Be Internet Awesome.

Be Internet Awesome in Central and Eastern Europe

IMPACT REPORT
July 2023

BIA IN CEE IMPACT REPORT

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First International Evaluation
of the Be Internet Awesome (BIA) Program
conducted between 2021 and 2023 in
Czechia, Croatia, Greece, Poland, Romania and Slovakia

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Introduction

The Be Internet Awesome (BIA) program has been designed to build digital citizenship competencies among young people, to support children in being safer and more confident online, and to use the Internet responsibly and creatively. The program is directly implemented by teachers who are equipped with materials and thoroughly trained to deliver the curriculum.

It was developed by Google and is currently running in 25+ countries around the world.

In Poland, it has been implemented since 2018 by the School with Class Foundation, and subsequently scaled into other CEE countries.

Since 2021, the School with Class Foundation has taken a lead role in coordinating the CEE effort of implementing and scaling the program, working closely with national partners from Croatia (Suradnici u učenju), the Czech Republic (Jules and Jim), Greece (FORTH), Romania (AdFaber) and Slovakia (Manageria). Lithuania and Hungary, who joined in 2023, are not yet included in this report.

The BIA program model provides a unified frame, translated and localized into the language of each country, consisting of:
1. a curriculum (to be used by teachers) with activities and lesson scenarios for students,
2. general teacher training guidelines
3. an online game directed at students (Interland)

On the other hand, the program allows for flexibility, which helps tailor it to fit into the structural and sociocultural needs of the participating countries. Depending on the needs of the educational systems, the existing programs, the competencies of teachers and educators, and the in-service teacher training models in place, each partner decides on how best to support the teachers and educators in implementing the BIA program. The models vary in the exact length of the teacher training, the focus on specific topics, and their form (online or offline).

This flexible approach is both helpful (in aligning the program to the local needs) and challenging (when it comes to comparing the results).

Be Internet Awesome Training Models

Country	Duration of the training in hours	Delivery mode	Focus on children in disadvantaged situations groups	Additional conducted activities
Czechia	5	Online	• children with disabilities • children from families with low social and cultural backgrounds	• open webinars • an online conference for students and teachers, featuring NGOs and experts • a competition for schools based on the Interland • the implementation of the BIA curriculum in other subjects
Croatia	12	Online	• children living in remote islands • students in primary schools in earthquake-affected areas • Roma students • children from families of low social and cultural backgrounds	• monthly workshops for teachers • webinars • a theatre play • cartoon competition for students • an annual online conference for schools
Greece	4	Online	• immigrants • pre-school education • children from families with low social and cultural backgrounds	• student disinformation competition • "capture the flag" competition
Poland	12	Online or hybrid	• Ukrainian refugees and migrant • pre-school education • children from families of low social and cultural backgrounds • Roma community	• 40h e-learning course • webinars: both open and for a community of BIA teachers • annual online conference for students and teachers • eTwinning projects • pilot of a print & play game for students
Romania	3	Online	• kids without homes • SOS Children's Villages • Roma community • kids in social centres • Ukrainian refugees and migrants • children from families with low social and cultural backgrounds	• a competition for students to create an awareness campaign • a summer roadshow across schools • a national conference concluding the school year • webinars on a variety of topics
Slovakia	4.5–5	Online	• pre-school education • children from families with low social and cultural background Roma community	• open webinars for teachers, parents and educators • a competition for students to encourage the use of BIA

How Did We Evaluate the BIA Program?

The School with Class Foundation has prepared the evaluation methodology scheme. After a set of consultations with all BIA national teams (including the national regulations and requirements for gathering data from minors), evaluation tools were prepared and translated into the languages of each participating country. The national partners were responsible for gathering responses and the final data analysis was carried out by the School with Class Foundation experts.

In 2022 and 2023, based on those prerequisites, we invited young people taking part in the BIA workshops and the teachers providing those workshops in all the countries to participate in the survey. They were asked to provide feedback through two online questionnaires designed to measure specific indicators coherent with the BIA aims. On average, the questionnaires were filled in four to six months after the completion of the program by the respondents. The delay was purposeful so that students and teachers have some time to experience the potential benefits of the program in their daily lives. All data gathering has been coordinated by the national BIA teams in all the partner countries.

The content and indicators used in the two questionnaires are presented below:

Student Questionnaire

Students evaluated the BIA program effects using the following five criteria:
- **Usefulness in the daily utilization of the Internet** (*What I have learned in the Be Internet Awesome classes comes in handy in my daily use of the Internet*)
  The program's ambition is to positively impact young people's day-to-day usage of the Internet.
- **Confidence** (*After the Be Internet Awesome classes, I feel more confident using the Internet)*
  Confidence is a cognitive and emotional component that impacts the self-efficacy to use the Internet in a reflective, responsible and creative way.
- **Knowledge** (*After the Be Internet Awesome classes, I know more about how to be safe online*)
  Knowledge was measured by asking about the subjective increase in the knowledge concerning the Internet used due to participation in the BIA program.
- **Implementation of what was learned** (*I was able to put into use the things I learned during the BIA classes*).
  This criterion was used to check in practice to what extent the students tested the things they had learned during the BIA classes.
- **Communication with others online** (*After the Be Internet Awesome classes, I know how to communicate with other people in a kindly way*).
  Since the social component is a core of the BIA program, the effects on quality communication with others online are vital.

Students were also asked to provide their ideas on potential BIA program improvement in an additional open-ended question.

Teacher Questionnaire

The teachers participating in the programs provided information on their experiences using the following four criteria:

- **Usefulness of BIA for the students** (*Students said/wrote that the Be Internet Awesome classes would be useful for them in life*)
- **Reported follow-up inquiry on BIA topics by the students** (*After the end of the Be Internet Awesome classes, the students came back to the topics that were discussed in their conversations*)
- **Reported implementation of BIA knowledge/competencies by the students** (*Students said that they used the knowledge from the Be Internet Awesome classes in their life or gave examples of such use*)
- **The impact of BIA activities on other educational activities provided by the teachers** (*What I have learned thanks to the Be Internet Awesome training program and from conducting classes based on the BIA curriculum is also useful for conducting other classes*).

The tool also involved two additional open-ended questions where the respondents were requested to provide suggestions for improving the BIA programs and their ideas for expanding its content.

All the questionnaires have been gathered anonymously through the country networks, using the online questionnaire links, after each wave of workshops. All participation was fully voluntary and no private data enabling the identification of individual respondents has been stored.

As mentioned above, both teachers and students had the chance to provide some in-depth comments in open-ended questions. The data from these parts is also partially presented in the report to illustrate the opinions of participants expressed in their own words and to provide more contextual insight in some cases. Information provided in open-ended questions was also used to show the students' and teachers' ideas to further develop the BIA program.

Who Evaluated the Program?

Student Sample

All the questionnaires gathered were checked against the missing sociodemographic and evaluation data. Since the research was anonymous and voluntary, it was not possible to identify those who did not respond and encourage them to take part.

Altogether, this report is based on data from 1845 high-quality questionnaires[1] from the students taking part in BIA classes, representing six countries. 46.2% of the respondents were girls, 46.4 boys and 7.4% did not indicate their gender.

As for the age of participating students, 4.4% of respondents were 17 y.o. or older, 14.7% were 15–16 y.o., 32.6% – 13–14 y.o., 21.6% – 11–12 y.o. and 26.7% 10 y.o. or younger.

The sample has been unequally divided between the countries with high percentages of students in Croatia and Romania and low percentages in Greece and Poland (Table 1).

As reported by the students, most of their schools were located in small cities and towns (40.1%) and villages (32.4%). Almost one-fourth of schools were located in large cities (Table 2).

Table 1 Students by countries

	Country	n	Percent
Valid	Czechia	177	9.6
	Croatia	887	48.1
	Greece	124	6.7
	Poland	127	6.9
	Romania	320	17.3
	Slovakia	210	11.4
Total		1845	100.0

Table 2 School location in the entire student sample

		n	Percent
	Village	597	32.4
	Small city or town	740	40.1
	Large city	454	24.6
	Subtotal	1791	97.1
Missing		54	2.9
Total		1845	100.0

1 Only the questionnaires providing data on the country and with fewer than three missing pieces of data in 5 evaluation criteria has been analysed. All the others were excluded from the analysis.

Teacher Sample

All the questionnaires in the database have been checked for missing sociodemographic information and evaluation data. A number of the questionnaires had to be excluded from the analysis since they were filled in only partially and could not be included as a reliable source of information.

In the end, 2372 complete and high-quality questionnaires[2] have been gathered from teachers conducting BIA classes in six participating countries. 69.8% of the educational staff were females, 13.7% males and 16.6% did not indicate their gender. The teachers' ages ranged from 20 to 74 y.o. with the mean age being 46.1 y.o. (and a standard deviation of 8.3 years). Their seniority in the teaching profession was 20.2, with 9 years of standard deviation.

The participating teachers worked in the following institutions (not summing up to 100% since some respondents worked in multiple institutions in parallel):

- Kindergarten – 6.7%
- Elementary school (students 6–10 y.o.) – 37.1%)
- Elementary school (students 10–12 y.o.) – 37.7%)
- Elementary school/gymnasium (depending on the school system in a particular country, usually students 12–13 y.o.) – 36.9%
- Secondary school – 16.9%
- Vocational school – 5.4%

2 Only questionnaires where the country data was indicated and at least 2 full answers (out of 4 evaluation questions) were provided have been a subject to analysis.

Additionally, 4.4% indicated that they teach students with special needs. Extremely rarely (0.5%), they indicated that they provided professional training for other teachers.

The teacher respondents represented all the six countries taking part but were not equally distributed. Most of the teachers were from Romania and Greece. The least represented were teachers from Czechia, Poland and Slovakia.

Table 3 Teacher sample by countries

| Country	n	Percent
Czechia	81[3]	3.4
Croatia	426	18.0
Greece	679	28.6
Poland	130	5.5
Romania	896	37.8
Slovakia	160	6.7

3 The comparative data from Czechia has to be analysed with great caution due to the small size of the sample (N=81)

Results of the Evaluation

Students' Evaluation

Overall, over 90% of the students agree that participation in the BIA program was useful in their everyday use of the Internet (almost 60% strongly agree and almost 31% agree). Only one in twenty cannot assess such usefulness and a minority deny it (almost 4% disagree and less than 1% strongly disagree).

Fig. 1 Students assessing the usefulness of the BIA program for the everyday utilization of the Internet
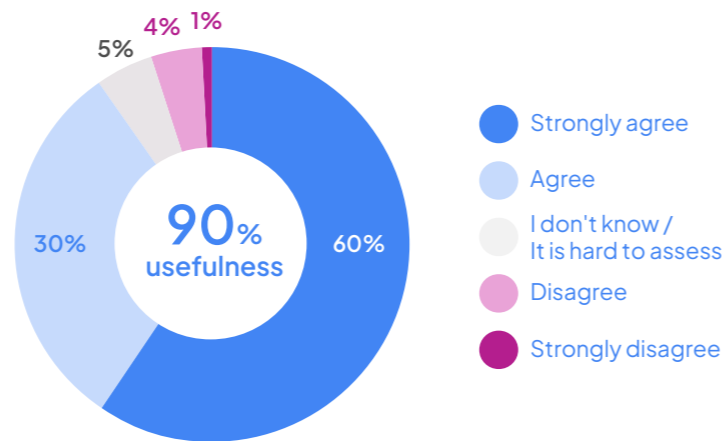
What I have learned in the Be Internet Awesome classes comes in handy in my daily use of the Internet

5%   4% 1%

90% usefulness   60%

30%

- ● Strongly agree
- ● Agree
- ○ I don't know / It is hard to assess
- ● Disagree
- ● Strongly disagree

"

I understood what kindness is and that it should be used online. Additionally, I should stop responding to threatening messages and harassment
/ 12 y.o. girl, Romania

"

All that is needed to be careful is to surf the Internet and to beware of what is not good
/ 14 y.o. boy, Romania

In the open-ended questions, some students suggested that the focus on **exercising practical actions should be included even more in the BIA workshops. Particularly, the role of using game-based learning was emphasised**. A good example of this is a quote from a 12 y.o. Slovakian student who proposed this approach for mastering relations online: *Maybe some side quests with a story where tasks related to someone's problem could be proposed. Maybe someone accidentally sent something they didn't want to and you have to help them with it. The game as such is really nice.*

Similarly, **almost 49% strongly agree and almost 35% agree (84% of positive answers in total) that after participation in the BIA program, they feel confident using the Internet**. Over 6% cannot assess their confidence, almost 8% disagree and 2.65% strongly disagree.

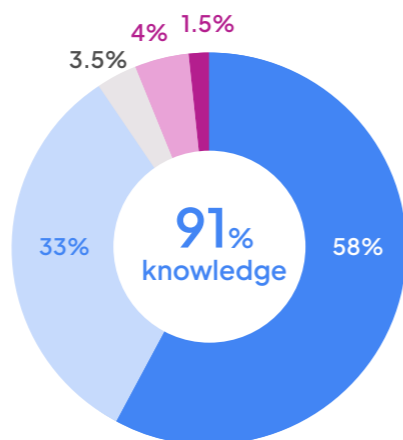**Fig. 2** Students being confident using the Internet after the BIA classes

After the Be Internet Awesome classes, I feel more confident using the Internet

2.7%

7.8%

6.5%

83% confidence   49%

34%
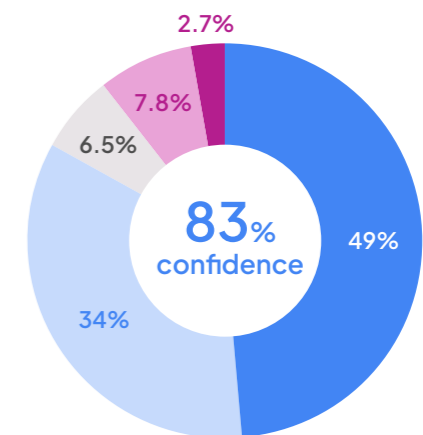
Almost 88% of students agree (about 49% strongly and about 38% agree) that their knowledge of how to be safe online increased as a result of participation in the BIA workshops. About 3.5% disagree and less than 2% strongly disagree with such a statement. Over 4% cannot assess such an increase.

Around 86.5% strongly agree or agree that they have implemented what they have learned in the BIA classes into everyday practice. Conversely, over 7% deny such implementation (about 6% disagree and over 1% strongly disagree). Over 6% cannot assess such an implementation.

Fig. 3 The students' increase in knowledge on how to be safe online after the BIA classes

After the Be Internet Awesome classes, I know moreabout how to be safe online

Fig. 4 Implementation of the BIA knowledge in everyday practice.

I was able to put into use the things I learned during the BIA classes

4% 1.5%
3.5%
91% knowledge
33%
58%

1.2%
6%
6.2%
87% implementation
49%
38%

- Strongly agree
- Agree
- I don't know / It is hard to assess
- Disagree
- Strongly disagree
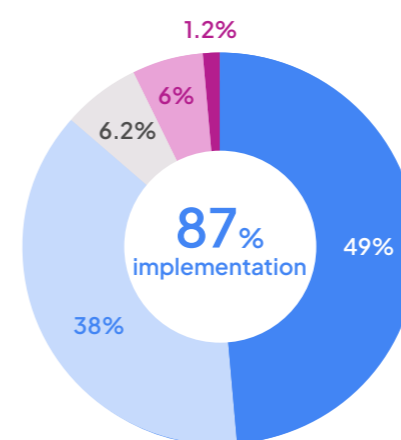
Over 51% strongly agree and over 35% agree that participation in the BIA workshops increased their knowledge of kind communication with others. At the same time, slightly less than 9% disagree with that (almost 5% strongly and 3% disagree). Less than 6% cannot assess their knowledge increase in this respect.

As presented above for all the criteria, a vast majority of the students confirmed that the BIA program brought them certain advantages. Such a result should be interpreted as the success of the program as perceived by its beneficiaries.

We also observed small but statistically significant differences between the answers of boys and girls (p<0.01) (the differences were mostly 2–3 percentage points). Generally, **boys slightly more often provide negative answers or use the "I don't know / hard to assess" option in the evaluation questions**. This was particularly the case for indicators concerning the practical use of BIA knowledge and confidence increase.

Fig. 5 Student knowledge about kind communication after the BIA classes

After the Be Internet Awesome classes, I know how to communicate with other people in a kindly way

4.7% 3%
5.8%
86% communication
35%
51%

The school location also played a statistically significant role in the answers provided by the respondents. Generally, **students from schools located in villages and small towns evaluated the BIA classes higher than those from schools located in large cities**. The differences here are not large (4–5 per cent points) but are statistically significant (p<0.01).

It is worth mentioning that, in all participating countries, numerous students expressed very favourable opinions concerning the program:

„

There is no need to improve anything, it's great as it is
/ 13 y.o., boy, Slovakia

The lessons do not need to be improved
/ 12 y.o., boy, Romania

The lessons are superb!
/ 14 y.o., boy, Poland

Nothing needs to be improved
/ 12 y.o. boy, Greece

I probably wouldn't want to change anything there. :-)
/ 13 y.o., girl, Czechia

All was good
/ 12 y.o., boy, Croatia

Some students suggested potential improvements concerning the content of the workshops and the educational methodology. Among them, the following ideas have been proposed:

- using games and **gamification** (*It would be better if there were more games in the lecture, so that learning would be more fun and the students would remember things better* – 12 y.o., boy, Slovakia)
- implementation of **more ICT technologies** and tools in the BIA educational processes
- inclusion of **more humour** in the workshop content
- inclusion of some **new topics**, e.g. online sexual harassment, serious cases of cyberviolence and phishing
- inclusion of **technical skills** – such as using virus detection software
- introduction of some **strategies for communication** among students from all the countries taking part in the project
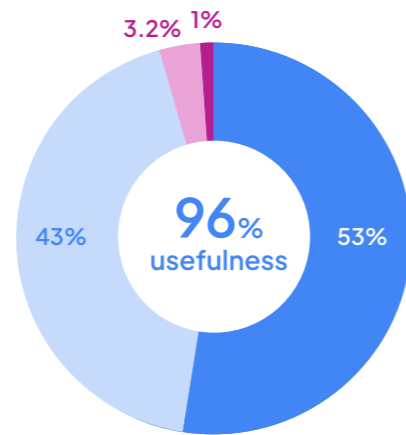- inclusion of **content creation** by the students (e.g. webinars).

Teachers' Evaluation

Generally, the teachers' evaluation is in line with the students' evaluation showing that the majority of them assess the program very highly.

Over 95% of teachers confirm (almost 53% strongly) that the students report to them the usefulness of the BIA program for their everyday life. Only less than 4% disagree and do not confirm this.

Nearly 98% of the teachers strongly agree or agree that after the BIA workshops, students were coming back to discuss certain issues covered by the program content.

Fig. 6 Usefulness of the BIA program reported by the students to the teachers

Students said/wrote that the Be Internet Awesome classeswould be useful for them in life

Fig. 7 Follow-up inquiries on BIA topics by the students

After the end of the Be Internet Awesome classes, the students came back to the topics that were discussed in their conversations

3.2% 1%

43% **96**% usefulness 53%

1.8% 0.7%

43% **97**% follow-up inquiries 54%

● Strongly agree
● Agree
● Disagree
● Strongly disagree

„
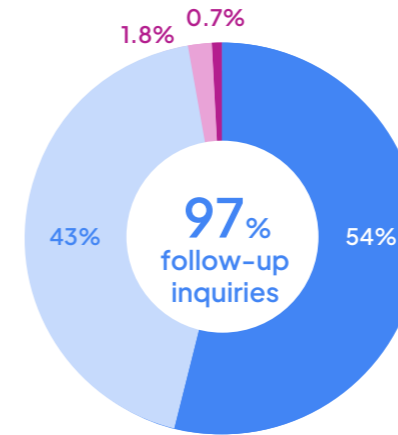
The program was excellent overall. It gave directions and formed the basis of constructive development for the children's future.
/ Greek teacher, Female, 53 y.o.

The program is excellently designed. Students learn about responsible behaviour in the digital world in an interesting way. Various materials are available to teachers that we can use in class. The content for parents is also useful and necessary. Thank you for your engagement!
/ Croatian teacher, Male, 38 y.o.

„

I was satisfied with the management of the training…. I really appreciated the opinions and use of materials from the training of other teachers.
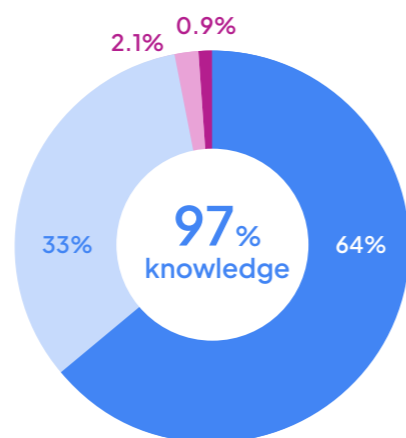/ Slovakian teacher

The children really enjoyed the lessons and the Interland game was a wonderful icing on the cake. They also enjoyed taking the quiz. Keep up the good work.
/ Czech teacher, Female, 44 y.o.

Almost two-thirds of teachers strongly agree and almost one-third agree that their students give them feedback on using the BIA knowledge in practice. Only 3% present the contrary experience.

The vast majority of the teachers (over 96%, among which 64.07 strongly agree) acknowledge the usefulness of what they do during the BIA activities for other lessons they provide. Only a small proportion do not experience such usefulness (3%).

Fig. 8 Implementation of BIA knowledge as reported by students to the teachers

Students said that they used the knowledge from the Be Internet Awesome classes in their life or gave examples of such use

2.1% 0.9%

33% **97**% knowledge 64%

Fig. 9 The usefulness of BIA content in the teachers' other activities/lessons

What I have learned thanks to the Be Internet Awesome training program and from conducting classes based on the BIA curriculum is also useful for conducting other classes

2.1% 0.9%

33% **97**% usefulness 64%

There were statistically significant differences in the answers from teachers representing different countries.

Before deeper analysis, it should be emphasised that direct comparisons of the countries are not easy and should be conducted with great caution. This is because bias is possible since the random sample of the participants was not possible in any of the countries taking part. Additionally, there are countries with a high proportion of "strongly agree" and a certain proportion of "disagree" and "strongly disagree" answers. However, in other countries, the proportion of the most positive answers is lower but there are either no or a very small proportion of negative answers.

Table 4 Usefulness of the BIA program reported by the students to the teachers by country

Country	Strongly agree	Agree	Disagree	Strongly disagree
Czechia	37.8%	62.2%		
Croatia	72.7%	25.9%	1.4%	
Greece	57.0%	40.7%	0.9%	1.4%
Poland	63.3%	34.2%	1.7%	0.8%
Romania	73.5%	24.9%	0.7%	0.8%
Slovakia	45.4%	53.9%		0.7%

Pearson Chi-Square=121.8, p<0.001

Table 5 The follow-up inquiry on BIA topics by students by country

Country	Strongly agree	Agree	Disagree	Strongly disagree
Czechia	40.0%	54.3%	5.7%	
Croatia	64.5%	32.4%	3.1%	
Greece	38.1%	56.2%	4.2%	1.5%
Poland	53.7%	42.3%	2.4%	1.6%
Romania	61.3%	34.8%	2.6%	1.4%
Slovakia	33.8%	64.0%	2.2%	

Pearson Chi-Square=136.05, p<0.001

The Romanian and Croatian teachers most frequently confirmed strongly that the students reported that the program was useful for their daily life while Czech and Slovakian teachers were less frequent in this respect. However, it should be acknowledged that in the Slovakian and Czech samples, negative answers are absent or extremely rare.

Similarly, Romanian and Croatian students most often indicated that the students further inquired about the topics after the workshops on BIA content. This was least acknowledged by the Slovakian and Greek teachers. Still, in Greece and Slovakia, the majority of the teachers provided positive feedback ("agree").

Similarly, Romanian and Croatian teachers frequently indicated "strongly agree" in response to the question about the implementation of the BIA knowledge by their students.

Table 6 Implementation of BIA knowledge as reported by students to the teachers by country

Country	Strongly agree	Agree	Disagree	Strongly disagree
Czechia	27.5%	68.1%	4.3%	
Croatia	64.5%	33.2%	2.1%	0.2%
Greece	42.4%	53.3%	2.9%	1.4%
Poland	50.4%	47.8%	0.9%	0.9%
Romania	64.8%	33.5%	1.1%	0.6%
Slovakia	19.5%	80.5%		

Pearson Chi-Square=189.11, p<0.01

Table 7 Usefulness of BIA content in the teachers' other activities/lessons

Country	Strongly agree	Agree	Disagree	Strongly disagree
Czechia	68.8%	31.2%		
Croatia	73.1%	23.7%	2.9%	0.2%
Greece	52.5%	42.4%	3.3%	1.8%
Poland	68.3%	29.3%	0.8%	1.6%
Romania	71.0%	27.0%	1.3%	0.7%
Slovakia	41.7%	56.3%	1.3%	0.7%

Pearson Chi-Square=118.24, p<0.001

Romanian and Croatian teachers frequently indicate the most positive answer on their usage of the BIA knowledge and content for other activities.

Additionally, some gender differences have been observed (p<0.001). Male teachers less frequently reported that students informed them about using BIA knowledge or came back with an inquiry about BIA topics. Additionally, they admit slightly less frequently that what they do in the BIA classes is useful for their other teaching activities.

Teachers' ideas to develop the BIA program

Some teachers provided their ideas on the content and methodology of the program. Their suggestion include:

- **adding/extending some topics**, such as the impact of ICT on physical health, serious examples of cyberbullying, sexting, internet addiction / problematic internet use, legal issues, e.g. copyright, screen time management
- adding some **training modules for students' parents/carers**
- organizing **more interactive meetings** with digital safety experts
- incorporating **more real-life cases** into the BIA educational content
- connecting the BIA topics to the curricula of particular school subjects
- **informing more parents/carers** about BIA activities

Conclusions

Generally, the evaluation of the BIA program from both the student and teacher perspectives is **very positive in all the countries**. This evaluation was a little bit more favourable from the perspective of the teachers who provided the workshops (in comparison to that of the students). Therefore, it is vital to inform the teachers about the perspective of the students, particularly from a certain country, including their qualitative feedback.

Of course, there is **still a need for improvement** since numerous students and teachers tend to indicate "agree" instead of "strongly agree" in response to many of the questions. There is also a stable but very small proportion of people who do not present a positive evaluation of the defined criteria. An in-depth analysis of the answers to the open questions of this subgroup should help improve the project content and implementation.

The more positive evaluation by students from villages and smaller towns may on the one hand be regarded as positive but on the other hand, it raises the question of why the respondents from large cities evaluate the program less favourably. The reason for this result is not clear and requires further investigations.

It is also important to address the gender differences. The program is slightly better evaluated by girls and female teachers. The factors influencing this situation should be discussed by the coordination teams in all the evaluated countries.

Obviously, the detailed results of the evaluation are currently being discussed by an international research team. The **conclusions are translated into specific recommendations for BIA program development** and will be introduced in the future of its implementation.

Acknowledgements

The School with Class Foundation would like to express its gratitude to the managing teams in all the participating countries for discussions, work and support during the evaluation process, as well as the teachers and students that took part in the research for sharing their views on the program quality.