education. Only 11.17%, thus, a small number of the respondents realised the above-mentioned contents using the personal professional syllabuses prepared and approved by the pedagogical council body of the their own school or another school, 3 of the teachers (1.68%) indicated other than stated sources, however, without specifying them.

The existing condition seems to be a result of the lack of independent and accessible syllabuses of Health Education created, developed and approved by the Ministry of National Education (table 2, figure 2).

Tab. 2. Patterns according to which the health-related contents are realised

Patterns according to which the health-related contents are realised;	N	% N
Syllabus bases	119	66.48
Syllabus created by a group of professionals approved by the Ministry of National Education	37	20.67
Individual syllabus created and approved by pedagogical council body of another school	20	11.17
Other (provide the name)	3	1.68

N – Number of teachers

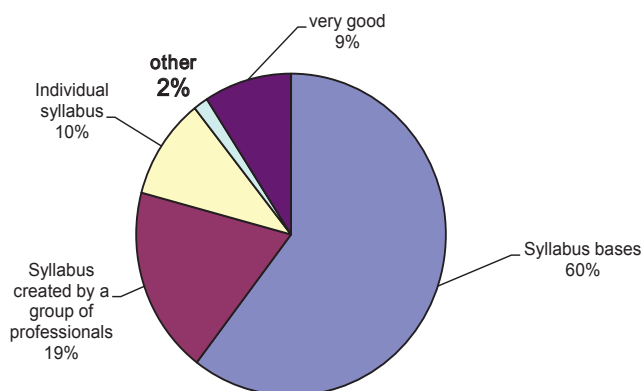


Fig. 2. Patterns according to which the health-related contents are realised

79 of the respondents (44.13%) explained that the reason why they realised the health-related contents relying only on the syllabus bases was the fact that it contained the most important issues affecting the awareness and attitudes of young people in the sphere of the health issues. In addition, such motivation was reinforced by yet another important argument, which was the lack of extra hours (classes) exclusively dedicated to Health Education alone.

57 of the teachers (31.84%) provided as the main reason the lack of extra hours (classes) dedicated to the realization of Health Education only. The remaining 24.02% of the respondents (43 teachers) justified their decisions by the lack of the syllabus developed and approved by the Ministry of National Education (table 3).

The respondents providing the answer in the survey about the syllabuses employed for the realisation of Health Education did not mark that the syllabus approved by the Ministry of National Education was the only one that took into account all the necessary contents, moreover, that it in some way completed the

syllabus in Biology. However, such a syllabus still cannot be called the syllabus of Health Education.

Tab. 3. Motivations according to which teachers realise health-related contents based only on the syllabus bases

Motivations according to which teachers realise health-related contents based only on the syllabus bases	N	N %
Lack of syllabuses created and approved by the Ministry of National Education	43	24.02
The essential issues influencing the human health-centred awareness and attitudes are included and it is possible to realise the contents without extra teaching hours (classes) dedicated only to Health Education	79	44.13
Lack of extra didactic hours dedicated only to health-related contents and their realization during Biology lessons	57	31.84

N – Number of teachers

27 of the respondents (15.08%) used the health-related issues included in the syllabus of Biology prepared by the educational publisher 'WSiP', 26 of them (14.53%) employed the one created by 'Nowa Era', 20 of the teachers (11.17%) referred to the one published by 'PWN', 21 (11.73%) – by 'Operon', while 16 of the respondents (8.94%) used the syllabus of Biology – 'MAC'. Nevertheless, 69 of the respondents (38.55%) declared realising Health Education on the basis of their own syllabuses.

The data demonstrated above by the use of percentages indicate the lack of individual syllabuses in the range of Health Education approved by the Ministry of National Education. Therefore, only some respondents are supported by a few individual professional syllabuses.

The purpose of the next question was to find out the factors that make teachers realise the health-related issues.

68.16% of the respondents (122 persons) mentioned two factors that made them realise such issues. Among the most frequently mentioned there were the following:

1. Paying attention to the state of personal health as the principal value and inculcating the habit of taking care of it among young people;

2. Making an attempt to shape students' attitudes so that they become responsible for their own health;

21.13% of teachers (38 persons) mentioned three factors; among them, apart from the two factors stated above, the third was given, i.e., a commitment of the school authorities to realise such issues.

10.61% of the respondents (19 persons) mentioned only one factor, i.e. paying attention to the state of personal health as the principal value and inculcating the habit of taking care of it among young people. All the above mentioned factors are important and help teachers shape the consciousness of the young persons in the range of health prevention, which will be useful in their future life (table 4).

Tab. 4. Factors that make teachers realise health-related contents

Factors that make teachers realise health-related contents	N	% N
3 factors mentioned	38	21.23
2 factors mentioned	122	68.16
1 factor mentioned	19	10.61

N – Number of teachers

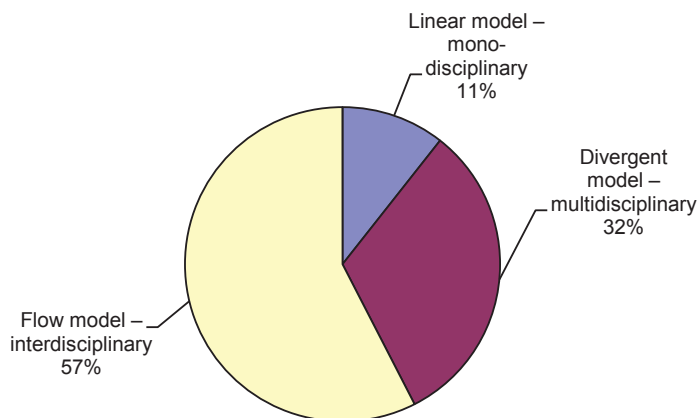
When asked about the educational model associated with the issues of the health – related contents realised by teachers, 103 of the respondents (57.54%) indicated the divergent model – multidisciplinary model, 57 (31.84%) chose the flow model – interdisciplinary model, and only 19 (10.61%) referred to the linear model – monodisciplinary model.

The multidisciplinary model, selected by the majority of the respondents, ensures us that the contents will not be repeated during the realisation of various subjects, but that they will be complementary. Then, the discovery, the experience and the knowledge complementation of missing links of the overall perception of reality were mentioned (table 5, figure 3).

Tab. 5. Educational model associated with the health-related contents selected and realised by teachers

Educational model associated with health-related contents selected and realised by teachers	N	% N
Linear model – monodisciplinary one	19	10.61
Divergent model – multidisciplinary one	57	31.84
Flow model – interdisciplinary one	103	57.54

N – Number of teachers

**Fig. 3.** The educational model chosen and realised by the respondents

Then, the respondents were asked to state whether the realisation of the health-related issues could take place during extra hours (classes). All teachers unanimously responded that they did not get extra lessons (classes) for the realisation of issues relating to Health Education. For that reason, it is the major problem preventing the possibility of its complete realisation.

When asked about advantages and disadvantages of the realised contents, 57.90% of the respondents stated that following advantages: shaping the attitudes of health prevention and personal responsibility for the state of one's own health. 21.05% of the respondents mentioned the recognition of the risk factors associated with falling sick and the appropriate prophylactics. 21.05% of the respondents, i.e. the same percentage as above, referred to the advantage of gaining extra knowledge in the range of health protection.

102 of the respondents (56.98%) did not mention any disadvantages in the range of the health-related contents. Neither did they acknowledge any disadvantages that could be classified as disadvantages influencing the lack of their realisation.

59 (32.96%) of the respondents discovered disadvantages in having difficulties in realising the above-mentioned issues due to the time limits, namely, the lack of extra hours (classes). 18 of the respondents (10.06%) referred to the lack of a syllabus created by the Ministry of National Education associated with the health-related contents and to difficulties with the documentation of such educational activities, which additionally makes teacher's work inconvenient and difficult.

As it can be seen from the data shown above and the respondents' statements, despite the numerous and undisputed advantages, there are considerable difficulties in the realisation of the complete issues, and therefore, satisfactory realisation of Health Education in upper secondary schools (table 6).

Tab. 6. Advantages and disadvantages of the contents related to Health Education

Advantages and disadvantages of Health Education		N	% N
Advantages *	Shaping attitudes and personal health prevention	102	56.98
	Recognizing risk factors associated with falling sick and the appropriate prophylactics	36	20.11
	Gaining extra knowledge in the range of health protection	41	22.91
Disadvantages ■	Difficulties in the realisation due to the time limits (lack of extra teaching hours -classes)	59	32.96
	Lack of a syllabus created by the Ministry of National Education associated with the health-related contents and difficulties with their documentation.	18	10.06
	Lack of disadvantages	102	56.98

N – Number of teachers

* – Respondents providing answers concerning advantages, i.e. 100%

■ – Respondents providing answers concerning disadvantages, i.e. also 100%

When asked about the difficulties faced during the realisation of Health Education, 103 people, i.e. more than half of all respondents (57.54%) stated that the main problem was due to the lack of getting extra teaching hours (classes).

Only 18 of the respondents (10.06%) claimed finding difficulties in the lack of teaching facilities (didactic sources) contributing to the proper realisation of the above-mentioned contents. The data presented in the table below (table 7) constitute clear evidence of significant difficulties in the complete realisation of Health Education. It is surprising that as many as 58 people representing 32.4% of the respondents did not answer the question, which can mean that either they did not perceive them, or the survey question was dealt with without appropriate consideration.

Tab. 7. Difficulties faced by teachers in realising Health Education

Difficulties faced by teachers in realising Health Education	N	% N
Lack of extra teaching hours for realising health-related contents – time limits	103	57.54
Lack of didactic base relevant to appropriate health-related issues	18	10.06
No answer	58	32.40

N – Number of teachers

The vast majority of teachers realising the health - related contents benefits from the cooperation with the institutions not involved in everyday school activities (table 8). Such institutions can sufficiently develop and improve the health - related issues. Ignoring the possibility of such cooperation most certainly diminished and reduced the effectiveness of Health Education. However, only 24 (13.41%) of the respondents did not enter such cooperation.

Tab. 8. The cooperation of teachers realising Health Education – school – with the institutions not involved in everyday school activities

The cooperation of teachers realising Health Education-school – with the institutions not involved in everyday school activities;	N	% N
YES	155	86.59
NO	24	13.41

N – Number of teachers

124 of the respondents (69.27%) cooperated with such institutions as the Polish Red Cross, the National Sanitary Inspection, as well as doctors and school nurses. 33 of the respondents (18.44%) cooperated with blood donation centres, the Association of 'Amazonki', the National Sanitary Inspection and school nurses. 22 of the respondents (12.29%) worked together with doctors, psychologists, as well as psychological and pedagogical counselling centres for addicts.

The presented data constitute clear evidence of the fact that while dealing with Health Education, teachers willingly cooperate with the institutions and professionals that work for the benefit of health promotion. The result of such cooperation

is regarded as highly effective in the range of gaining knowledge and developing health-centred attitudes by students (table 8, 9).

Tab. 9. The names of the institutions that the teachers cooperate with while realising the health issues

Names of the cooperating institutions or people*	N	% N
Sanepid ¹ , Association of Amazonek ² , school nurse, blood donation centres	29	18.71
PRC ³ , Sanepid, nurse, doctor	108	69.68
Doctor, psychologist, psychological and pedagogical counselling centre for addicts	18	11.61

N – Number of teachers

* – Corresponding only to the respondents who provided us with the positive answer to the previous question. In this case, 155 respondents are considered to constitute 100%.

1 National Sanitary Inspection

2 The Society of 'Amazonki' (Amazonki – refers to women fighting with breast cancer)

3 Polish Red Cross (Polish: Polski Czerwony Krzyż, abbr. PCK)

One of the survey questions was related to the most commonly used activating methods. 84.92% of the respondents, i.e. the vast majority (152 persons), provided us with two activating methods, among which the most frequently mentioned were 'debate' and project. That means that they are most willingly applied during the realisation of Health Education. It is worth acknowledging that teachers confuse the notion 'project' with other activating methods. It should be remembered that 'project' realisation consists of a number of teaching methods since 'project' is multi-methodological in its character.

Three methods are used by 18 respondents (10.06%), and four by only 9 of them (5.03%). The respondents who constituted the minority also mentioned the method of 'portfolio', 'interview' and the method of drama.

Tab. 10. The activating methods most commonly used by respondents during the realisation of the health-related issues

The activating methods most commonly used by respondents during the realisation of the health-related issues	N	% N
Four methods	9	5.03
Three methods	18	10.06
Two methods	152	84.92

N – Number of teachers

Among the respondents, to be precise, 66 of them (36.84%) chose the debate as a method considered to be the most effective, in their opinion. Such choice was justified by the fact that this method allows preparing students for the effective participation in public life and allows them to develop the abilities to express their own beliefs.

46 respondents (26.31%) considered a project to be the most effective form of work because it develops students' creativity and improves the abilities of reasoning.

The smallest number of respondents, i.e. only 18 (10.53%) used the method dealing with portfolio, which forces the student to search for information, select it for the purpose of its use during the classes, and then for the purpose of effective presentation.

It is puzzling, though, why as many as 47 people, which constitutes 26.26%, did not answer this question.

Tab. 11. The respondents' choice of the most effective methods, in their opinion

The respondents' choice of the most effective methods, in their opinion	N	% N
Debate	66	36.87
Project	48	26.82
Portfolio	18	10.06
No answer	47	26.26

N – Number of teachers

The last question of the survey concerned the difficulties faced by the teachers during the realisation of health-related contents in high schools. The vast majority of the respondents, i.e. 152 persons (84.21%) stated as the main problem the time limitations, namely, no extra time for the realisation of such contents. 18 respondents (10.53%) referred to the lack of syllabuses approved by the Ministry of National Education that would involve issues related to health prevention, and lack of appropriate education facilities.

Only 9 people (5.03%) specified as a problem the variances in the subject syllabuses and curricula. Therefore, due to the difficulties mentioned by the respondents, Health Education cannot be completely and effectively realised in upper secondary schools (table 12, figure 4).

Tab. 12. Difficulties that the respondents had to face during the realisation of classes related to Health Education in high schools

Difficulties that the respondents had to face during the realisation of classes related to Health Education in upper secondary schools	N	% N
Time limits – lack of additional hours dedicated to their realisation	152	84.92
Lack of teaching hours, lack of professional syllabuses recognised/approved by MNE* as well as insufficient and inappropriate didactic base	18	10.06
Variances in curricula (subject syllabuses)	9	5.03

N – Number of teachers

* Ministry of National Education (Polish: *Ministerstwo Edukacji Narodowej i Sportu*, MENiS)

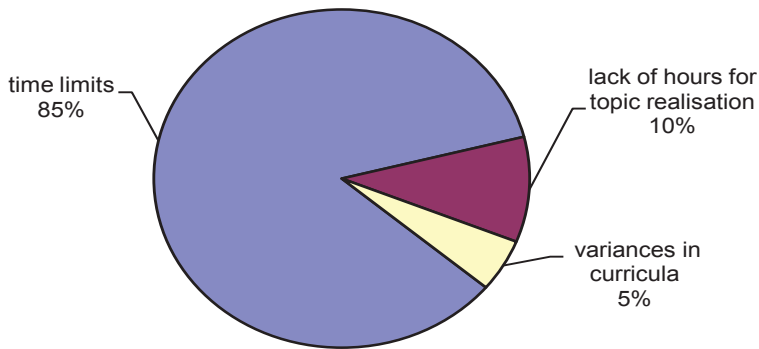


Fig. 4. Difficulties that the respondents had to face during the realisation of issues related to Health Education in upper secondary schools

Summarizing, it should be recognized that the assumed hypotheses were confirmed by the survey examination. They show the following aspects:

- Health Education is not fully realised, however, its elements are included in the curriculum and realised at the 4th stage of education:
 - individual teachers realise the elements of the health-related contents by making the appropriate subject contents relevant to the teaching subject, especially in the case of Biology teachers, due to the fact that this discipline refers very closely to human beings and their health.
 - the realisation of the health-related issues develops the knowledge and shapes appropriate attitudes, that is activities essential in the prophylactics of human health, aiming at improving the personal health as well as the health of the family.
 - during the realisation of the above-mentioned contents the correlation with certain subjects can be observed. Apart from Biology, Health Education, which was confirmed by the survey examination, is conducted by teachers of the following school subjects: Civil Defence Course, Physical Education, Family Life Education, and Personal and Social education (weekly class meetings, also known as tutor's lesson – performance and discipline analysis). Thus every teacher realises Health Education contents according to their school subject issues. It is a good example of the school subject correlation, namely, the interdisciplinary one, that takes place during the realisation of health-related issues within a particular school subject. Such correlation is very valuable because it helps to increase the efficiency of the acquired knowledge and shaped attitudes and beliefs.
 - in upper secondary schools, the divergent model of education can be observed considering the realisation of Health Education (multidisciplinary one). Such a model, as mentioned earlier, is realised during the classes dealing with some different subjects while maintaining their individual autonomies, however,

without acknowledging the synchronization, namely, during the classes which correspond to the subject contents. The cooperation of teachers is required in such case.

Analysing the problem after the survey examination, the following conclusions should be referred to:

1. Health Education, due to its unique role, should be realised in every school completely (in a full range). However, it is difficult because of the lack of personal syllabuses and lack of obtaining extra teaching hours (classes), which could be dedicated to the realisation of such contents.

2. The effectiveness of such education could be more efficient if it appeared as a separate discipline realised by several teachers. It means that all teachers could play their own parts according to their personal qualifications.

The present state cannot be quickly changed; however, most certainly the attempts can be made to prevent the presently appearing phenomena related to the Health Education realisation.

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Health Education – syllabuses, methods and results in the upper secondary school

Abstract

The fight against many diseases will not bring the expected results if human beings do not acquire the appropriate health-related knowledge. It allows people to undertake a number of preventive actions to avoid falling ill and to minimize the impact of diseases.

From the very early age, people learn the principles of personal hygiene and how to take care of their own safety, which in the future will prevent them from many dangerous diseases and will help them maintain good health.

In schools, a very important role is played by the classes conducted in the range of the first aid since they supply students not only with the knowledge in this field, but also with some practical skills. They allow, if necessary, to undertake a quick action, often the action that saves someone's life.

Health Education should be an integral part of the school education in all school types. For that reason, 'the basic work' is very important; such work focuses on repeating certain behavioural patterns so as to take care of the physical and mental health. It should be started at the very young age. Together with the development of children and young people, the health-related contents should be improved, and should be made suitable for the age and needs of young people.

Still, the realisation of Health Education is essential. However, “is it always realized by Biology teachers to such extent as they would like it to be taught themselves?” To answer this question, research was conducted in seven upper secondary schools situated in Kielce. It appeared that the realisation of Health Education is made difficult due to the lack of the independent and accessible syllabuses of Health Education and due to an insufficient number of hours for its realisation. Varied extent to which students are interested in the subject matter requires the employment of the most interesting methods to discuss the contents. To improve the effectiveness, the health-related issues should be considered as a separate school subject realised by some teachers who would have their personal theme range to cover, according to their qualifications.

Key words: health education, curricula of secondary school, methods of teaching

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