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**EVALUATION REPORT**  
**ON APPLE’S FRIENDS PROGRAMME**  
**IN BULGARIA**

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## **Summary**

An evaluation of the „Apple’s friends” programme has recently been carried out in Bulgaria by the Institute for Population and Human Studies of the Bulgarian Academy of Sciences. The piloting of „Apple’s friends” programme was accompanied by a study, which aim was to monitor its effects by the means of the feedback on three levels 1) Study of the emotional and behavioural reactions of the children included in the programme; 2) study of the opinion of school representatives (teachers, psychologists and principals); 3) study of the opinion of the parents of the children involved in the programme. The study comprises 72 children, second class, from three schools in the country, 12 teachers, psychologists and directors, 70 parents of children participating in the "Apple’s friends"

The study with children was conducted in three stages: 1) Team play; 2) Watching and discussing a cartoon movie; 3) Focus groups. It compares the implications of the Apple’s Friends programme in group of children who have already participated in Zippi’s friends and children who have not. According to the results, children make significant progress in developing their emotional intelligence. There is a substantial transfer of mastered knowledge to the experience and behaviour in real situations. This is supported by the demonstrated developed ability to solve independently and effectively problems that have arisen, successfully cooperate, understand more complicated relationships and manage them in efficient manner. The intention to practical application of the knowledge from the specific area is less expressed in the group of children who have completed only Apple’s friends and accounts more sustainable results for the group involved in both programmes.

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### **1. Social challenges, theoretical and empirical preconditions for the piloting of Apple's Friends**

The behaviour of children and adolescents at school, bullying and violence, focus the attention of specialists in Bulgaria and society as a whole. There are dozens of events (meetings, discussions, conferences) devoted to this problem and efforts targeted at its prevention. Our study, conducted in 2017, showed that this is one of the most discussed problems of the Bulgarian media (Bojinova, 2017). BTV commented on school violence in 1,085 of its broadcasts and messages on average for a month (over the last 6 years), which is actually about one-third of the violence comments in total, averaging 3597 per month. Similar is the trend with other news sites. On the other hand, self-report of 604 students (primary and secondary schools) for their school experience report that during the last year 73% of them had been insulted, mocked, given a nickname, 64% have been teased somehow and 57% report they had been pushed or hit less than once monthly. However, at the same time 74% of children and adolescents report they have witnessed bullying less than once monthly. This means that there is aggression that shall be prevented, but it is occasional, not daily.

The focus groups with teachers from primary and secondary schools in Sofia and the country reveal that, according to their opinion the most common form of aggression is the verbal. A reason for this, according to the teachers, is situational daily conflicts. Children used to adopt the rough and abusive language as a model of communication, and when this is not reported as wrong, it transforms into a behavioural norm. In general, the teachers consider that there is a tendency problem of school violence to be overstated (Bojinova, 2017).

The outlined results, as well as the additionally studied opinion of parents of children of school age and people distant from schools suggest there is some mismatch between the opinion about school violence formed by the media and its real scope and forms. However, it remains the empirically supported evidences for the relatively common among children forms of verbal aggression, lack of skills for settlement of conflicts occurred in the course of communication, lack of attitudes to tolerance and responsiveness to the Other. What is obvious is the need of serious efforts directed at work with children for promotion of their emotional intelligence.

In replication of the conclusions from our previous report (in relation to the piloting of Zippie's Friends), the emotional intelligence is a set of emotional and social competences, eg. 1) The ability for identification and awareness of own emotions and the fact that they are closely related to our thoughts and behaviour; 2) The ability emotional states to be managed and regulated and adequately expressed; 3) The ability emotional states to be directed to attainment of definite goals and success; 4) The ability to understand the emotional states of other people; 5) Proficiency in managing relationships and building networks, and an ability to find common ground and build rapport (Goleman, 2015).

These competences are hierarchical; each person learns how to perceive, express and regulate her emotions to different extent during the different life periods depending on the level of psychosocial development and social experience. Furthermore, this process can be supported by targeted trainings (Goleman, 2000, 2015). The high levels of emotional intelligence are a precondition for establishment of stronger and more sustainable social relations with the others and at the same time for prevention of high tension and conflict relations (Gardener, 2014).

Apple's Friends turns out to be undisputedly a programme having wide potential to increase the level of the emotional intelligence of the children tailored to their cognitive and

emotional development. Important fact is its contents and the strategic coherence and continuity of Zippie's Friends.

This study aims to outline the implications the programme in respect to each of the targeted effects, focused by the six modules – feelings and emotions, communication, friendship, solving problems, changes, and going ahead.

## **2. Research design and methodology**

The substantiation and the design of the study of Apple's Friends correspond to the design and model for study of Zippie's Friends. At the same time they are based on the results realized based on Zippie's Friends, the age specificities of the children and the abilities behaviour to be studied in real situations or situations simulating and close to the real ones.

### **2.1. Objective, tasks, hypothesis**

The objective of the study is to investigate the effects of implementation of Apple's friends programme in Bulgaria – changes in the level of emotional intelligence of 8-9 age children in result from the training.

The **tasks** of the study are to investigate the influence of the program on:

- the differentiation and recognition of the children's emotions
- the children's communication with others
- children's concepts of friendship relations and their maintenance
- settlement of problems occurred due to numerous reasons
- the management of changes
- going ahead
- the children who have completed the Zippie's Friends programme and those, for whom Apple's Friends is the first training, as comparison for the attained results and effect.

We suggest that Apple's Friends programme will have a positive effect on the promotion of identification of the individual emotions and the emotions of others, the skills for their management and regulation, development of communications skills, maintaining friendships, overcoming occurred problems and the initiated changes, overcoming disappointment and

anxiety, will promote the further development of the emotional intelligence. This process builds upon the age normative development and socialization of the children.

## **2.2. Methodology**

The research took place prior commencement and after completion of the programme with the main purpose to trace:

- 1) The influences on the children who were involved in the training;
- 2) The teachers who have administered the training;
- 3) The psychologists and principals of the schools where the training took place;
- 4) The opinion of the parents of children involved in the training.

**The research on the children** involved in the piloting of “Apple’s friends” programme is a longitude study which tracks the changes in the emotional intelligence of the children including their feelings, communication, friendship, solved problems, conflict management, etc.

Children from three schools in the country, recruited for the programme were included in the study. The study was 60 minutes and comprised three modules:

- ✓ An experiment which observed the interactions among children in real environment (the game witches, giants, dwarfs);
- ✓ Discussion on a cartoon watched by children aimed to determine the degree, to which children are able to recognize and understand the feelings of others, the meaning of the friend ( friendship), and the behaviour in a conflict situation;
- ✓ Focus groups prior to the training on topic „relations between the children in our class” and after the training on topic „what we have learned from “Apple’s friends” and had my classmates changed”.

The first research module included playing a competitive game at the beginning and in the end of the school year. The degree of complexity of the game was determined based on previously conducted pilot study with a control group of children. The games at the beginning and at the end of the school year were competitive performance and instructions conformed to the degree of development of motor functions and the teamwork abilities. The games were

subject to certain rules that suggest speed and accuracy of throwing, as the objective of each team was to win all the three rounds. The children were from different classes and had been divided into teams randomly. Each game had been played three times as the reactions and behaviour of the children, as well as the emotional responses dynamics depending on win or loss to be monitored. Additional indicator was the effect of the extrinsic motivation, suggesting increase of the competitive attitudes of children – a precondition for spontaneous aggressive reaction and/or tolerance in interactions. Children’s motivation had been stimulated through an instruction, directing them to: 1) self-performance and performance of the team as a whole, which suggests intrinsic motivation; 2) prize for the winners, which promotes the extrinsic motivation of the children. The reactions of the children of the winning and losing teams to the prize had been observed. The evaluation card prepared comprised the monitored indicators: emotional reactions of children, interactions among the children, behavioural reactions of the individual child and the group as a whole depending on the situation. The evaluation was based on the correspondence of the qualitative and quantitative assessment of the experts.

The experiment is a team game Witches, giants, dwarfs that include 4 stages: Stage 1 is focused on the adaptation of the children to the experiment. The children, the experimenter and the experts form a circle, hold their hands and introduce themselves, as says “My name is ... and what is my favourite thing to do is ....” The experimenter tries to maintain positive atmosphere and attitudes among children. Stage 2 suggests training of the skills needed for the team game Witches, giants, dwarfs. The experimenter divide randomly children into two teams, describes the rules of the game and each character – draws it symbolically on the board, demonstrates the movements and sounds of the character and who is stronger (the witch is stronger than the giant, the giant – than the dwarf and the dwarf – than the witch). The children directed by the experimenter make several physical exercises and learn how to imitate individually the acts of each character. Afterwards the two teams arrange in two rows facing each other, as each child has a competitor from the other team. Furthermore, the child has to choose which character will play. After a signal by the experimenter the children start to perform their roles. The experimenter verifies for each couple who are the characters and who the winner is. Thus, the children become aware of the competitive component of the game. Stage 3 reveals the real experiment. The children, already divided into two teams by the experimenter have to negotiate and agree according to the instructions given which character will all they play as a team. When

the teams are ready, the children arrange in rows facing each other and compete in couples. The procedure is repeated three times with three consecutive performances of Witches, giants, dwarfs. Winning is the team who have won more games. The children are explained also that the winner will have a prize. The last part of the instruction aims at the extrinsic motivation. It is supposed to strengthen the strive after achievement and stimulate higher competitiveness for the two teams and respectively, more expressed emotional and behavioural reactions. The game is supervised by the experts.

During Stage 4, the winning team is given prizes (funny stickers). The children from the two teams are asked to share their feelings and do they want the game to proceed. The emotional and behavioural responses and reactions of the winners and losers are reported.

The second research module included watching of a cartoon on subjects, describing various conflict situations among the classmates and the dynamics of friendship relations. The characters were animals with specific features. In the beginning and in the end of the school year two different cartoons with similar general plot had been used. The cartoons had been selected with expert evaluation and in compliance with the normative development of the children, as the children had not been familiar with the cartoons (had not watched them previously) in view to experiment preciseness. A part of the experiment was stopping the cartoon prior to the conclusion, enabling the children to finish the story themselves after a discussion how they described the way, in which each of the characters used to feel and what experiences had, who was guilty of the conflict occurred and free generation of example for analogous situation from their daily life. In this way are traced recognition of emotions of others and the extent of personal identification, various interactions among children and the opportunities different types of conflicts overcoming, the position of children to settlement of the contradictions and attitudes towards friendship.

The third research module comprised focus groups on topics the relations of the classmates at school, conflict situations and how children react to them, recognition of behaviour and reactions of others and self-reflection. The focus group in the end of the school year included also the topic: What have we learnt from Apple's, what had Apple changed in others and in me.

The next stage of the research concerned study of the opinion and observations of school representatives. Three questionnaires designed especially for the purposes of the study were administered to the teachers, the psychologists (school counsellors) and the principals. The questionnaire for the teachers aimed to investigate their impression of the students during the year, the classroom atmosphere and the most common problem situations that occur. The questionnaire for the psychologists aimed to investigate their observations over the student's behaviour throughout the year, the parents and teacher requests for assistance and most common reasons for these requests. The questionnaire for the principals aimed to investigate their opinion on the school environment and students and parent's requests throughout the year. All of the representatives were asked about their observations and opinions on the Apple's friend program. Furthermore, interviews had been made with the directors and psychologists from the schools and focus groups with the teachers implementing the programme Apple's friend were organized. This study was held also twice - in the beginning and in the end of the school year.

In addition the parents of the children participating in the programme had been administered a separate self-report questionnaire at the beginning and at the end of the school year. The questionnaire was designed according to the objectives of the research and the items concern the way the child adapts to the school environment, its relations and interactions with classmates, experiences of the child, its coping skills in conflict situations and problems of different nature. The observations of parents on the atmosphere in the classroom and the school as a whole have been included.

### **2.3. Research sample**

The research took place in the period 2017-2018 in three Bulgarian cities – Sofia, Vratza, and Aytos. The research comprises 72 children from second class involved in the piloting of Apple's friends (all children, except for one group of 24 children, have already completed Zippie's Friends). The teachers are 8 - 7 from them have already trained children under Zippie's Friends and 1 works only with Apple's Friends. In addition, 3 directors and 3 psychologists, 70 parents have been administered the questionnaire.

Table 1: Subjects of the study

Participants	Students	Teachers	Principals	Psychologists	Parents
N	72	8	3	3	70

### 3. Results and discussion

The effects of the training programme Apple’s Friends on children from second class, as stated above, is performed by the means of three min groups of studies. The first group is focused on the children, the second on school representatives of the schools where children study and the third group comprises the parents of the children involved in the programme. The results have been consecutively described in the below sections.

#### 3.1. Study of the children involved in the programme Apple’s Friends

Study of the effect of Apple’s Friends programme on children has been realized through three individual studies. The first two are experimental – role game Witches, giants, dwarfs and interpretation of thematic cartoons, and the third one comprises the focus groups.

##### 3.1.1. Emotional and behavioural reactions of the children in competitive situation

For the purposes of Apple’s Friends programme the emotional intelligence of the children is studied by the means of experiment **based on the game Witches, giants, dwarfs**. The experiment suggests observation of the real behaviour of the children in situation of team competition. The introduction of extrinsic motivation (prize for the winning team) additionally supports the strive after success, whereas the win suggests interaction between the team members for selection of the character whose role they will perform, as well as during negotiation of the strategy depending on the previous success / failure (the shifts among the games). At the same time children can express their direct attitude to their team mates and to the members of the competing team – winner or loser

Table 1 summarizes the results from the two time periods in respect to the emotional and behavioural reactions of the children observed during the game, as well as the interaction and interrelations among children. Table 1 summarizes the basic emotional and behavioural

reactions of the children in the experimental situation Witches, giants, dwarfs at the beginning of the school year prior to Apple’s Friends training and at the end of the school year (after completion of the Apple’s Friends training).

Table 2: Summarized results from the game Witches, giants, dwarfs concerning the experimental indicators among children

<b>Research stage</b>	<b>1<sup>st</sup> study</b>	<b>2<sup>nd</sup> study</b>
<b>Experimental indicators</b>	<b>During the game</b>	<b>During the game</b>
<b>Feelings</b>	<p>The children perceive the game rather emotionally; they demonstrate enthusiasm and are pleased to perform the roles. Some of the boys are rather spontaneous, noisy and inclined to fight.</p> <p>All are happy with each success.</p> <p>After failure children demonstrate deep disappointment.</p> <p>Most of the children are very disappointed and sad when they do not receive prize.</p> <p>The winners demonstrate joy and pleasure with the received prizes and show them to the losers.</p> <p>Children are sincere and open in their experiences.</p>	<p>During the second stage of the study, children demonstrate the same emotions as during the first. All children are full of enthusiasm. They experience each failure and success.</p> <p>The boys, who used to be very spontaneous during the first stage, demonstrated much more temperance during the second stage and tried to control their emotions.</p> <p>As a whole, the game is the place where they can be more open in expression of their reactions.</p>
<b>Interactions</b>	<p>The teams are formed randomly, but children cope to unite because of the common goal and are cooperative. They try to elaborate strategy for the choice of alternative resulting in win based on their previous success / failure and the probable choice of the competing team, the features of the character they choose to perform. Largely each team has its leaders who impose their opinion on the others.</p> <p>The teams that have not completed Zippie’s Friends do not demonstrate good interaction and cooperation skills, they more usually quarrel about the choice. Their strive is mainly to suggest the choice their competitors will make one of the teams without making decision started the game when the competitors declared they are ready. The experimenter</p>	<p>A part of the teams showed progress in their interactions and team strategy planning. A lot of the children are able to listen the opinion of the others and take it into consideration during the discussions. Some children tried to make their best to be recognized as leaders. One boy stated I am the leader and insist to discuss the choice once again. However, this was not obstacle he to agree to the initial proposal made by another child.</p> <p>Very impressive was the voting organized for selection of the character for the team, made by two of the teams.</p> <p>In general, the members of the teams agree faster and make faster decisions compared to the study prior to participation in Apple’s Friends. Special influence has the leaders and their already fixed positions for the</p>

	<p>stopped and returned them to negotiate – the members of the team used to react in a spontaneous and non organized manner.</p>	<p>teams. The children are much more rational in their performance.</p> <p>For the teams that have not completed Zippie’s Friends there is not accounted significant progress in the mode of interaction among the children. Again are observed not rationalized actions, lack of negotiation, returns.</p>
<p><b>Relations</b></p>	<p>The relations among the children in the different teams are friendly. Occasionally in case of failure they remind one to the other that there used to be another option, however they have made the wrong choice.</p> <p>The children from each of the competing teams have accented competitive behaviour. This is especially visible among the boys. Some of them use the games and the roles as to demonstrate their physical excellence to the boys from the other team. This, however, has only game form. Almost all teams try to suggest one way or another the choice of the other team.</p>	<p>During the second stages children demonstrated again good interactions within the team.</p> <p>The inter-team competitive style is also kept, however the level of demonstration of power during the game among boys is significantly reduced.</p> <p>The children tend to discuss the failure / success of the competing team and look for the reason for their own failure often related to the suggested eavesdrop on their choice by the other or to the wrong choice they have made. They regret they have under esteemed the possible alternatives.</p> <p>Conflicts and reactions of anger and aggression has occurred only among the children who had not completed Zippie’s Friends Zippie’s Friends directed to a child with special educational needs who behaved in a provocative manner.</p>
<p><b>Behaviour and reactions after the end of the team game and giving the prize to the winning team</b></p>	<p>The winning teams are pleased with the prizes and show to the members of the teams who list what they have received. They seem to be happy.</p> <p>The losers are disappointed and seem to be sad.</p> <p>The different teams react differently to the proposal to proceed with the game. In most cases there are children both from the winners and losers who want and who do not want to proceed to play.</p>	<p>During the second stage of the study children demonstrated their experience. The losers did not seem to be so disappointed and sad.</p> <p>Members from almost all winning teams do not want the game to proceed but the members of the failed teams are eager to play again as they state they will win.</p>

The experiment with the game Witches, giants, and dwarfs prior to Apple’s Friends and after completion of the programme demonstrates support to the skills and attitudes formed with

Zippie's Friends and promotion of the further development of the emotional intelligence of the children:

According to the outlined results, the children reveal progress in identification and management of their own emotions and their expression. They have positive attitude towards new situations, including competitive. They are enthusiastic and strive to express themselves. They are open, sincere, incline to share what they think and to propose their solutions. They have better skills to control their spontaneous emotional reactions and experienced disappointment. They are led by the idea that in future they will have more success and can be winners.

The children have improved their skills to communicate and interact with others. They have good interaction in the course of decision-making, demonstrate tolerance and accept the opinion of the others, avoid conflicts. They have improved further their ability to conform their own mood and vision to those of the others. Some children have already fixed attitudes to become leaders and try to launch their opinion, best described with one of the statements of the boys: I am the leader, I want we all to discuss once again .... This trend is more typical for the boys, probably provoked by the nature of the game.

The children demonstrate adequate competitive attitudes, in particular revealed in their skills to elaborate strategy common for the group and conformed to their previous success / failure, the forecasted choice of the other team, agreement of the different opinions and positions of the team members.

The observations lead to the suggestion that implementation of Apple's Friends has serious effect on the emotional and behavioural reactions of the children, most of all for those who have previously been included in Zippie's Friends compared to its individual delivery. However, this is indicative suggestion, not fully substantiated statement because of the limited data of only one study.

### **3.1.2. Children's interpretation of the feelings and behaviour of the cartoon characters**

During the second module of the study the children watch cartoon movies and based on their interpretation are studied their skills to identify and understand, name and access: 1) the feelings of others; 2) the relations, the causes for conflicts and the opportunities for their overcoming. The interpretations of the children are described in Annex 1.

In Table 3 are summarized the interpretations of the children for the experiences and behaviour of the Bear, Franklin and the Goose from the cartoon „**Franklin and the broken globe**“ (first stage of the study, prior to delivery of Apple’s Friends programme) and of the Bear and Franklin and the rest in the cartoon **Franklin and the bus patrol** (second stage of the study after completion of Apple’s Friends. The two movies are different in contents, however for both the focus is the friendship, which in different way faces challenges.

**Table 3: Interpretation of the cartoon the delivery of Apple’s Friends (I-st and IInd stage)**

<b>Research stage</b>	<b>1<sup>st</sup> study</b>	<b>2<sup>nd</sup> study</b>
<i>Experimental indicators</i>	<i>During the game</i>	<i>During the game</i>
<b>Feelings</b>	<p>The children are fully aware of the feelings of the characters from the movie Franklin and the broken globe. They are able including to interpret the feelings as underlying the individual behaviour – they consider the behaviour of the Bear is provoked by the sense of guilt, shame, jealousy, pain.</p> <p>This is indicative for the results from Zippie and exit level after Apple.</p>	<p>Children go deep in the experiences of the characters and the related behavioural reactions. They find the relation between them and the hurt and disappointment reported by the Bear, Franklin and the rest friends..</p>
<b>Interactions and conflicts</b>	<p>Children understand that the friendship and lies are incompatible. The lie is reason others to become angry with you, but it also “makes you feel bad and sick”. The children state that friends shall “always say the truth and be honest, not to fight and hurt each other”. «</p> <p>The children consider broken relations can be remedied. This can be attained through recognition of own mistakes and excuses.</p> <p>The personal experience shared by the children reveals they can translate their concept of friendship in their relations with friends and parents.</p>	<p>Most of the children are able to understand the complex nature of the situation in which the Bear and Franklin are – to be in charge of observation of the rules and remain friend with whom you impose sanction because breaking of the rules.</p> <p>According to their interpretation friendship is important; however there are other important issues as the rules. They consider correct the statement that the rules are rules and they shall be observed even if your friend will be angry with you.</p> <p>They further understand the position that there is no room to be hurt for imposed sanction for non-observation of the rules because “everyone learns lifelong and shall learn to make mistakes”.</p> <p>The children reach the idea that both rules and friendship are equally important and can be at the same time observed / maintained if “your friends observe the rules”.</p> <p>The children demonstrate they are aware of the sense of the rules. They consider rules rather important because “if they are not observed something bad can happen to</p>

		you”. There was also a group of children who consider as during the previous period that friendship is more important and rules can be broken if they jeopardize the friendship. In general children consider the Bear and Franklin will remain to be friends and that they also experience similar situations, but later make it up with their friends.
<b>Activity of the children in the course of interpretation of the cartoon movie</b>	Almost all children tried to participate in the interpretation of the movie, and share their opinion. There are no significant differences in the interpretations of the individual children and groups.	Almost all children participated actively in the interpretation of the movie and shared their opinion. There is some difference in the interpretation among the majority of the children and the minority group. The children who had participated in Zippie’s Friends programme demonstrate better skills to listen the others, and wait their turn to speak compared to those who had participated only in Apple’s Friends.

The interpretations of the two cartoon movies outline the positive effect of Apple’s Friends on the level of emotional intelligence of the children. The interpretation of the first movie Franklin and the broken globe reveals that the children have already established stable concept of friendship, relations with others, the time perspective of the friendships made. It is obvious they consider friendship incompatible to lies. They clearly identify and differentiate the lie as act that spoils friendship as friendship is based on honesty and sincerity. The children are aware of the feelings of others as reason underlying their behaviour and how the different feelings can be responded to. (Table 3, Annex 1).

In the second movie Franklin and the bus patrol, Franklin and the Bear are in a more complicated situation, in which the rules and their observation challenge their friendship. Children are already convinced of the fact that friendship is more important than everything else (proven in the study in respect to Zippie), however in this case they have to assess are there situations, to which this is not applicable. The interpretation of the situations from the movie the children make demonstrates progress in their understanding of the complicated multilayer nature of the friendship and that sometimes it is overshadowed. A large number of the children concluded that there are circumstances when you have to oppose to friend and this is the case when you have to observe important rules. Rather impressive is the opportunity formulated by the children for finding the balance between friendship and the rules, their equal treatment as two very important points. They state this is possible when “your friends observe the rules”.

At this stage, the children the more and the more precisely understand the relation between feelings and behaviour. This allows them to interpret much better the motivation underlying the acts (Franklin changes his mind about the rules and attitude to the Bear when is hurt). At the same time they have also revealed the dynamics in the relations and how everyone can improve in this line – one can make a mistake and be reprimanded, however this particular is how people learn not to make wrongful things in future.

The interpretations suggest furthermore that the children have succeeded to generate a clear vision about the rules and their sense. They have come to the conclusion that rules have significant role, in this case to protect the bus passengers from accident and nothing bad to happen to them.

The outlined trends, and most of all, inclusion of the rules as a key element of the relations among people, have a real progress in the socialization of the child.

Not at last, it has to be noted that the children relate what they watch on the screen to their real experiences, which is indicative for the transfer of the knowledge to the real performance of the child.

It has to be noted that the children who have completed Apple's Friends programme demonstrate the same level of understanding of the friendship, interpersonal relations, and feelings as the children who had been involved also in Zippie's Friends. At the same time, they demonstrate less mature interactions among them during the discussion of the movies.

### **3.1.3. Apple's Friends according to the children – focus groups**

The focus groups conducted during the third stage of the study produce information about the effect of Apple's Friends programme by the means of comparison of children's statements in the two periods of the study (prior and post Apple's Friends) in respect to: 1) Children's ability and attitude to comment the relations in their classroom, the conflicts and their role in them; 2) Their ability to identify and assess the behaviour and reactions – of others and their own; 3) Assessment of children of Apple's Friends programme – what they have learnt and how this has changed them.

The three focus groups gave indicative information and results concerning each of the study topics:

## **1) The ability and inclination of the children to comment the relations in their classroom**

### **Prior to the training –**

The children are very communicative and are eager to participate in the comments about their classmates, their relations, good and bad acts. They are excited by what is happening to them and want to share it.

**After the training** – the children are enthusiastic to participate in the discussions about the relations with their classmates. They try to share much wider range of experiences (except for the negative), to reveal they are interested in everything that happens to their classmates.

## **2) Ability of the children to identify and evaluate the reactions and behaviour – their own and of the others**

### **Prior to the training:**

- The children have clear criteria to indicate the good and the bad relations. They evaluate each individual act, however are able also to make a generalized assessment. (Some of them note that they have boys mates who quarrel and fight. Others state that the relations of their classmates are good.)
- The children are willing and look for the support of the teachers and parents when some negative event occurs, eg. when someone insults them. (Children report that when someone insults them they forthwith approach the teacher, often the parents and sometimes cope alone).

### **After the training:**

The children pay attention to and assess the behaviour, as well as the experiences of their friends and classmates. They demonstrate well-expressed empathy. (They comment the rude behaviour of their classmates, but also speak about cases when someone is sad because there are problems in his/her family and they try to calm him/her down and cheer him/her up.)

- The children are prepared to overcome the problem relations among them dominantly alone, rarely approach teachers and parents. (They share they know how to proceed when someone insults them or is rude to them).

## **2) Evaluation of the children of Apple's Friends - what they have learnt and how they have changed**

- ✓ The children appreciate high Apple's Friends. The report they have had very interesting and pleasant time. (Many of the children report these had been their favourite classes. Some of them try to make comparison with Zippie's Friends but the opinions are different).
- ✓ Children consider most interesting topic in Apple's Friends the friendship. (They have learnt that friends have to share, assist each other, not get into quarrels and insult, to be happy ....)
- ✓ Children report that Apple's Friends had made them learn a number of issues - about the games, how to observe the Apple rules (they cite a part of the rules), how to behave, how to help others who are sad (calm them down and cheer them up).
- ✓ Children think that some of them have changed and become better, but there are still some children who use to behave in inappropriate manner.

The focus group in general evidence the positive effect of Apple's that is similar with the effect of Zippie's Friends. It can be concluded that the children have already formed a sustainable attitude to communication, openness and honesty in communication with the others. They have deepened their ability to assess others in differentiated manner (behaviour ad feelings) and in differentiated aspects (different acts and experiences) and to share these evaluations. The children demonstrate effective transfer of the acquired knowledge to perception and rationalization of what happens really in their environment and the way they perform.

Indicative for the effects of the programme are also the accents children place on what they have already discussed. The topic friendship had left most touching impressions and had formed attitude towards maintenance of positive relations. They give special significance also to the Apple's rules. (This is noted also by the teachers, who stress that in a number of situations the children remind themselves the rules they have to follow.)

## **3.2. Study of the school representatives**

### **3.2.1. The teachers about Apple's Friends**

#### **Focus groups**

The teachers who in practice implement the Apple's Friends training programme and previously the Zippie's Friends have participated in focus groups and thus had been studied their evaluation of:

1) Qualities of the programme, its potential effects; 2) The advisability such programme to be implemented; 3) Effects of the training in various aspects of the programme;

#### **1) Qualities of the programme, its potential effects**

The general feeling of the teachers about Apple's Friends is very close to their impressions reported for the Zippie's Friends. They estimate high the contents of the programme and the manner it is implemented. The teachers stress that this programme provides flexible and creative working, which is significant for the results. During the training, the interest of the children is constant, as well as their willingness to involve in full and this significantly promotes the final result.

The teachers share in details their impressions from the classes. They note that:

1) The work with Apple's Friends is much easier compared to Zippie's Friends because the children already have knowledge of the basic concepts and now they only extend them;

2) The children are willing to go to the classes and eager to work. They have already attitude to such classes and the atmosphere is positive. This to great extend supports the activity and the good results.

3) The aggressive behaviour of individual children had been limited still due to Zippie's Friends, which is a precondition for more beneficial work with all children in the classes included in Apple's Friends.

4) Apple promotes extension and deepening of the knowledge from Zippie but not it to be forgotten. The teachers expect and consider such programmes have to be designed for the later classes as the effect to be extended in time.

## **2) Advisability such programme to be implemented**

According to the teachers included in the study implementation of Apple's Friends similar to Zippie's Friends is undisputedly beneficial. This type of programmes ensure opportunity for work specially designated to formation of positive behavioural models, relations of mutual recognition and support, friendship, tolerance among children, respectively decrease of the bullying cases, aggression (partially occurring still during the primary school). This according to the teachers promote escape from some of the restrictions of the priority and dominating school strategy for better results.

## **3) Effects of the training in various aspects of the programme**

The teachers consider the programme in general is very efficient. Similar to Zippie's Friends it has significant effect on children in all its modules, but its most serious effects are in several directions:

- It is observed strong willingness children to share the problems that excite them and master skills for their settlement through own efforts. The teachers note that the repeated complaints from children have ceased and that children approach them solely for serious problems.

- It is noted a significant progress in the empathy of children towards the others. According to the observations of the teachers, children demonstrate clear understanding and responsiveness to the children who are melancholic and sad because they have had a negative experience in school or at home. They try to improve their mood.

- Children observe the rules they have learnt from Apple's Friends, understand their importance for their relations and coping with the experiences and overcoming the problems and bad experiences. Thee teachers note that most of the children know them perfectly and in different situations remind their classmates which rules they have violated. This has significant effect on their behaviour and limits the manifested aggressive behaviour. ("Now even the most aggressive children observe the rules" state two of the teachers.)

### **3.2.2. Psychologists and directors for Apple's Friends**

The study comprising psychologists and principals of the schools where Apple's Friends is piloted, as well the teachers, is aimed at evaluation of: 1) the benefits from implementation of such a programme; 2) Effectiveness of the training in the various aspects of the programme;

**The benefits from implementation of Apple's Friends in second class** is evaluated by the psychologists and principals mainly in respect to maintenance of positive relations among the pupils in the classroom, as well as to the successful coping with the integration of new children, including children with special educational needs.

The psychologists and directors had been administered a self-report scale and they participated in discussions that give idea about their impressions concerning the general atmosphere in the school at the beginning of the school year and the change in the period right after implementation of the piloted Apple's Friends. The previous study related to the implementation Zippie's Friends, evaluate the atmosphere in their school as calm, joyful and pleasant. At the same time this trend corresponds to the fact that the principals are rarely approached by parents and teachers as to find solution for serious problems with pupils from second class. According to the data collected the pupils are dominantly calm and have positive attitudes. Comparison of the responses of the principals at the beginning and at the end of the school year demonstrate a positive picture for the schools atmosphere for the studied period.

The relation between the problems in the individual school and the **effectiveness of Apple's Friends programme as an extension of Zippie's Friends** is discussed most by the school psychologists /counselling staff. The key position of the psychologist concerning solving the various problems in school (notwithstanding who signals about this – the children themselves, the teachers or the parents) enables her/him to classify them. The psychologists in all the three studied schools report that most often they are approached for solution of problems related to study difficulties and insults.

Similar to the preceding year, the psychologists report that more serious are the problems related to aggressive behaviour and bullying among children at secondary school. For the children at primary school such acts are incidental. They accent the expedience Apple's Friends to be implemented as extension of Zippie's Friends. They consider this consequence and coherence between the programmes has a real effect. Apple's Friends strengthens the attainments of Zippie's Friends and promote its further development. In the school in Aytos the only pupil with serious aggressive behaviour had changed positively and now, at second class

already observes the Apple's rules. The child learnt consciously how to manage its impulsive aggressive acts and behaviour towards other children.

The psychologists, similar to the teachers also accent on the significance of the progress children have in the communication area, which foundations are laid by Zippie's Friends. Furthermore, they pay attention to the progress children make in making friendships led by set of principles, the empathy towards others, mastery of the rules that support overcoming various problems in the relations – insults, rejection, accenting on the exclusive significance of these sides of the children's behaviour for the their performance in the direct social environment.

### **3.3. Study of parents**

The **feedback from parents of the children** involved in Apple's Friends is collected in respect to: effect of the programme on the child, experiences of the child in school it shares, its communication style with coevals in conflict situations, its mood when it is back from school and the impressions of the parent for the general atmosphere in the classroom and the school. For this purpose 70 parents were administered self-report instruments studying the situation at the beginning and at the end of the programme.

According to most of the parents (99, 7%) Apple's Friends programme had positive effect on the children. Interesting are the information and the opinion of a mother whose child is included in the programme. She reports that the „positive effect of the programme is manifested in the expressed higher keenness of the child to observe the environment and the school setting; deeper analysis why some event had occurred as it had happened; taking the role of the other; more openness to hear mother's point of view (and the position of the parent) and to compare to its own.” The mother reported also „I admire the homework for the parents you gave during the year. My child was eager to read what I have written and to what extent my writing coincides with her expectances.”

According to the parents 96.1% of the children come back to home from school in good mood and 75,8 % are enthusiastic. Disturbed or anxious when back home are less than 5% of the children.

The children share about joy events or amusing games in about 82% of the cases. The most often positive experiences are related to pleasant communication (refers to 82.2% of the

cases), interesting games (about 72.5%), new friendships (65.8%), won competitive games (56.3%) and praise from classmates (55.7%).

Children rarely share negative experiences, eg. disputes (33.2%) and fights (8.6%). Most often the negative experiences are related to quarrels and insults (50,1%), physical encounters (31.5%), violation of the rules (22.1%), lost competitive game (17.3%), isolation of the child by the part of the other children (who decline to play with it 10.5% and do not communicate with it 15.5%).

When conflict occurs with the other children parents consider children usually approach teacher for support (21.2%), avoid these children (59.5%), withdraw (71.8%), ask parent for help (42.1%) or find solution to the problem in conversation (72,2%). Rarely the conflict exaggerates in physical encounter (5.7%).

Approximately 90% of the parents describe the atmosphere in the classroom and the school as cheerful and pleasant or calm. The atmosphere in the classroom and school is described as tense by about 12% of the parents and it is problematic according to 8-10% of them.

Parents report that boys much more compared to girls share about fights; in case of problems with other children they more often start physical encounters, more often share with their parents such physical aggression experiences and that the other children neglect them.

It is made a **comparative study** of the evaluation of the parents concerning the experience of the children at school about which the child shares and about its mood when is back at home **prior to commencement of Zippie's Friends programme and after its completion.** In most of the cases the reported discrepancies among the studied indicators are not statistically significant. Nevertheless, the results can be interpreted as outlining some trends of change.

In respect to the mood of the child when comes back at home after school there is a tendency pf increased share of children who come back at home in good spirit after completion of Zippie's Friends programme. There is outlined also a trend for decrease of the number of children who often or very often come back from school anxious or upset after completion of Apple's Friends programme.

<b>Item 1. The child comes back at home:</b> (scale „often“ and „very often“, %, and mean rank)
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	prior to Apple's Friends	after Apple's Friends
<b>in good mood</b>	92.2%	98.3%
<b>anxious</b>	4.2%	2.0%

According to the replies of the parents, what experience children share from the school day there is a clear trend for decrease of the number of disputes and fights reported by the child after completion of Apple's Friends programme. In respect to the positive experiences – joyful events and amusing games – there are minimum changes.

<b>Item 2. What events do your child report?</b> (scale „often“ and „very often“, %, and mean rank)		
	Prior to Apple's Friends	After Apple's Friends
<b>joyful events</b>	72.2%	82.2%
<b>disputes</b>	33.2%	28.1%
<b>amusing games</b>	80.4%	82.0%
<b>fights</b>	15.3%	9.4%

Usually it is suggested that the information parents provide for their children is rather subjective but it can be indicative for the studied subject. In this case the parents report with their responses evidence for positive changes in their children and the school setting during the school year when the Apple's Friends is implemented. Rather important is the outlined trend of decrease of the conflict type of behaviour among children. In general important are the outlined trends data from the study of the parents to replicate the results from other parts of the study in respect to the positive effects and efficiency of Apple's Friends programme.

## GENERAL CONCLUSIONS

The training programme Apple's Friends through its contents and consistency of the topics discussed in the course of the year has positive effect on the development of the emotional intelligence of the children, from its most basic aspects as the identification and understanding of the feelings – own and of the others, to the highest hierarchical complex levels – the relations with the others. It undisputedly extends and deepens the attainments of Zippie's Friends when implemented after it. This is evidenced from the results from observation of children, evaluations of the school representatives and the impressions of the parents. It shall be noted that these results are complimentary and describe the general picture of the effects of the programme. The effects can be summarized in several directions:

The children demonstrate obvious progress in identification, understanding and management of their own motions and their expression. They are able to a great extent to control their spontaneous and emotional reactions and experienced disappointments. On the other hand they already are able to identify the feelings of others within a wider range, as well as to understand the relation between feelings and behaviour – the feelings and emotions as motivation to act.

The children demonstrate empathy to the others. They try to understand their positions and experiences. In critical situations, they are responsive to their classmates and friends and try to help them.

The children demonstrate stable concept of friendship, the time perspective of already established friendships, how friendships are supported and maintained. At the same time, they have also progress in the comprehension of the complicated multilayer nature of the friendship relations and that in some cases these relations are challenged by the need some rules to be followed depending on the setting.

The children have improved their communication and interaction skills. When they have to take joint decisions, they demonstrate tolerance to others, avoid conflicts, demonstrate willingness to conform their vision and mood to those of the others. In competitive situations, they are oriented to collaboration to elaborate a common strategy for performance. Some of the children demonstrate also leadership attitudes.

The children are already equipped with skills to solve the conflicts among them on their own. The approach teachers and parents for support only if they consider the problem serious and think they will not cope alone. The problems related to aggressive manifestations and bullying are rather limited.

One of the key effects of the programme are thanks to Apple's Friends. They lead to mastery of particular behavioural models due to which the children are prepared to cope with the different situations and problems they encounter. According to the children and the observations of the teachers the children have knowledge of and apply very strictly these rules and often remind their classmates them when they neglect the rules.

Implementation of the rules as significant element of the human interactions leads also the children to the understanding that the rules are something serious and are established as to be observed. This understanding has significant progress in the course of socialization of the children.

This study gave opportunity for comparison of Apple's Friends when implemented individually and its implementation after Zippie's Friends. The individual observations demonstrate the weaker effect of the individual implementation of the programme in respect to the translation of the knowledge into practice and real situations (effect on the emotional and behavioural reactions of the children in real situations). This can be due to the different duration of the classes (two consecutive years is inevitably better compared to the one year). This result, however, cannot be categorically evidenced based to the limitations of the study.

It shall be also noted that the teachers, psychologists and principals highly appreciate Apple's Friends. They note the role of the programme to some extent depends on the results from Zippie's Friends in respect to the emotional intelligence of the children, without underestimating the effects of its individual application.

The parents also report that Apple's Friends is a programme that has positive effect on their children and the relations in their classrooms. On their part children like Apple's Friends comment it enthusiastically and are able to evaluate what they have learnt and give special preference to the topics of friendship and Apple's rules.

## **Conclusion**

The results from the study of the piloted programme Apple's Friends with children second class in three Bulgarian schools evidenced in undisputable manner its efficiency for development of the emotional intelligence of the children. The programme promotes understanding of others and oneself, interaction and cooperation when there are common tasks, establishment of stable and long-term friendships and especially for mastery and implementation of effective behavioural models for overcoming problems. Promotion of the emotional intelligence of children in school suggests also improvement of the emotional climate in the school setting, significant limitation of the negative behavioural acts.

Apple's Friends has supportive and extending nature in respect to the attainments under Zippie's Friends. The coherence of these two programmes is a precondition for the practical formation of stronger, long-term positive social relations among children in the school setting and their environment.

Expositive results from the piloting of Apple's Friends programme leave no hesitations it to be recommended for wide implementing in the schools in Bulgaria.

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## ANNEXES

### Annex 1

#### Description of the children's interpretation of the cartoon movies within the framework of the study

	at the beginning of 2017/2018 school year, prior to Apple's Friends	at the end of 2017/2018, after Apple's Friends
cartoon movie	<p><b>„Franklin and the broken globe“</b>            Children watch a part of the movie: Franklin and the Bear are playing in the classroom and incidentally break the globe. Until they wonder to confess or not, the teacher and the rest pupils enter the classroom. The Goose pushes incidentally the globe, it falls down and now all think the Goose has broken it; the Goose is sat, thinking how clumsy it is and withdraws declining to play with the rest. Franklin constantly approaches it and tries to play, the Bear neglects and avoids it.</p>	<p><b>„Franklin and the bus patrol.“</b>            Children watch a part of the movie: the teacher assign the Bear for bus patrol because he knows all the rules and can control observant a of the rules in the school bus, and give punishing tickets to violators. Gradually all animals are given tickets, including Franklin, the Bear's best friend. He becomes angry at the Bear and told to the children that if they appoint him to be patrol he will not punish them because they are his friends and they elected him. All expect they will be allowed to do whatever they want in the bus .....</p>
Aytos – 2 class	<p>What happened in the movie?            The children perceive directly the contents of the movie and describe the basic moments.            How felt the Goose and why?            Sad and disappointed. She thought she had broken the globe.            Why the Bear and Franklin didn't confess what happened?            Because they were afraid of being reprimanded and punished.            Are they friends?            Yes.            Were the good friends with the Goose?            No.            Should they report the incident immediately?            Yes.            But can't they just wait the incident to be forgotten?            No because they will not stand this.            Why do you think they will not stand this?            - Because friends don't behave like this.            - They will feel sick and bad.            - this will eight on their conscience.            Why the Bear avoided the Goods but Franklin tries to play with her?            - Because the Bear does not approve what had done.            - He is ashamed and thinks she will understand.            - Franklin feels guilty and tries to cheer her up.            - The Bear does not want because he is afraid Goose can understand and stop be his friend.            How will she understand what happened</p>	<p>What happened in the movie?            The Bear was bus patrol and gave punishing tickets to all who did not observe the rules.             and the rest did not want he to be patrol.            Why Mr. Owl proposed the Bear for bus patrol?            Because the Bear is well aware of the rules.            What happened in the bus when the Bear was patrol?            - His friends were angry at him because the Bear gave them punishing tickets. The Hare took the ball during movement and the Bear gave him a punishing ticker and the Hare was angry.            - The Bear warned others and they felt insulted and that he is not their friend.            When the Bear was on the bridge what used to told to Franklin? ?            - Franklin asked the Bear why he is sad. The Bear replied others are angry at him.            What said Franklin?            Franklin told the Bear had behaved in the right way: Bear, you are right, rules are rules.            Why Franklin changed his mind?            - He told this to calm him down.            - Because he had broken the rules and had been reprimanded            What did the animals decide afterwards?            Franklin to become patrol because he told he is not going to reprimand his friends.            What happened when Franklin was the patrol?            - He is kind to his friends and does not give</p>

