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DELIVERABLE

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Technology**

D5.4: Evaluation Report on the 2nd implementation circle of GreenNET

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0.2	15/05/15	Michaela Marterer, Peter Härtel	STVG	Third Draft revision of second phase evaluation
0.3	05/06/15	Michaela Marterer, Peter Härtel	STVG	Revision and final check after technical ICT problems within STVG

Statement of originality:

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

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Executive Summary

This document sums up the evaluation of the second phase of the implementation. The evaluation report highlights any inconsistencies or weaknesses of improvement in the second implementation phase.

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1 Introduction

1.1 *Scope*

This deliverable contains the most relevant reports, recognitions and recommendations 2nd implementation circle of GreeNET, based on the feedback of the partners and users in programmes and practices within the process of the project GreeNET.

This deliverable covers both: the quantitative, also graphic visualized, results of the evaluation process 2nd circle, as well as a qualitative interpretation in the way of general and specific recommendations.

In some areas the comparison with the first circle is shown in the numbers reached by both circles.

The GreeNET network is on the way – so some results, recognitions and recommendations have an interim character, with the aim to support and improve the work within GreeNET, as well as for the sustainable process beyond the lifetime of the project.

All described aspects, issues, recognitions; recommendations are based, on the background of experiences of the evaluator, mainly on the feedback of the partners and actors within GreeNET.

1.2 *Audience*

This report is addressed to the public as well as to all partners of the GreeNET consortium and to the European Commission.

1.3 ***Structure***

Chapter 1 contains an overview of this document, providing its scope, audience, definitions and structure.

Chapter 2 gives an overview about the Best Practices of GreeNET and the status quo of implementation and evaluation of Best Practices

Chapter 3 gives an overview about the evaluation results of general events

Chapter 4 includes the recommendations for the 2nd phase of implementation circle of GreeNET and final conclusion after finalising the 2nd phase.

Chapter 5 includes the Annexes for the evaluation in 2nd phase of implementation circle of GreeNET

2 Best Practices and Evaluation within the implementation circles

2.1 *Method of evaluation*

Within the network activities of GreeNET best practices were collected during the first phase of activities in the partner countries. They are summarized within the deliverable D 2.5 “Best Practices of Enquiry-based Environmental Education and Training Methods” collected by Mona Schönfelder and Prof. Franz X. Bogner both from the of Bayreuth, Department of Biology Education.

For the GreeNET project there are several events planned in work package 4 within the phases A and B of implementation regarding feedback of the practises and examples gathered within the focus groups and summed up in the State-of-the Art and Needs Analysis and in the above mentioned deliverable in order to merge good practises.

Each partner country has to create his own plan for the implementation phases A and B regarding the possibilities in his country for the regional and / or national events.

Within the Evaluation and QA plan and the Instruments for evaluation (Deliverable 5.1 and 5.2 in the project) there was the agreement on the following methods of evaluation for the quality of products and outcomes concerning the best practices:

Quality of products / outcomes of the GreeNET project

The quality aspect of the products and outcomes are crucial for phases of implementation phase. Therefore the voice of users was involved in a very intensive way.

To evaluate the practises by ***teachers and trainers*** different domains with indicators were used:

Domain: Target group orientated

Indicators:

- The structure is supporting to find easily themes and topics for teaching elements of EE as an opportunity to make EE accessible at lower and upper secondary school level.
- The writing style is accordingly to the target group: teachers / trainers
- Subject related vocabulary is used
- Didactic concepts and methods used are appropriate
- The structure of the practices is well explained and useable for the teachers to find out elements for daily work

Domain: Content

Indicators:

- The content is adequate for using it in the teaching unit
- The time practicability is described in a proper way

The questionnaire

Based on the criteria to collect the best practices a questionnaire was developed for the evaluation of the best practices (cf. Annex 1) which is a very detailed questionnaire which is aimed to find out if the best practices can be transferred to different target groups, age groups and countries.

2.2 List of Best practises collected and used for implementation

This section gives an overview about the best practises collected within GreeNET by the partners and within focus groups and which of the practices were already used within the implementation phase A in the countries to give a whole picture about the activities of the network GreeNET.

2.3 School-based Effective Environmental Educational Activities through Enquiry-Based Learning¹

Table 1: Overview of the school-based Best Practices and Practices already used for implementation in circle 1 and circle 2

No.	Institution	Name of Best Practice	Already used for Implementation	
			1 st circle	2 nd circle
1	BMUKK	Rio 92+		3 times
2	EA	Agro Web	1 time	
3	EUMENNA	Dikketruidendag (Thick sweaters day)	2 times	
4	BMUKK	Energy Tutors		
5	AUA	Experimental educational lessons on the testing of the germination rate of a range of vegetable seeds	2 times	
6	AUA	A small exemplary hydroponic school garden	1 time	
7	UBT	Energy – today and tomorrow	2 times	1 time
8	ECOI	Educating for Sustainability: the Barcelona School Agenda 21	*	
9	ECOI	LESET: Let's save energy together!		
10	ECOI	Research Work		
11	AUA	Enhancement of biodiversity in school grounds		
12	EA	Students United for a Sustainable School		
13	UBT	The flying classroom	3 times	3 times

Green = already used **red** = not used by now for implementation

- ECOI implementation events were connected with all its Best Practices

¹ Based on D 2.5 “Best Practices of Enquiry-based Environmental Education and Training Methods”, page 12

2.4 Environmental Educational Activities connecting Formal and Informal Learning Settings²

Table 2: Overview of the Best Practices connecting formal and informal learning and Practices already used for implementation in circle 1 and circle 2

No.	Institution	Name of Best Practice	Already used for Implementation	
			1 st circle	2 nd circle
1	GRNET	Natural Europe		
2	Agro-Know Technologies	Green Ideas	2 times	
3	UBT	Waste		1 time
4	UBT	Rainforest and Climate Change		1 time
5	EA	The River of Life		
6	EA	My School Garden	3 times	2 times
7	BMUKK	Plastic bags – no thanks!		
8	BMUKK	ConsuManiac – Check your daily shopping!	2 times	
9	BMUKK	Walking works!		

Green = already used

red = not used by now for implementation

2.5 Elaborated Best Practices for Schools

Table 3: Overview of the Best Practices elaborated during the Best Practice Exchange Forum and Practices already used for implementation³ in circle 1 and circle 2

No.	Green Topic	Name of Best Practice	Already used for Implementation	
			1 st circle	2 nd circle
1	Bioenergy	The Chemistry of Biogas: from Cellulose to Methane		
2	Achievement of Honeybees	How communicate bees?		
3	Ecosystem of temperate forests	Plants as CO ₂ -repository		
4	Rainforest affected by climate change	Climate Change and Rainforests – the Future?		

Green = already used

red = not used by now for implementation

² Based on D 2.5 “Best Practices of Enquiry-based Environmental Education and Training Methods”, page 70

³ Ibid., page 111

2.6 Best practises implemented in the 2nd circle

No.	Institution	Name of Best Practice	Already used for Implementation 2 nd circle
1	EL	The ecosystem of lake Pamvotis through the information center of Lake Pamvotis Organization	1 time
2	EL	Green labs for schools' projects	1 time
3	bmbf (AT)	Schule des Essens	4 times

Within the second circle 3 **additional best practises** were implemented and evaluated. They are described in the database on the project website in all languages of the partner countries of the project. **This shows the lively part of the network activities to enlarge the collection of best practises.**

Table 4: Overview about the implementation of Best Practices within the 1st Circle of GreenNET

No.	Country	Practise	date	no of participants	schools
1	DE	Schulversuche - "Energie - heute und morgen"	04.02.2014	7	1
2	DE	Energie - heute und morgen, Erneuerbare Energien im Unterricht	26.02.2014	10	10
3	DE	Lehrerfortbildung "HOBOS - Bienen live im Biologie unterricht mithilfe von e Learning	27.03.2014	10	9
4	DE	Digitale Medien im Biologie unterricht -"HOBOS" - Das fliegende Klassenzimmer"	29.01.2014	5	1
5	EL	"CARING FOR OUR SCHOOL GARDENS: FROM THEORY TO PRACTICE"	21.02.2014	30	29
6	EL	"CARING FOR OUR SCHOOL GARDENS: FROM THEORY TO PRACTICE"	30.04.2014	36	18
7	EL	Internal Training / Implementation	27.03.2014	10	2
8	ES	AgroWeb	26.02.2014	10	1
9	ES	Bee Not To Bee	26.02.2014	10	1
10	ES	Dikketruiendag	26.02.2014	10	1
11	ES	Dikketruiendag	31.03.2014	12	0
12	ES	Germination Rate	26.02.2014	10	1
13	ES	Germination Rate	31.03.2014	12	1
14	ES	Green Ideas	26.02.2014	10	1
15	ES	Green Ideas	31.03.2014	12	1
16	ES	Hidroponic Garden	31.03.2014	12	1
17	ES	Konsumaniatic	26.02.2014	10	1
18	ES	Konsumaniatic	31.03.2014	12	1
Total			18	228	80

The Tables shows 18 activities for Implementation of best practices were held during the first circle within GreenNET with 80 schools and 228 participants.

Out of the 26 collected best practices 9 best practices were used for the first phase implementation.

Table 5: Overview about the implementation of Best Practices within the 2nd Circle of GreeNET

No.	Country	Practise	date	no of participants	schools
1	DE	Rainforest	10.07.2014	10	10
2	DE	To bee or not to bee	17.06.2014, 26.06.2014, 10.07.2014 (participants: 21, 19, 12)	52	
3	DE	Energy tomorrow	10.07.2014	18	
4	DE	Waste	30.07.2014	7	7
5	EL	School Garden	05.08.2014, 06.08.2014	30	
6	EL	The ecosystem of lake Pamvotis through the information center of Lake Pamvotis Organization	08.12.2104	15	14
7	EL	Green labs for schools' projects	29.11.2014	35	7
8	AT	Rio 92 +	30.10.2014, 05.11.2014, 16.12.12014 (participants: 8, 16, 3)	37	23
9	AT	Schule des Essens	4, 09.04.10.04.2015 (participants: 33, 12 filled in the questionnaire)	12	1
			Total	216	62

The Tables shows 9 activities for Implementation of best practices were held during the second circle within GreeNET with 62 schools and 216 participants.

Out of the 26 collected best practices 12 best practices were used in both phases of implementation and additional 3 new practises were added to the collection.

In total in circle 1 and circle 2 all in all 444 participants from 142 schools were involved in the evaluation (the portion of the participants which have provided filled in questionnaires). In total 15 best practices out of 26 and additional 3 new practices were used.

3 Best Practices and Evaluation within the 2nd implementation circle per Practice

The second circle was following the same procedures and method of evaluation as in the first phase.

3.1 Rainforest

Dates of evaluation: 10.07.2014

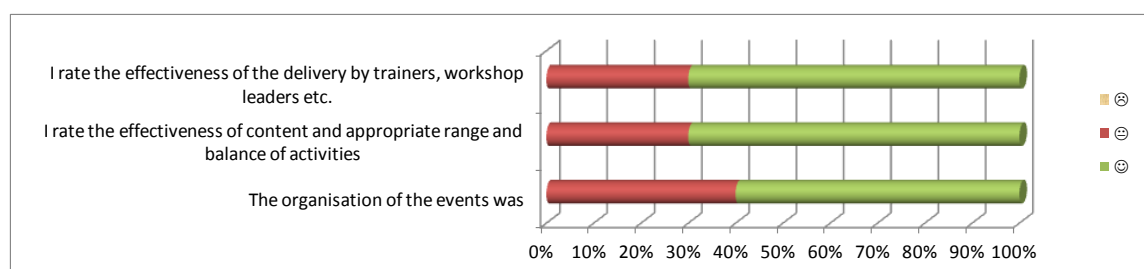
Country: Germany

Participants working with students in the age of: 6-12, 13 -15 and 16-19

Number of participants evaluated the best practice: 10

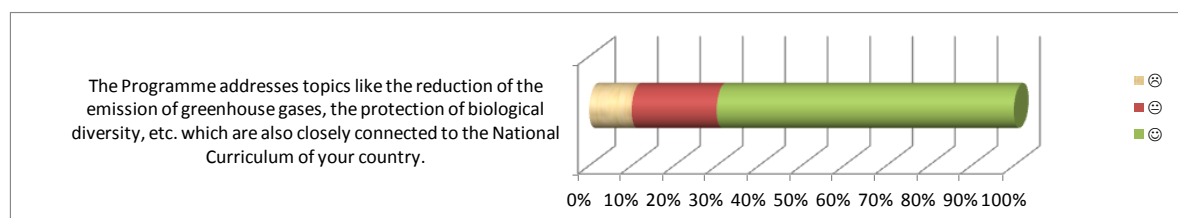
Based on the questionnaire (cf. Annex 1) the evaluation shows following results:

Section 1: Feedback for the event:



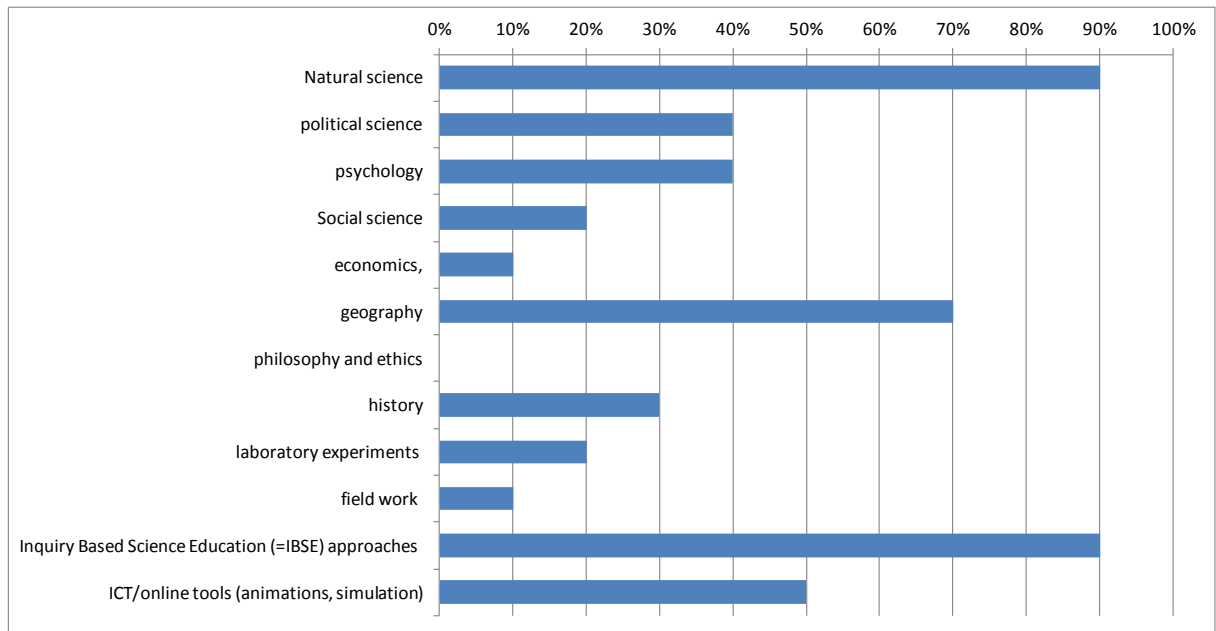
Section 2: "voice of user":

1 Relation to a green topic and to the National Curriculum

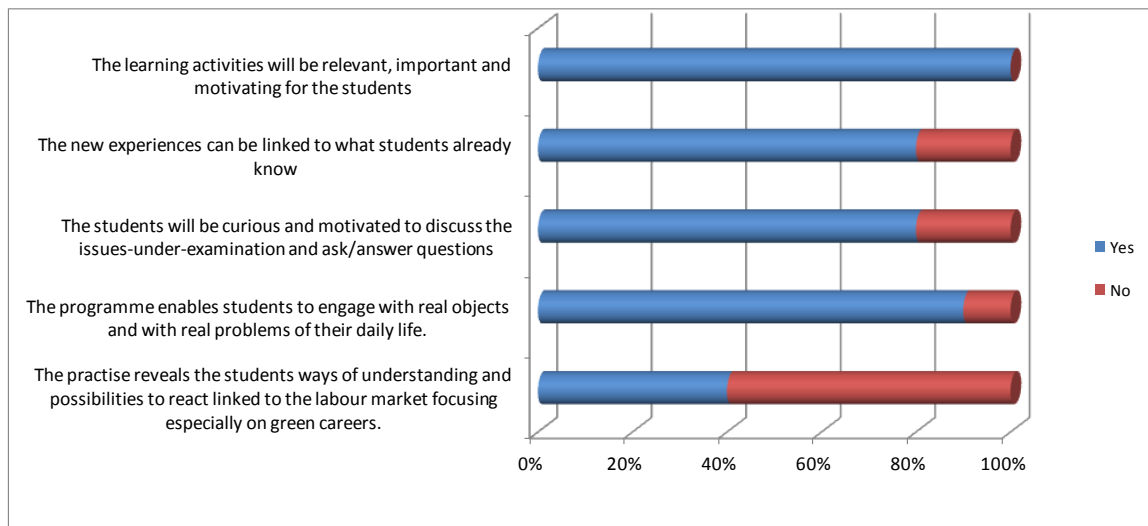


2. Being interdisciplinary: Drawing upon many academic disciplines and teaching methods, does the programme include following elements?

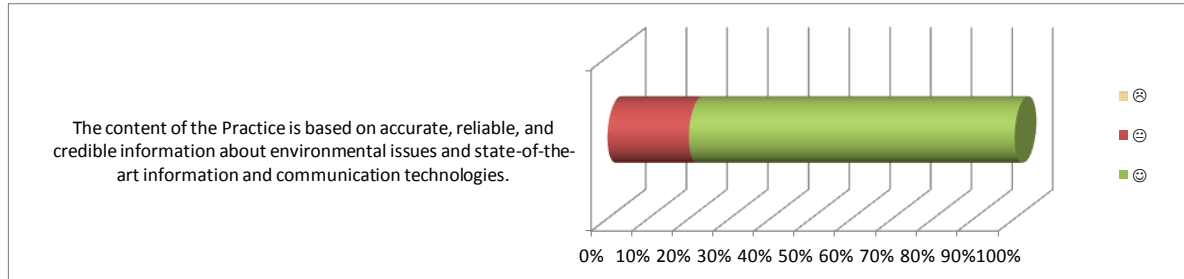
(The figures shows how many percentage t answered with yes)



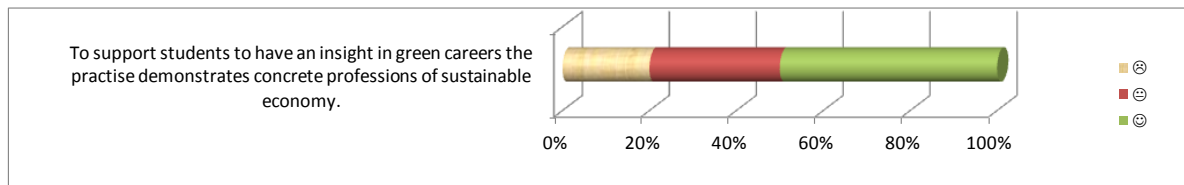
3. Relevance to the daily life of students



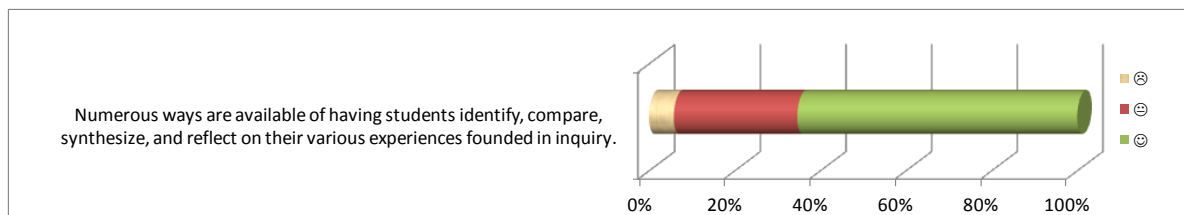
4. Based on accurate and factual professional expertise



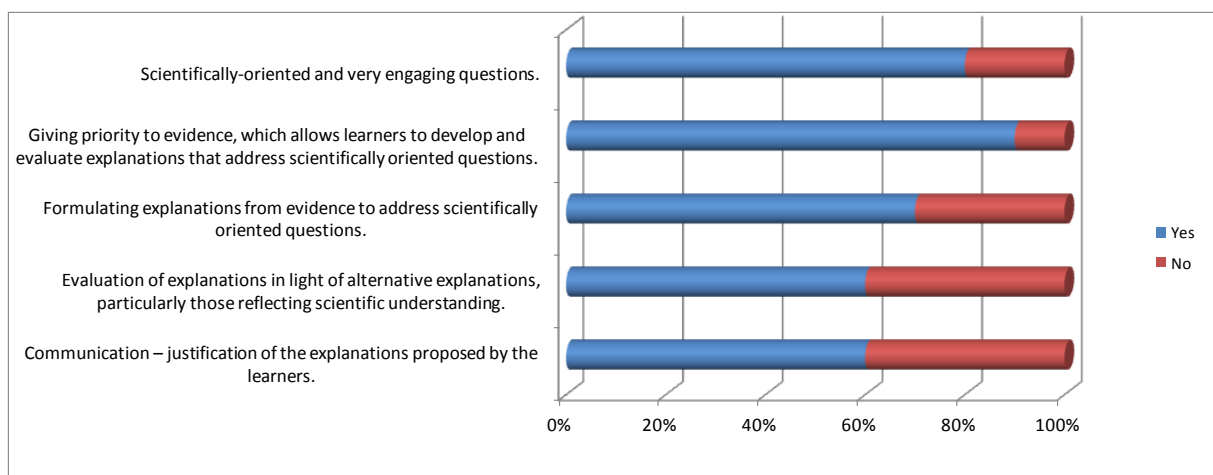
5. Connection to professions in the green labour market



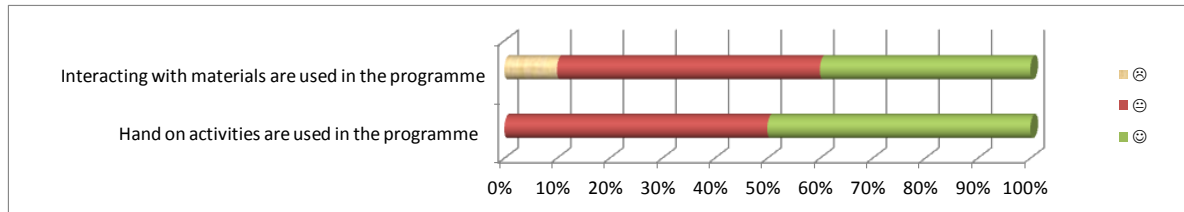
6. Learning by research and inquiry



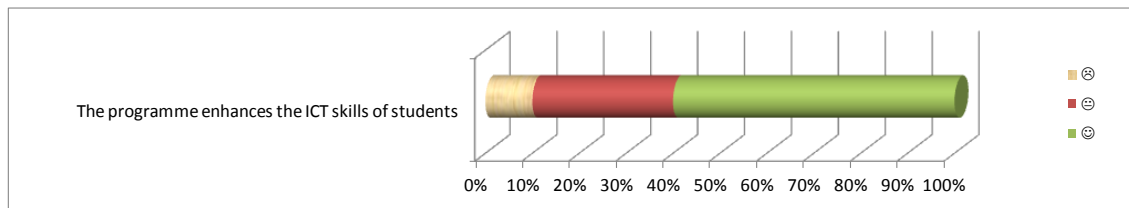
The learning activity supports following features:



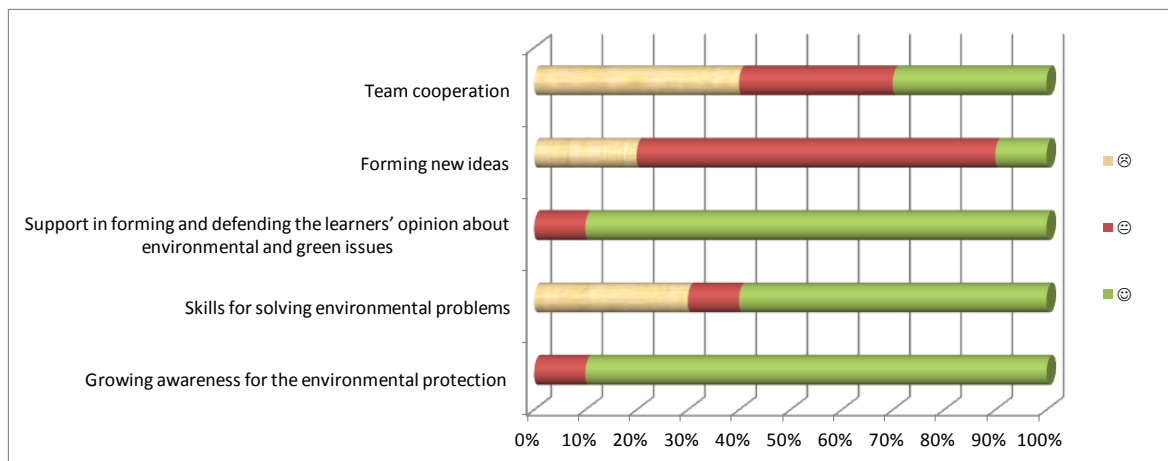
7. Activation of the students by hands-on



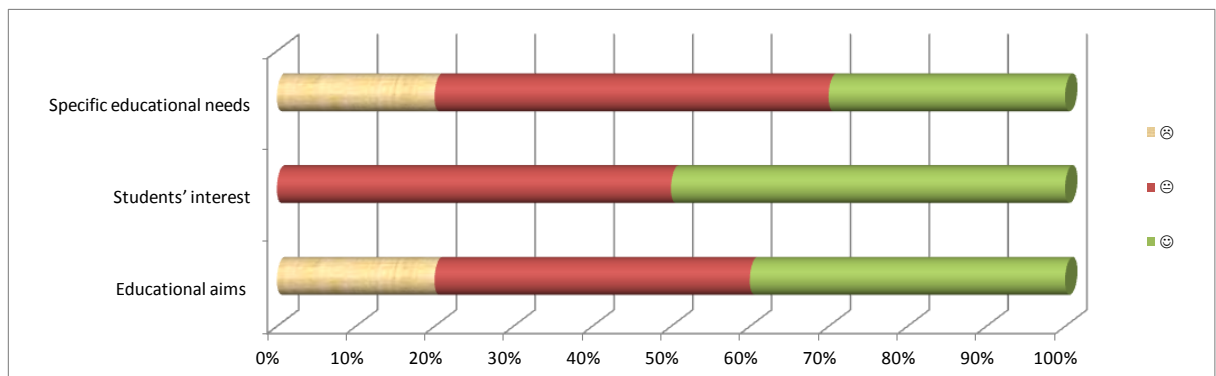
8. Enhancement of students' ICT skills



9. The learning activity supports the development of following social skills



10. The programme is easily adaptably for



3.2 To bee or not to bee

Dates of evaluation: 17.06.2014, 26.06.2014, 10.07.2014 (participants: 21, 19, 12)

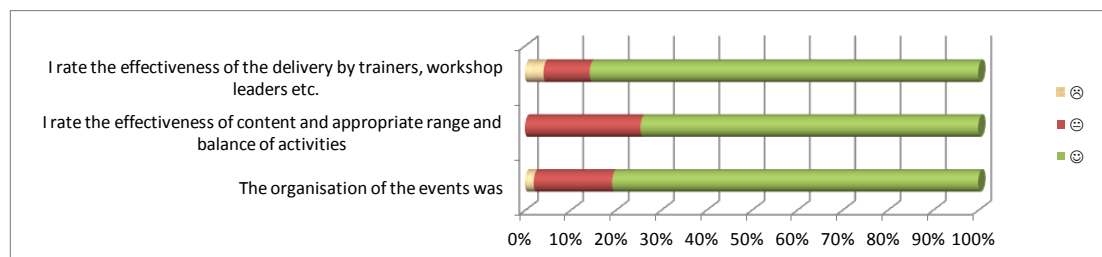
Country: Germany

Participants working with students in the age of: 6-12, 13 -15 and 16-19

Number of participants evaluated the best practice: 52

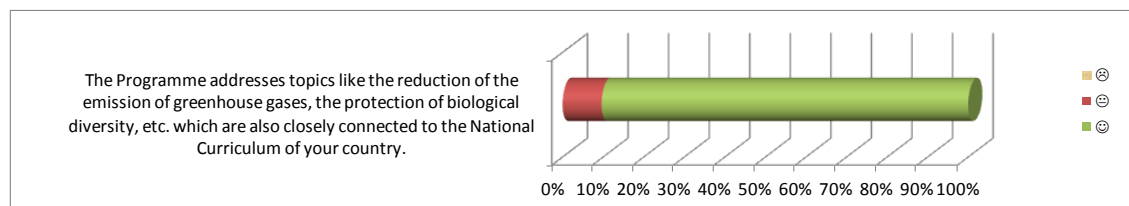
Based on the questionnaire (cf. Annex 1) the evaluation shows following results:

Section 1: Feedback for the event:



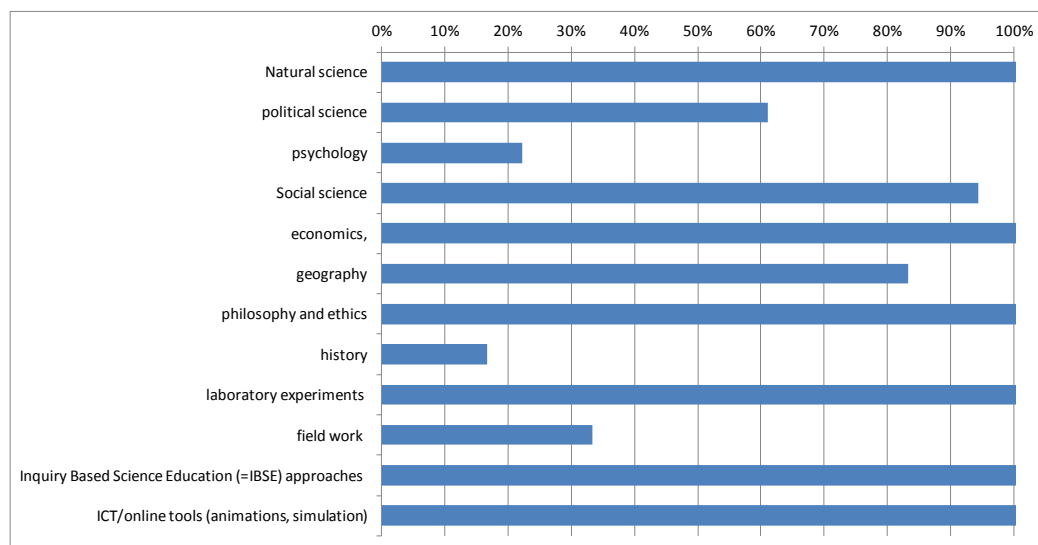
Section 2: “voice of user”:

1 Relation to a green topic and to the National Curriculum

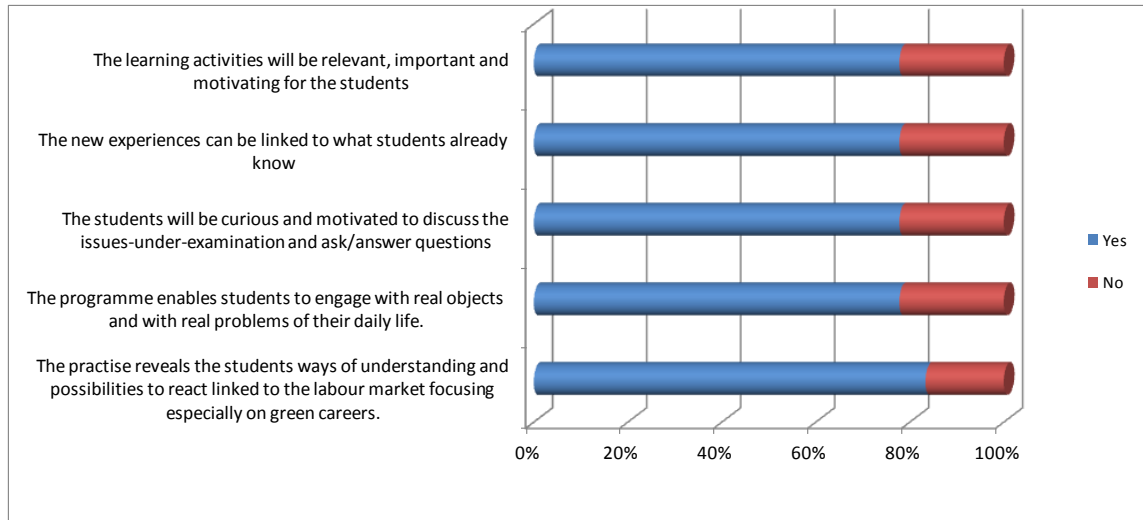


2. Being interdisciplinary: Drawing upon many academic disciplines and teaching methods, does the programme include following elements?

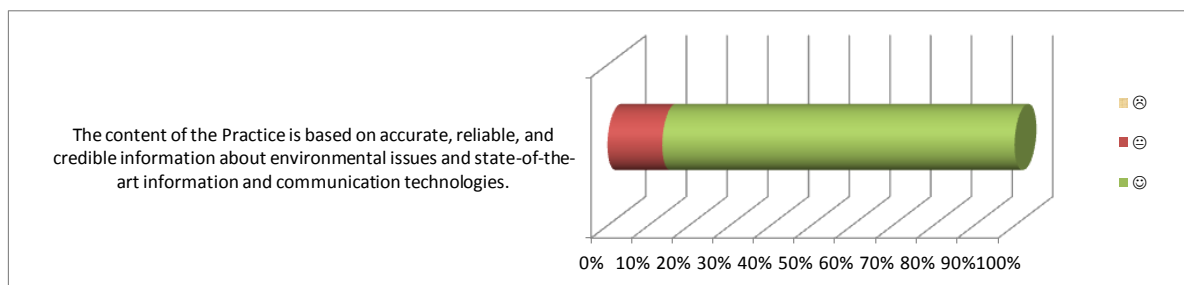
(The figures shows how many percentage t answered with yes)



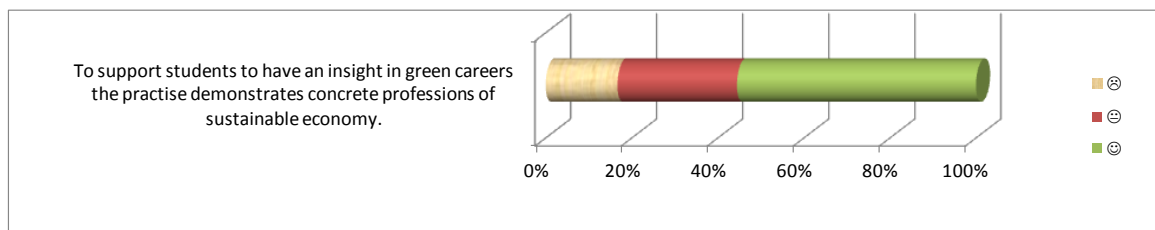
3. Relevance to the daily life of students



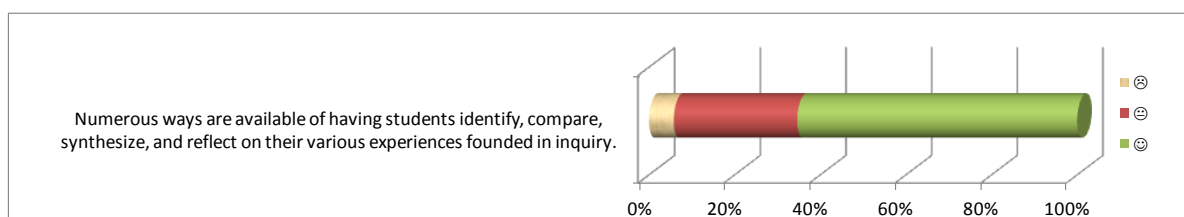
4. Based on accurate and factual professional expertise



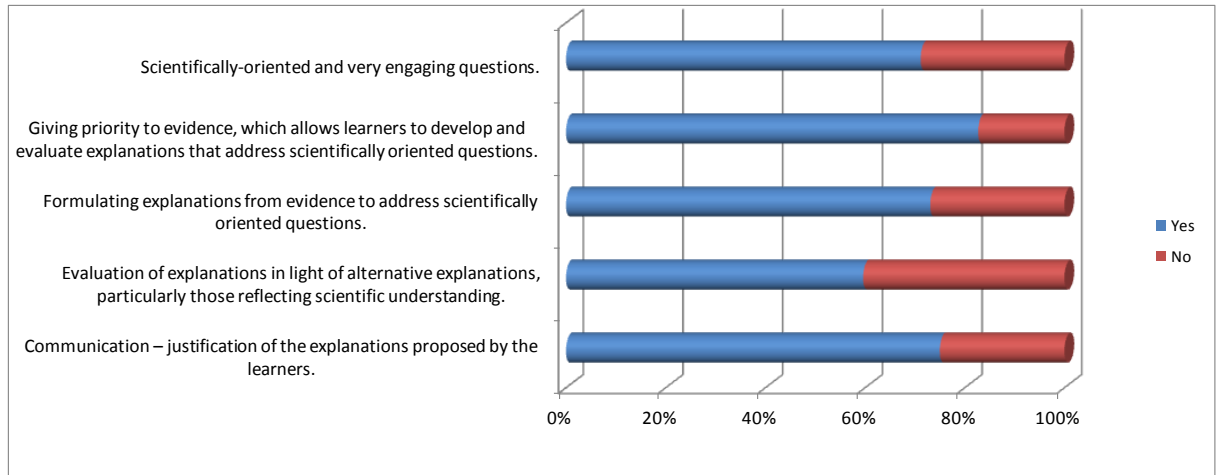
5. Connection to professions in the green labour market



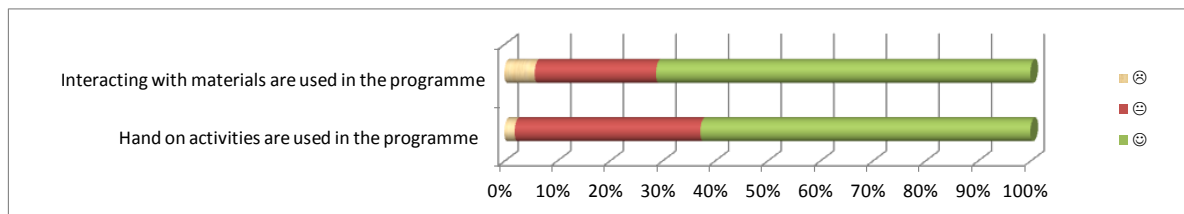
6. Learning by research and inquiry



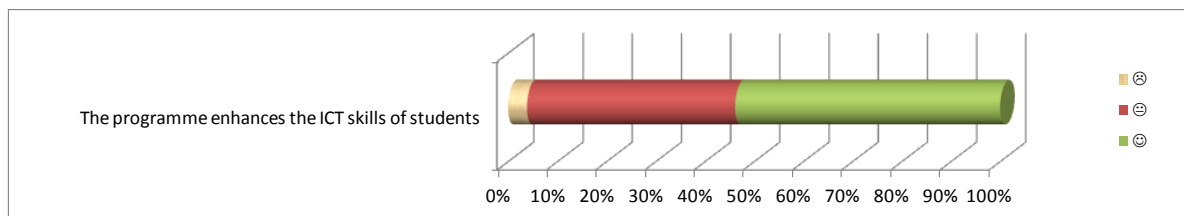
The learning activity supports following features:



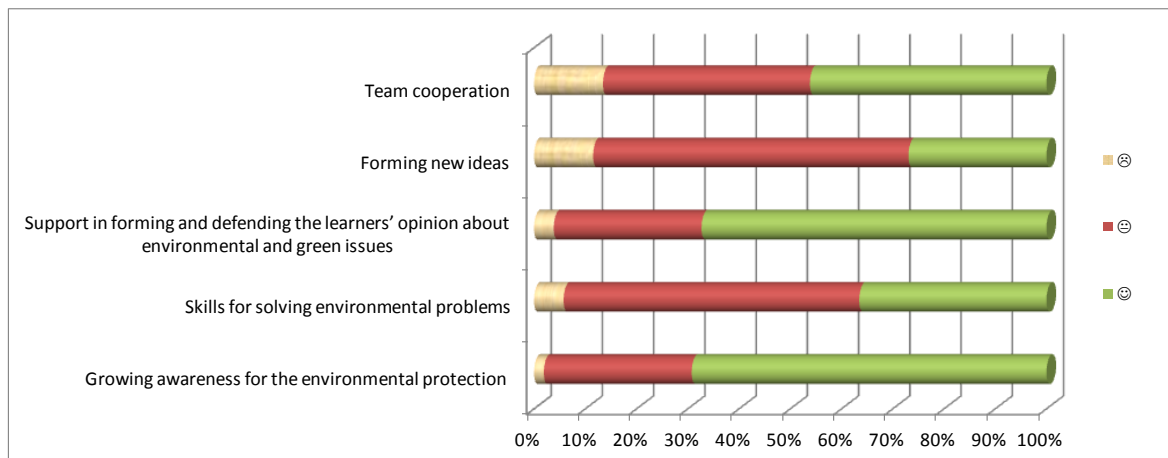
7. Activation of the students by hands-on



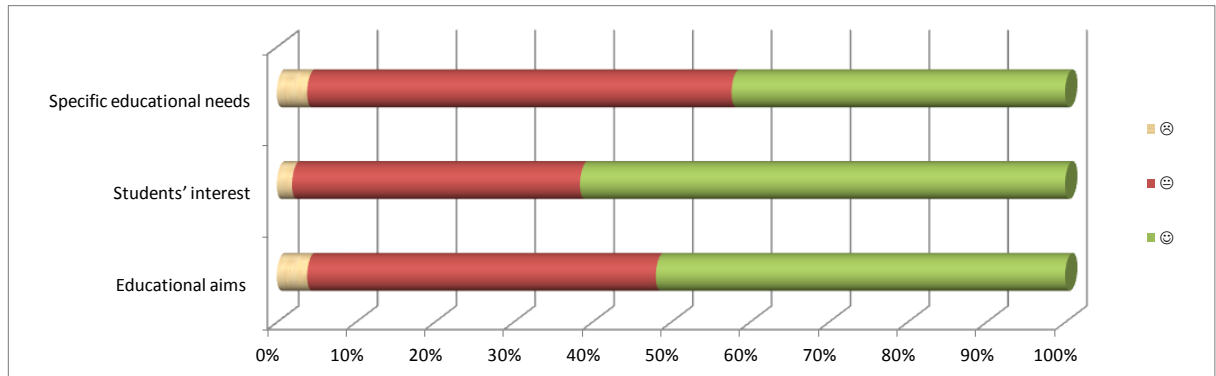
8. Enhancement of students’ ICT skills



9. The learning activity supports the development of following social skills



10. The programme is easily adaptably for



3.3 Energy tomorrow

Dates of evaluation: 10.07.2014

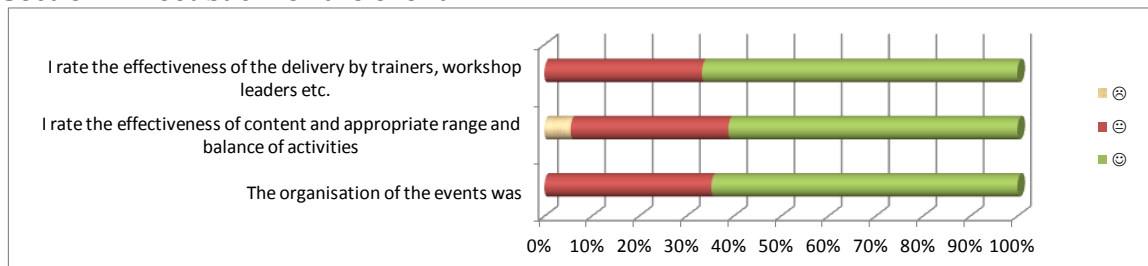
Country: Germany

Participants working with students in the age of: 6-12, 13 -15 and 16-19

Number of participants evaluated the best practice: 18

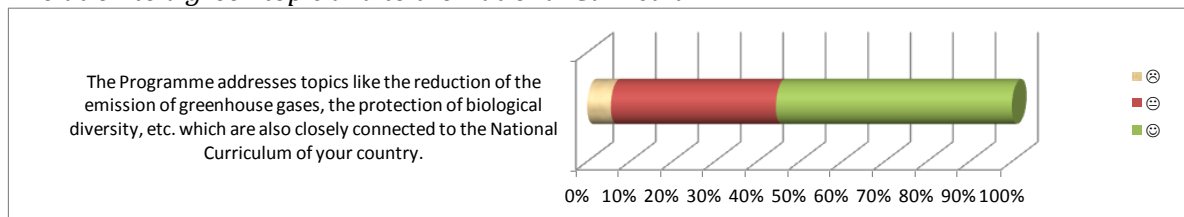
Based on the questionnaire (cf. Annex 1) the evaluation shows following results:

Section 1: Feedback for the event:



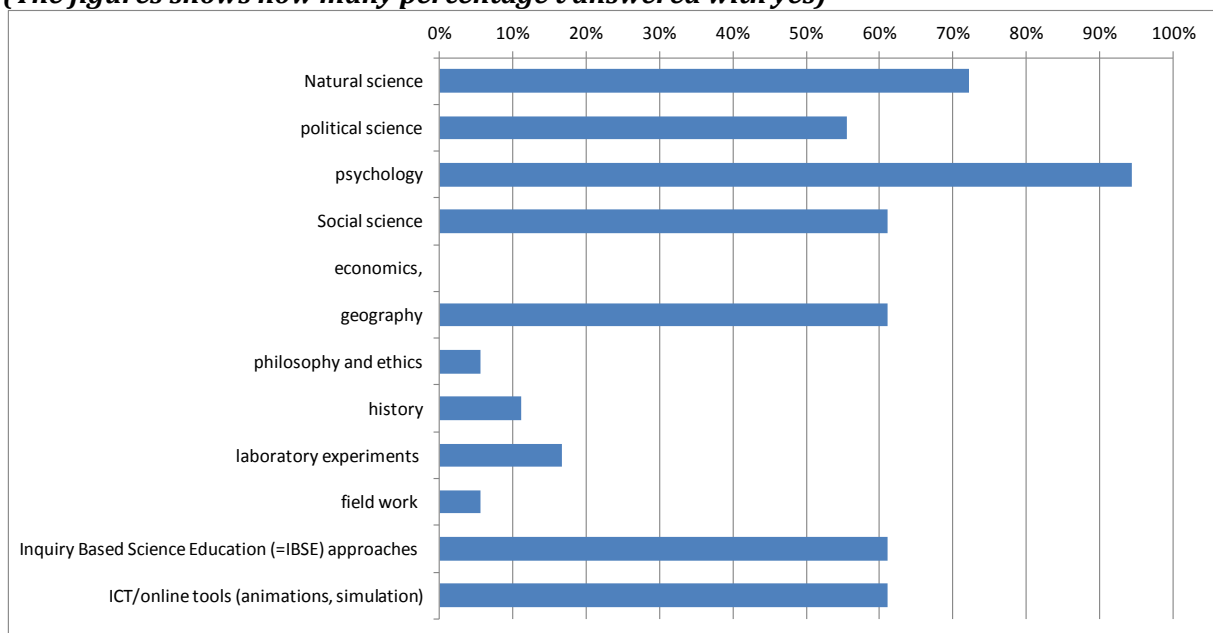
Section 2: “voice of user”:

1 Relation to a green topic and to the National Curriculum

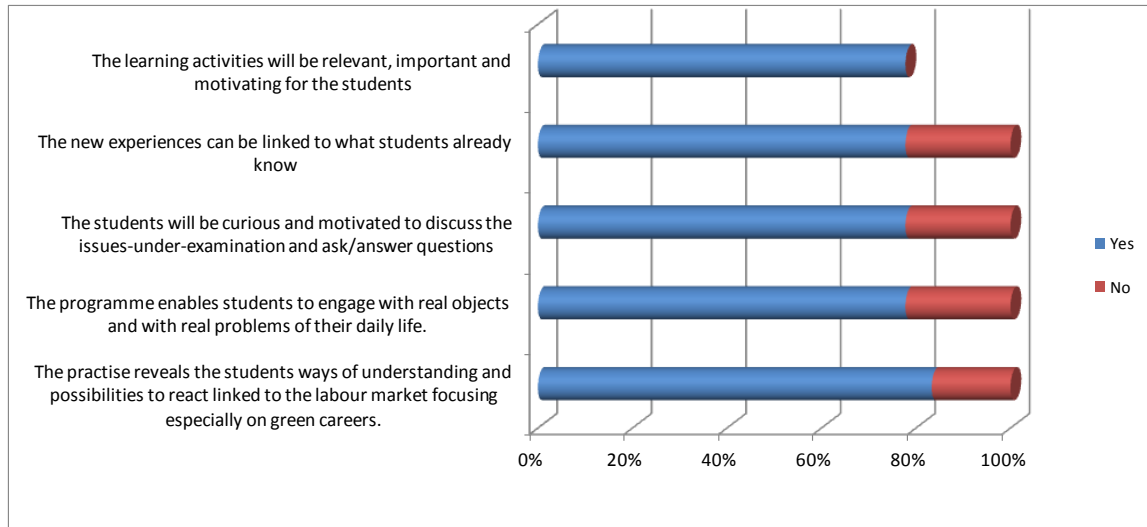


2. Being interdisciplinary: Drawing upon many academic disciplines and teaching methods, does the programme include following elements?

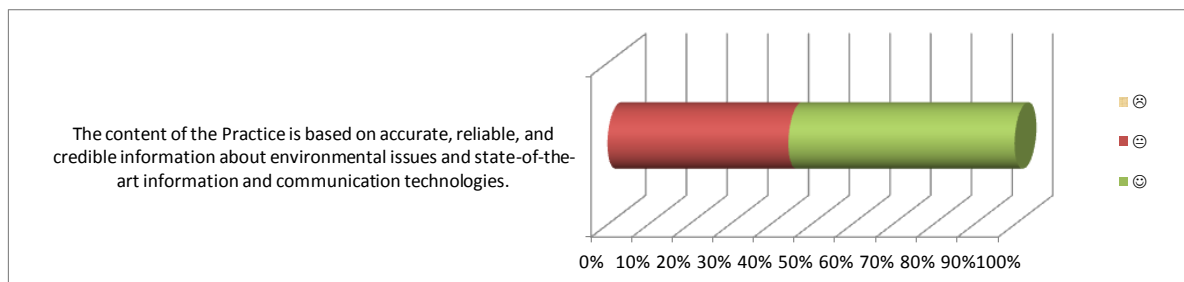
(The figures shows how many percentage t answered with yes)



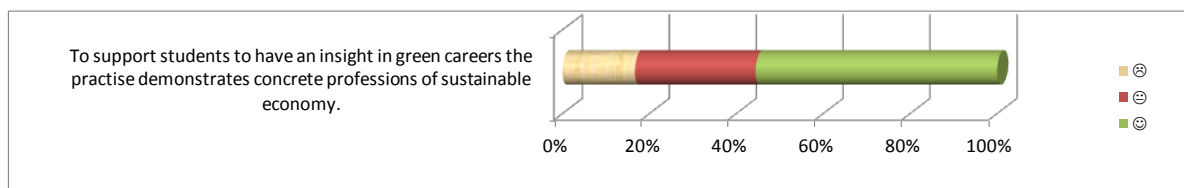
3. Relevance to the daily life of students



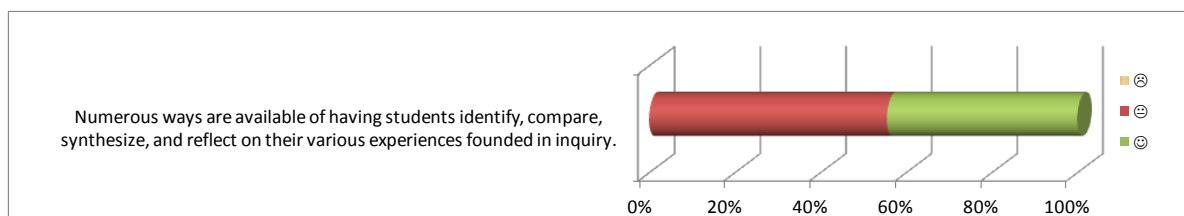
4. Based on accurate and factual professional expertise



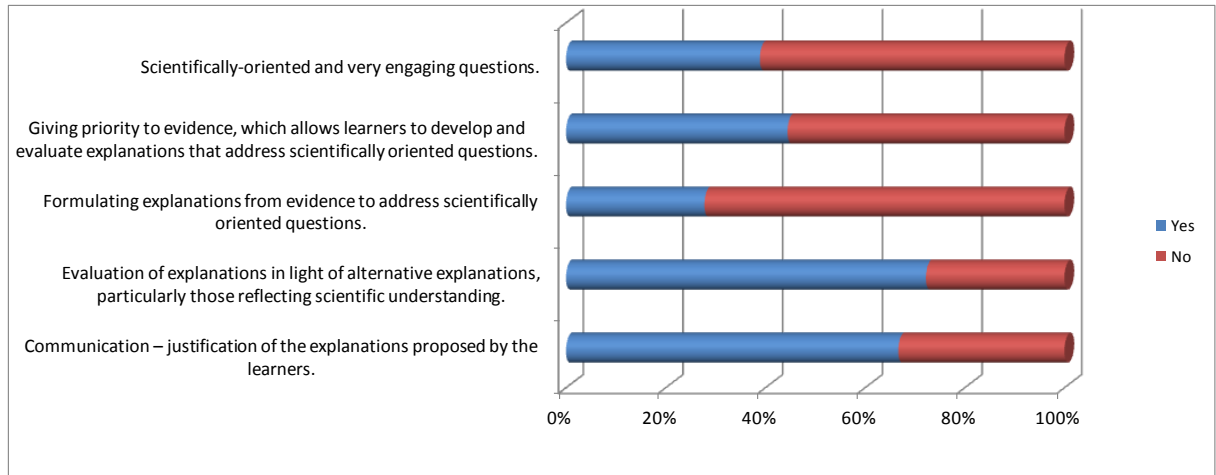
5. Connection to professions in the green labour market



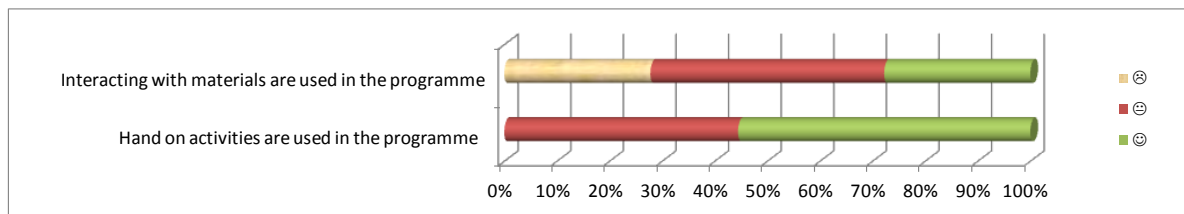
6. Learning by research and inquiry



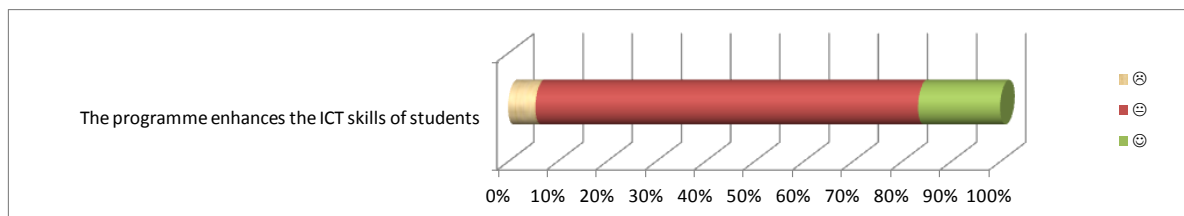
The learning activity supports following features:



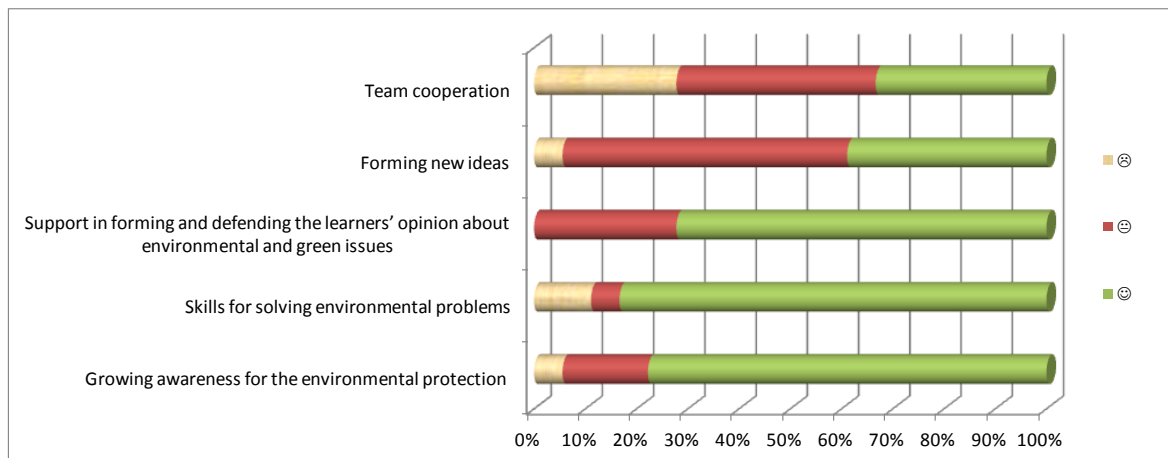
7. Activation of the students by hands-on



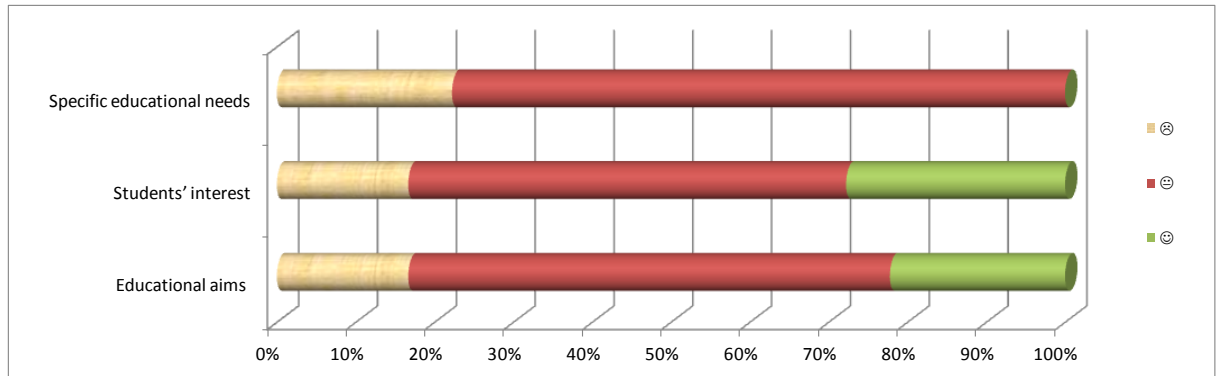
8. Enhancement of students' ICT skills



9. The learning activity supports the development of following social skills



10. The programme is easily adaptably for



3.4 Waste

Dates of evaluation: 30.07.2014

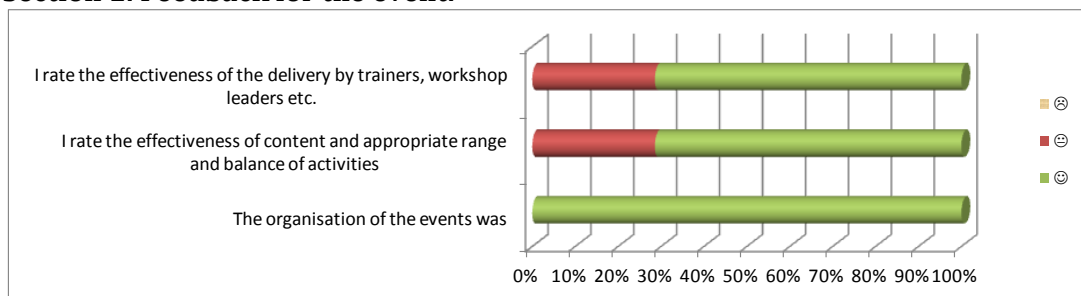
Country: Germany

Participants working with students in the age of: 6-12, 13 -15 and 16-19

Number of participants evaluated the best practice: 7

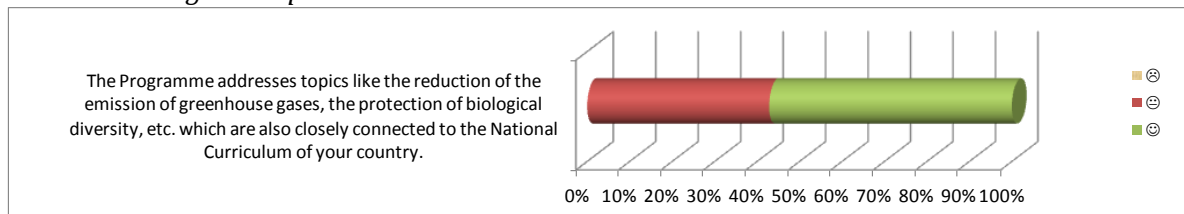
Based on the questionnaire (cf. Annex 1) the evaluation shows following results:

Section 1: Feedback for the event:



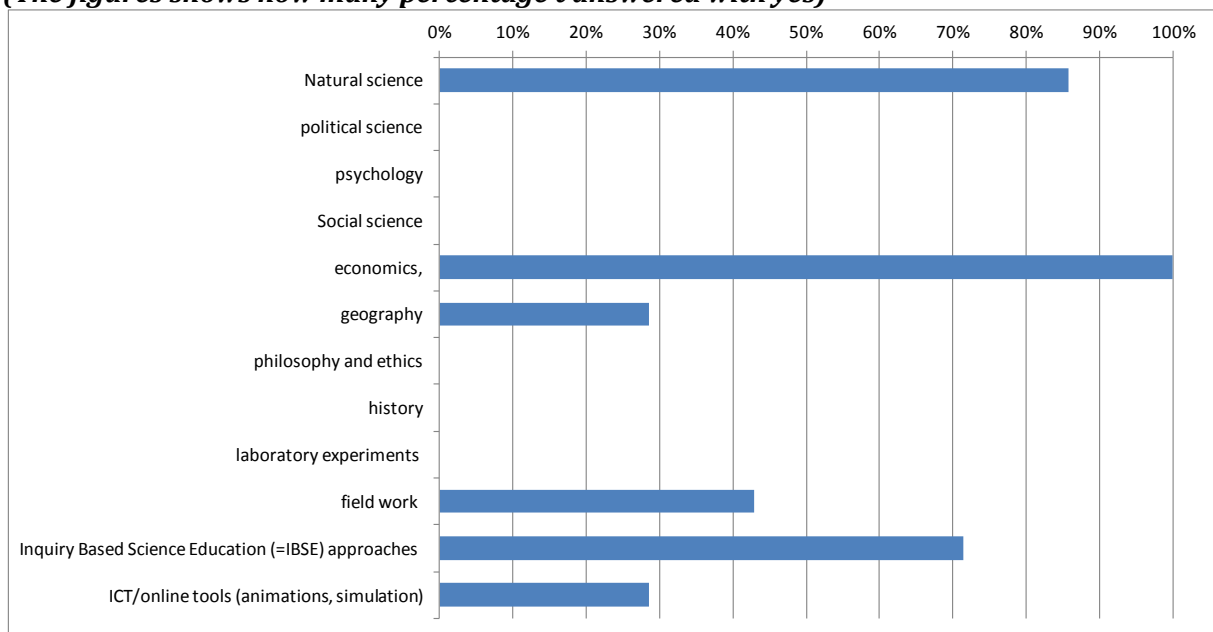
Section 2: “voice of user”:

1 Relation to a green topic and to the National Curriculum

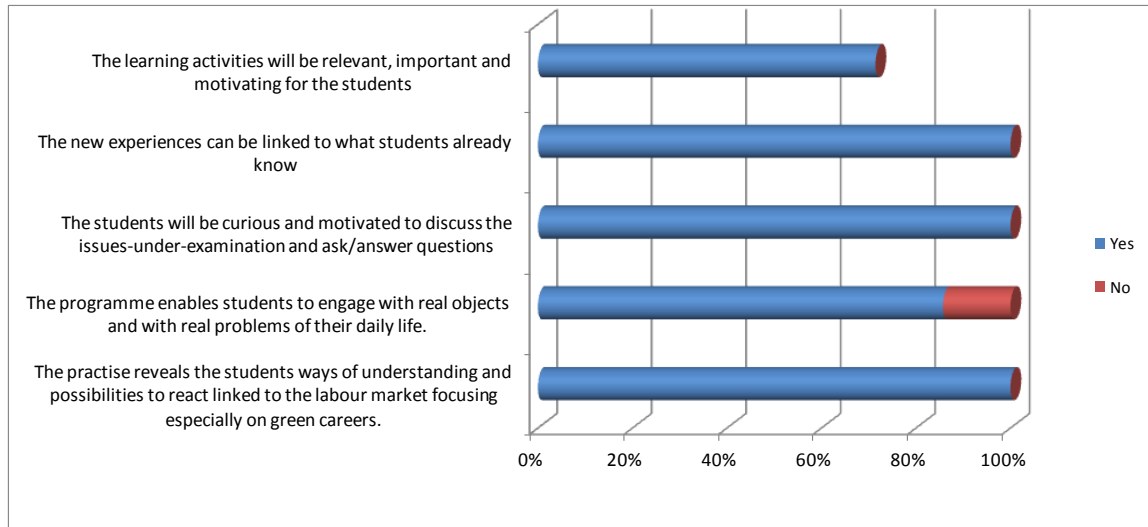


2. Being interdisciplinary: Drawing upon many academic disciplines and teaching methods, does the programme include following elements?

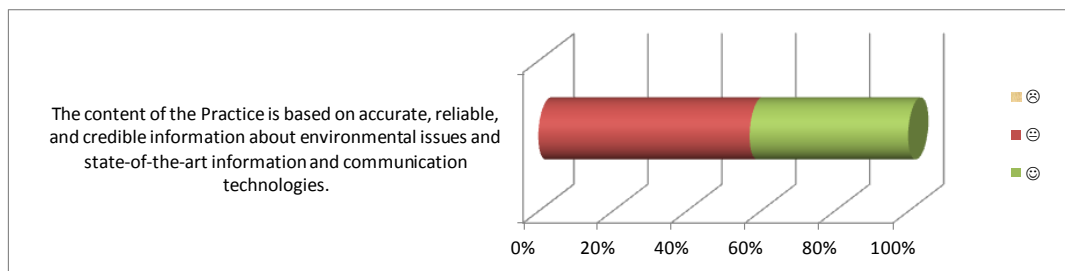
(The figures shows how many percentage t answered with yes)



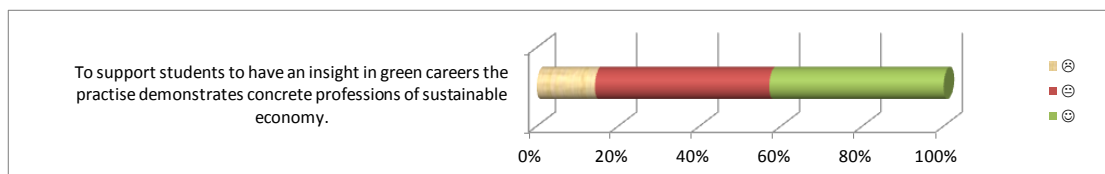
3. Relevance to the daily life of students



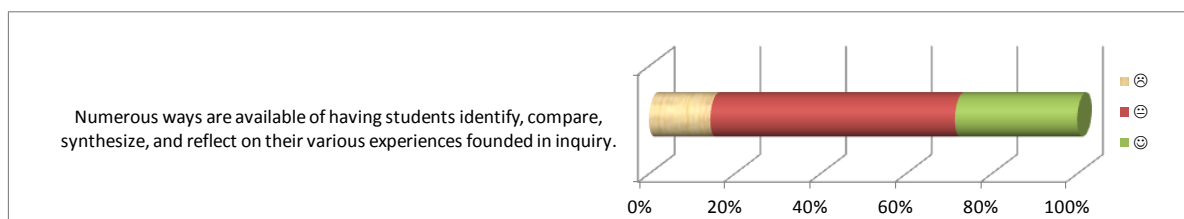
4. Based on accurate and factual professional expertise



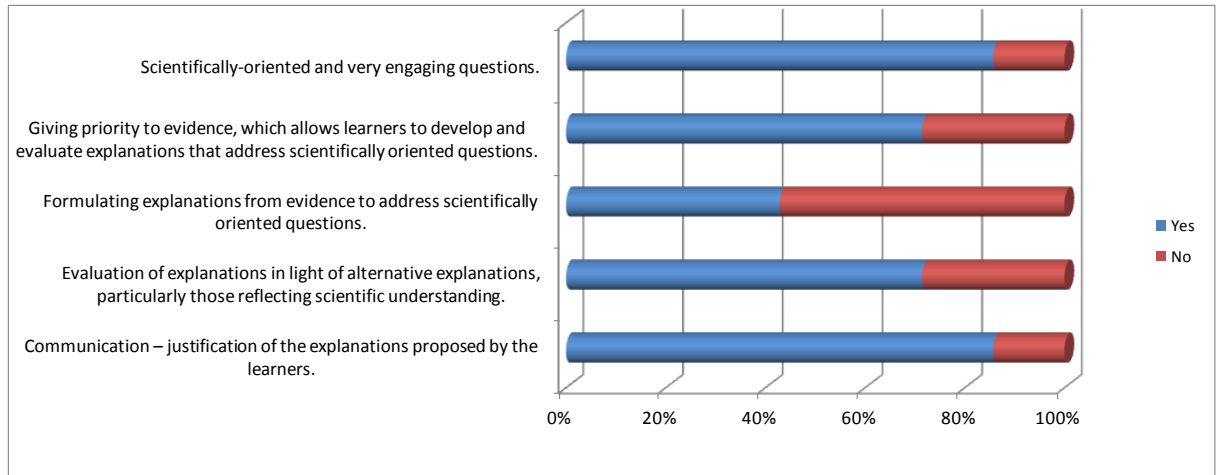
5. Connection to professions in the green labour market



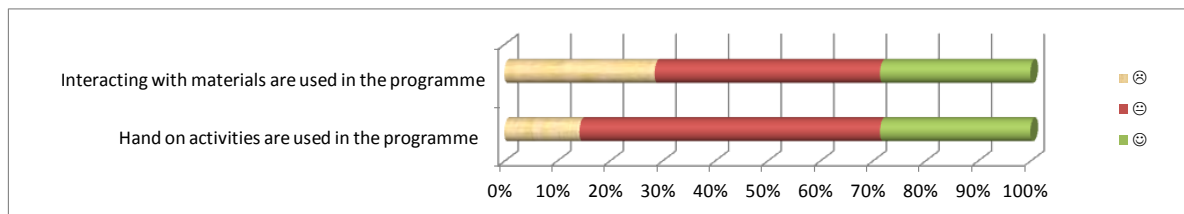
6. Learning by research and inquiry



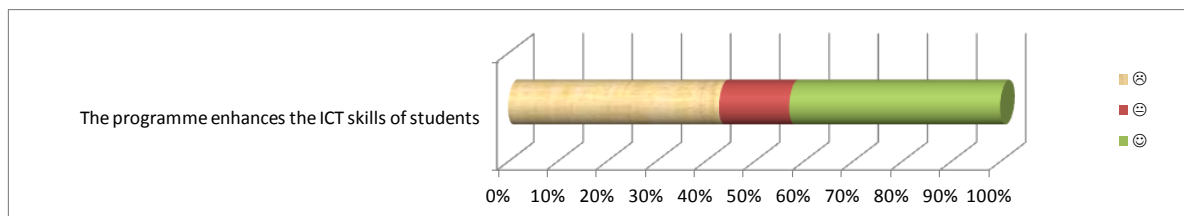
The learning activity supports following features:



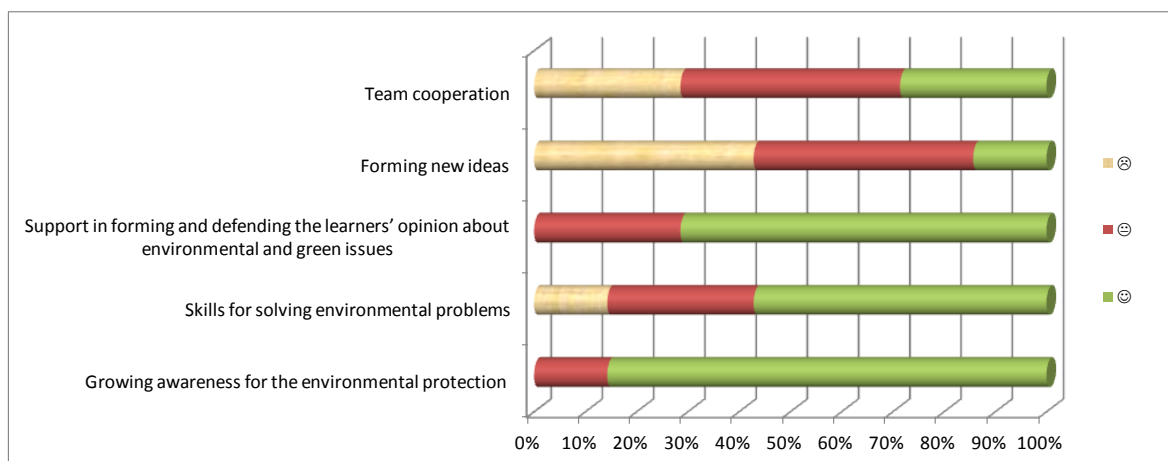
7. Activation of the students by hands-on



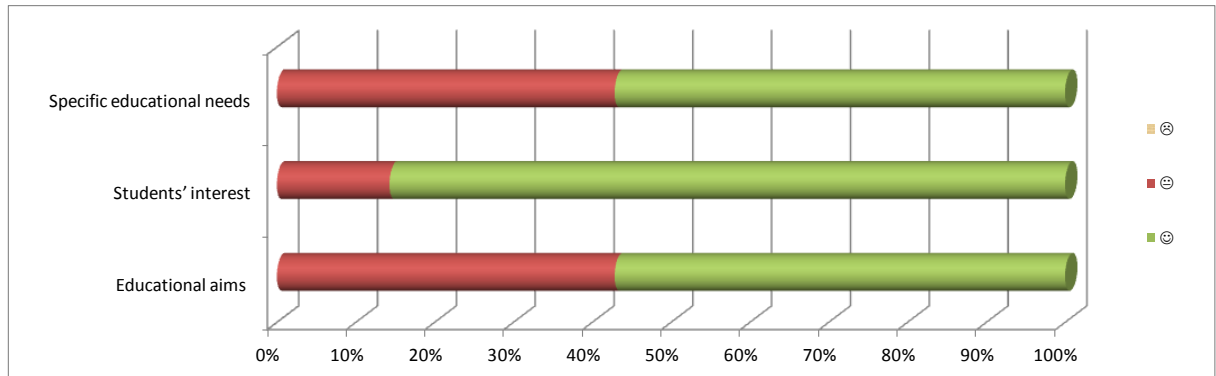
8. Enhancement of students' ICT skills



9. The learning activity supports the development of following social skills



10. The programme is easily adaptably for



3.5 School Garden

Dates of evaluation: 05.08.2014, 06.08.2014

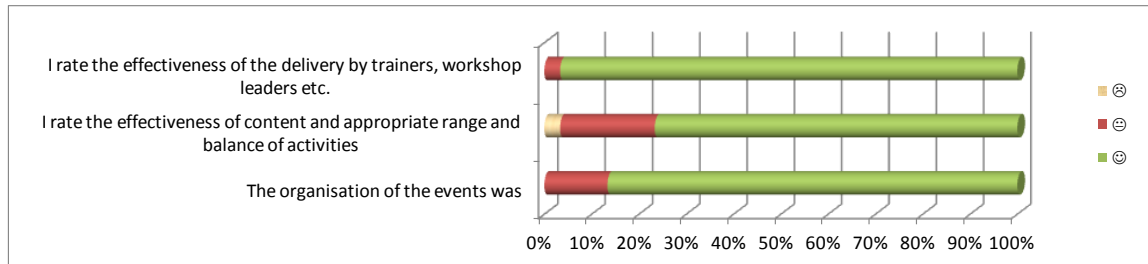
Country: Greece

Participants working with students in the age of: 6-12 and 16-19

Number of participants evaluated the best practice: 25

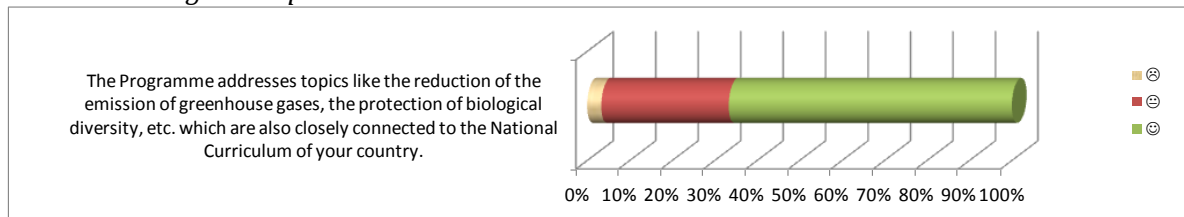
Based on the questionnaire (cf. Annex 1) the evaluation shows following results:

Section 1: Feedback for the event:



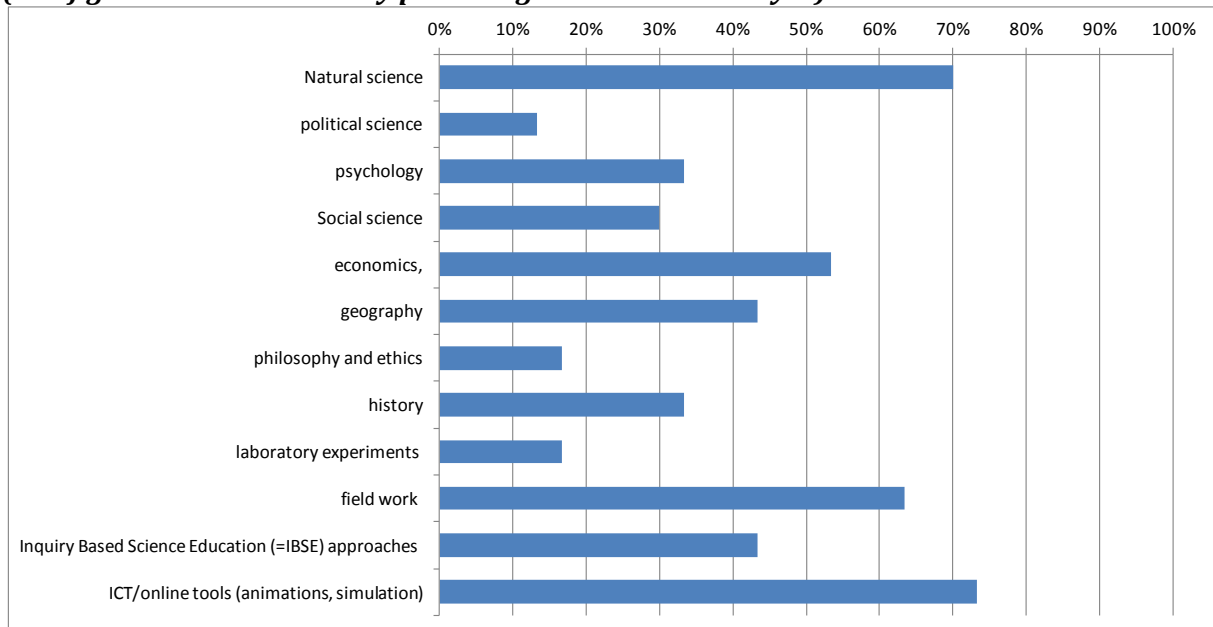
Section 2: “voice of user”:

1 Relation to a green topic and to the National Curriculum

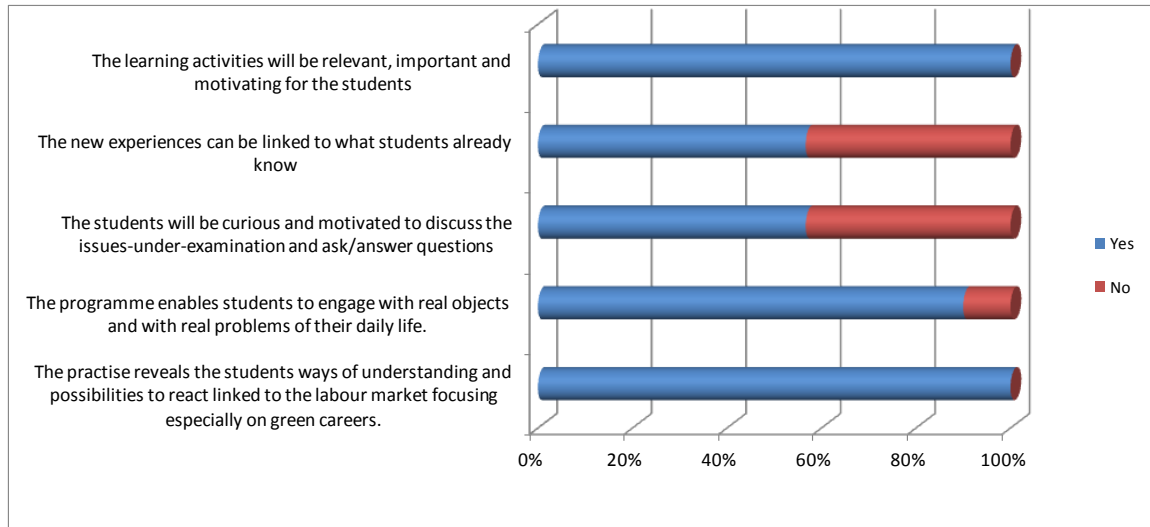


2. Being interdisciplinary: Drawing upon many academic disciplines and teaching methods, does the programme include following elements?

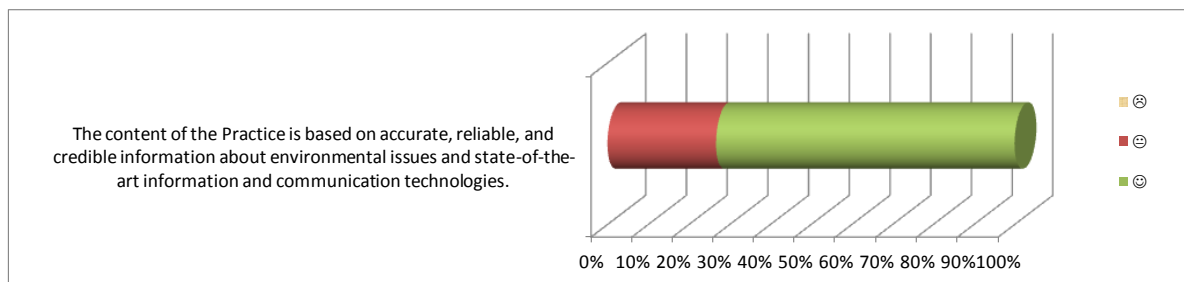
(The figures shows how many percentage t answered with yes)



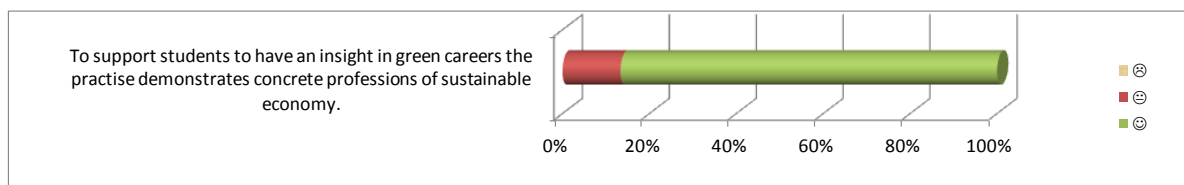
3. Relevance to the daily life of students



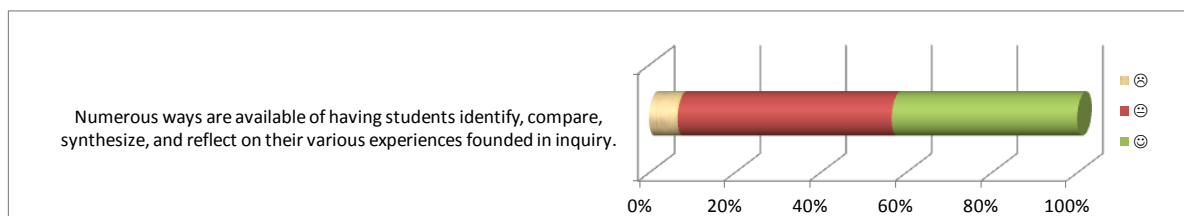
4. Based on accurate and factual professional expertise



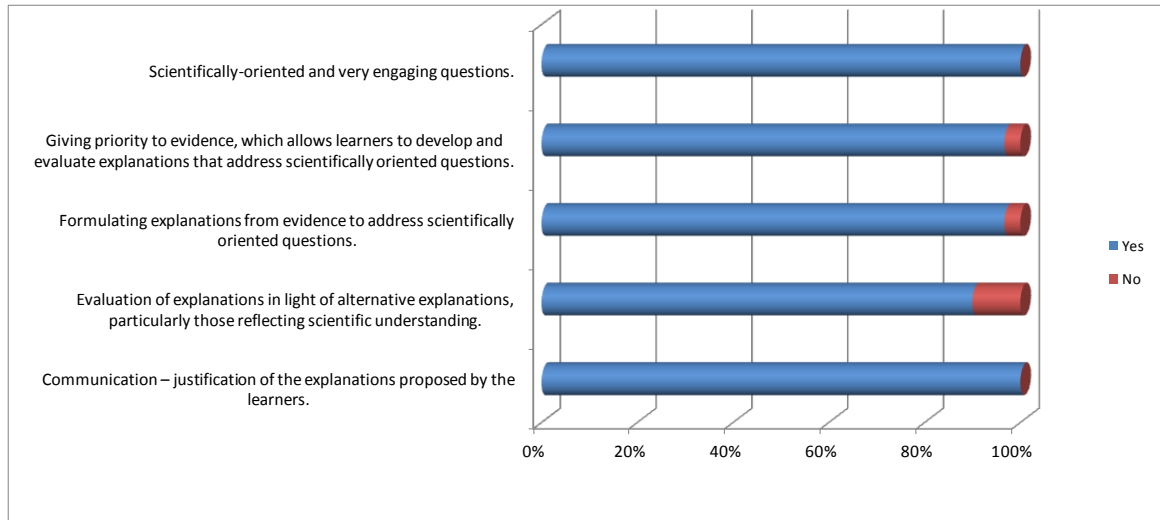
5. Connection to professions in the green labour market



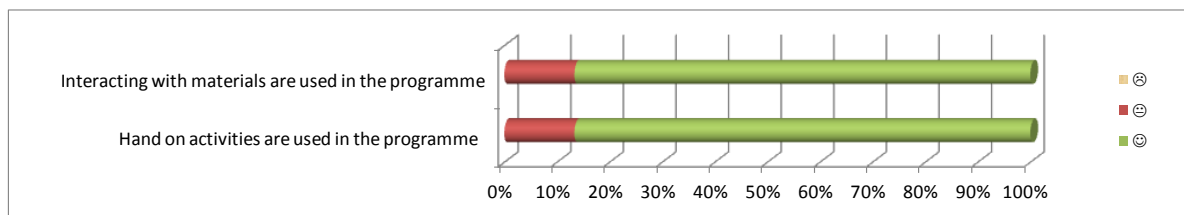
6. Learning by research and inquiry



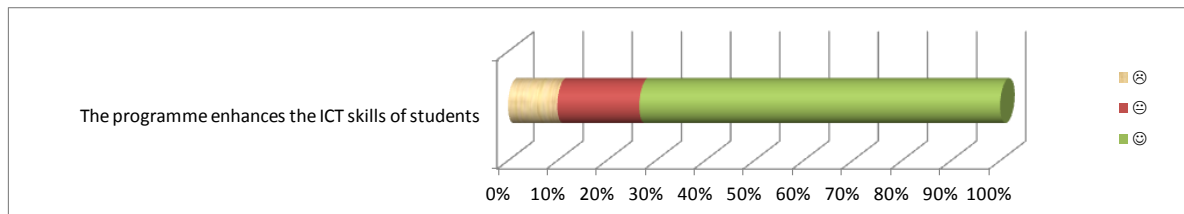
The learning activity supports following features:



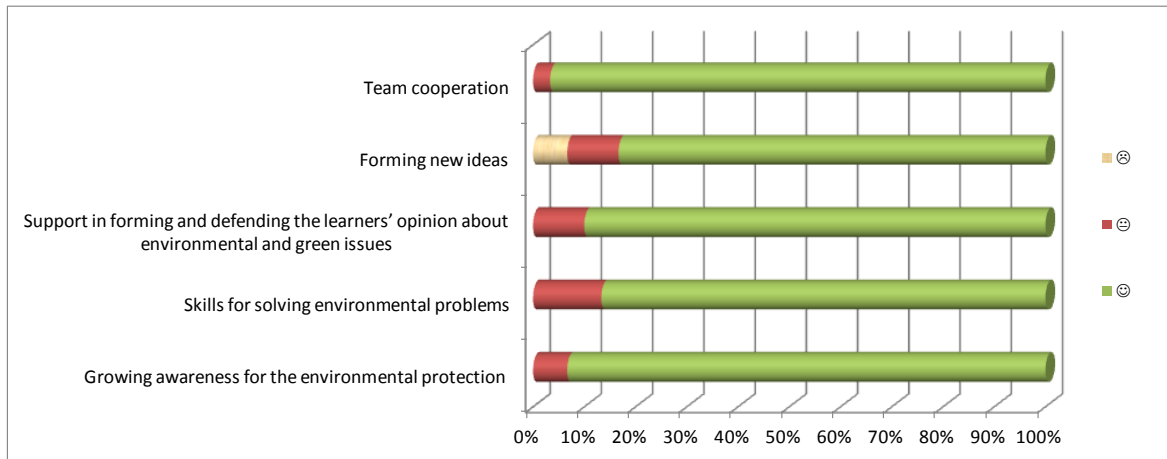
7. Activation of the students by hands-on



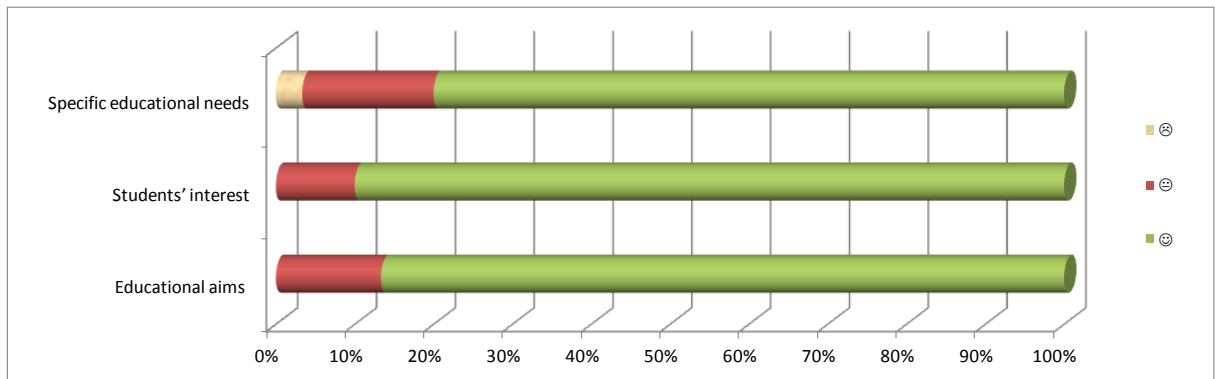
8. Enhancement of students' ICT skills



9. The learning activity supports the development of following social skills



10. The programme is easily adaptable for



3.6 The ecosystem of lake Pamvotis through the information center of Lake Pamvotis Organization

Dates of evaluation: 08.12.2104

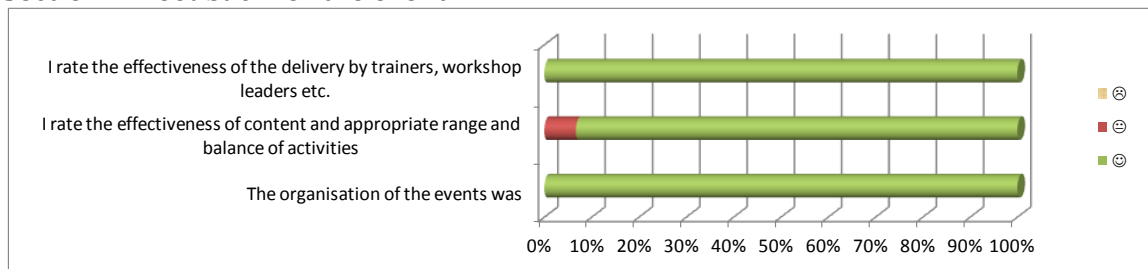
Country: Greece

Participants working with students in the age of: 6-12, 13 – 15 and 16-19

Number of participants evaluated the best practice: 15

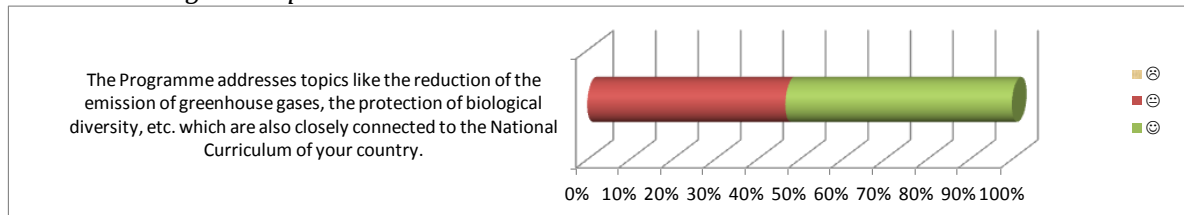
Based on the questionnaire (cf. Annex 1) the evaluation shows following results:

Section 1: Feedback for the event:



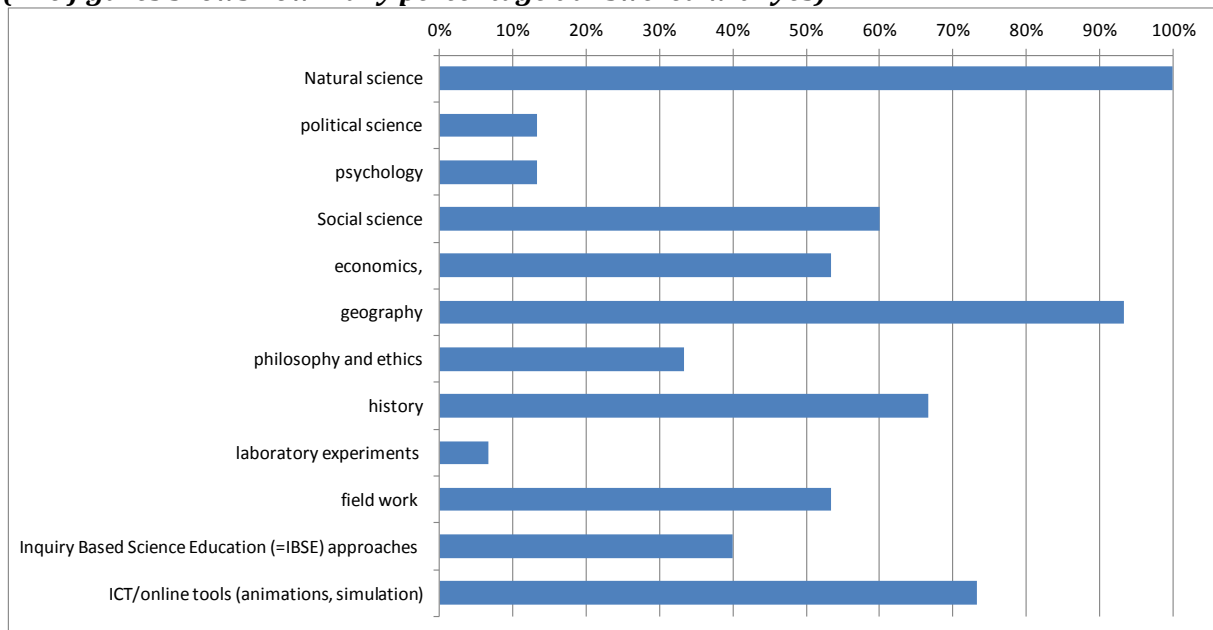
Section 2: “voice of user”:

1 Relation to a green topic and to the National Curriculum

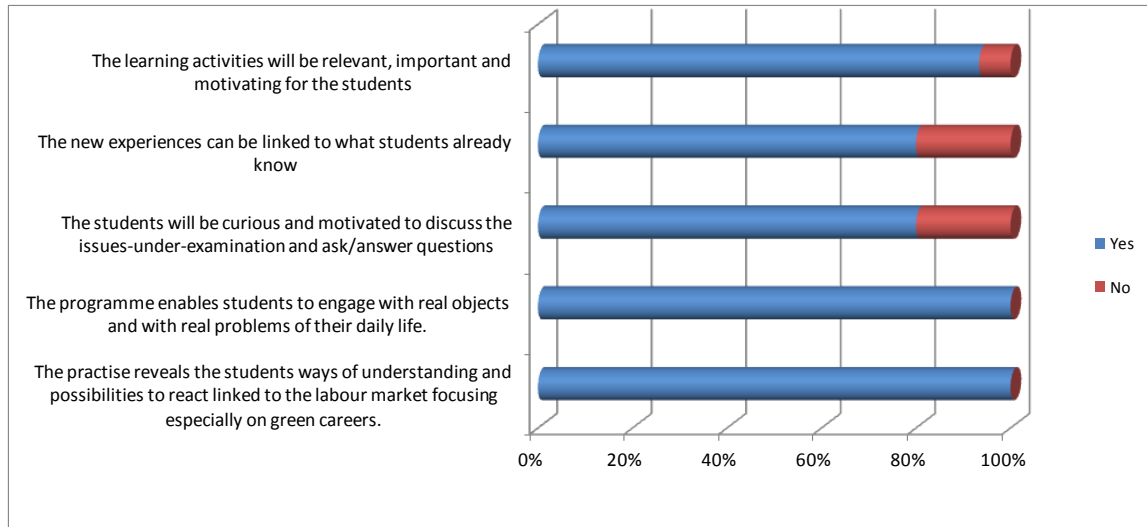


2. Being interdisciplinary: Drawing upon many academic disciplines and teaching methods, does the programme include following elements?

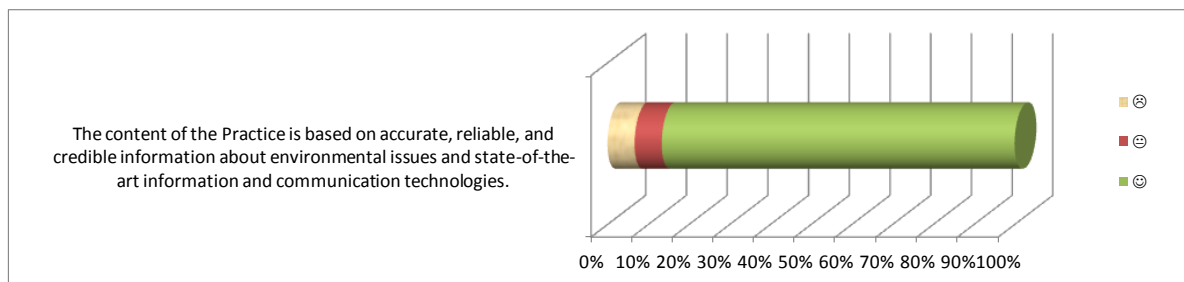
(The figures shows how many percentage t answered with yes)



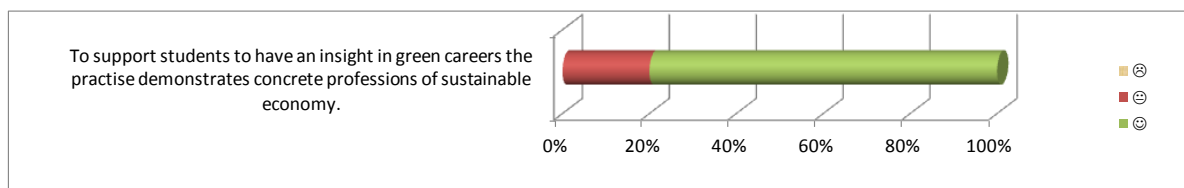
3. Relevance to the daily life of students



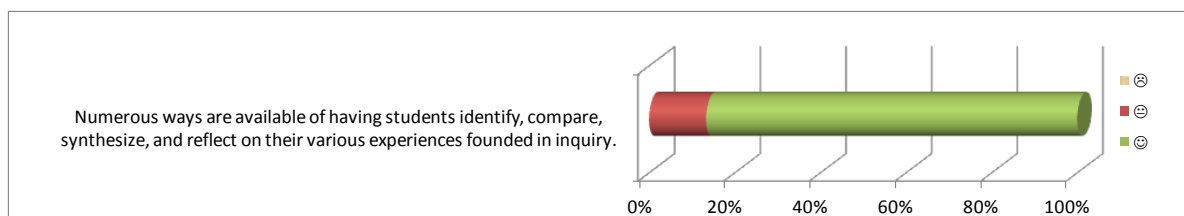
4. Based on accurate and factual professional expertise



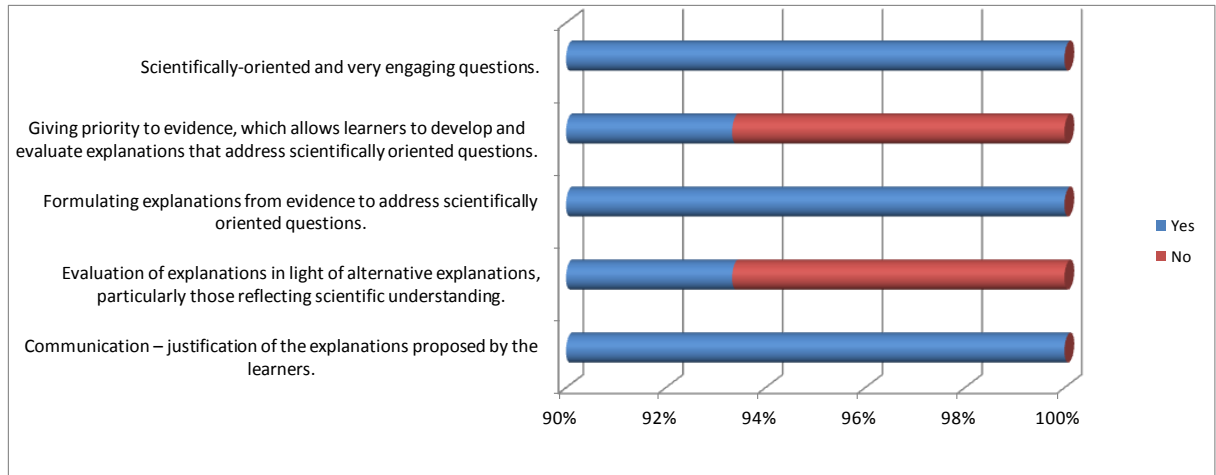
5. Connection to professions in the green labour market



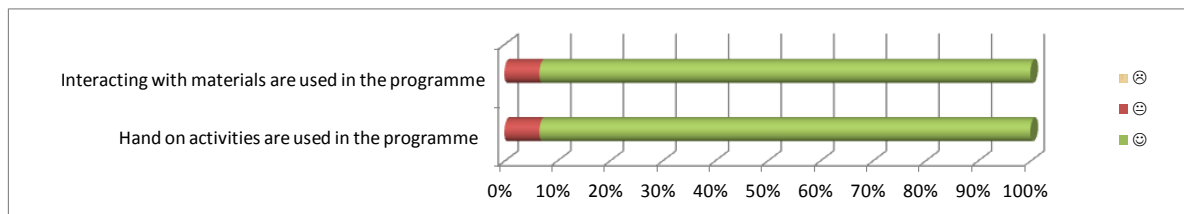
6. Learning by research and inquiry



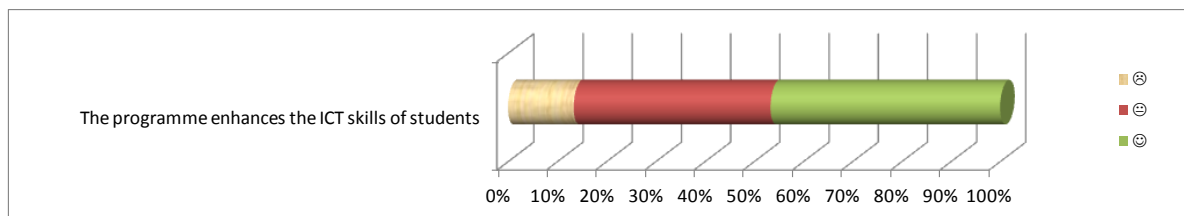
The learning activity supports following features:



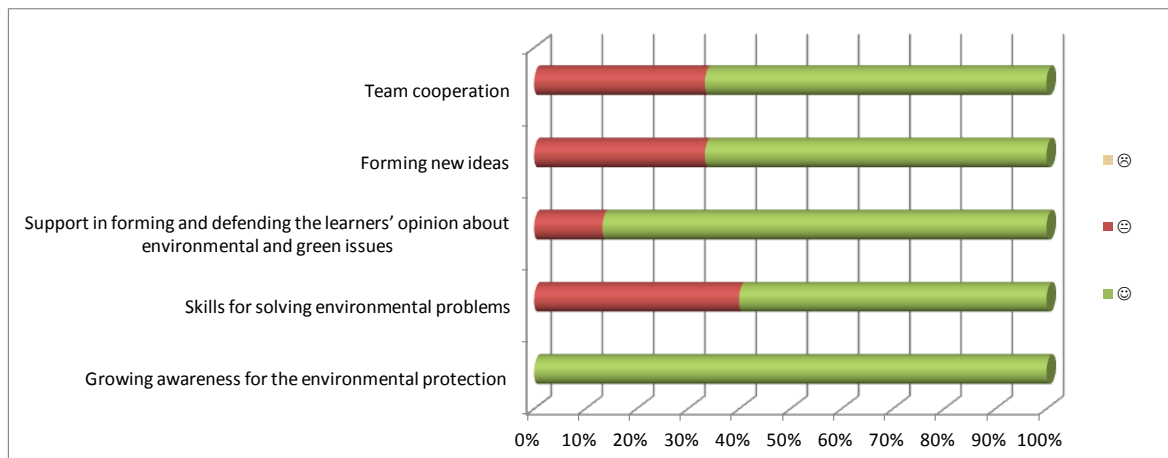
7. Activation of the students by hands-on



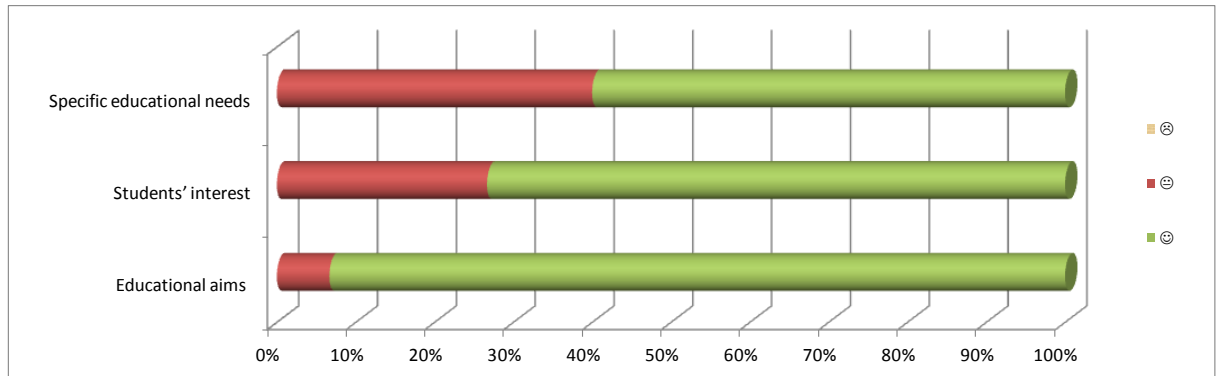
8. Enhancement of students' ICT skills



9. The learning activity supports the development of following social skills



10. The programme is easily adaptably for



3.7 Green labs for schools' projects

Dates of evaluation: 29.11.2104

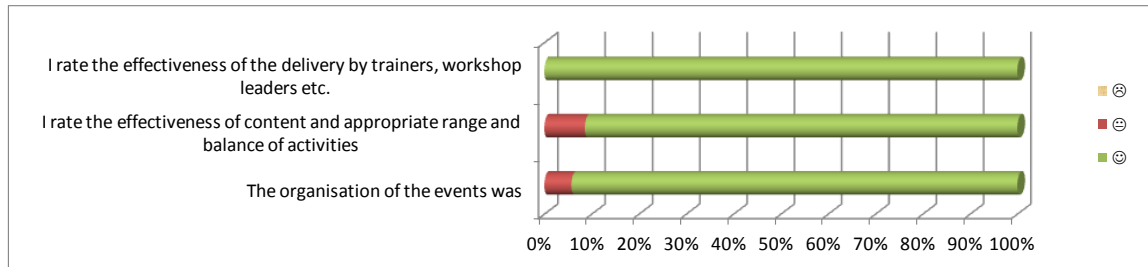
Country: Greece

Participants working with students in the age of: 6-12, 13 – 15 and 16-19

Number of participants evaluated the best practice: 35

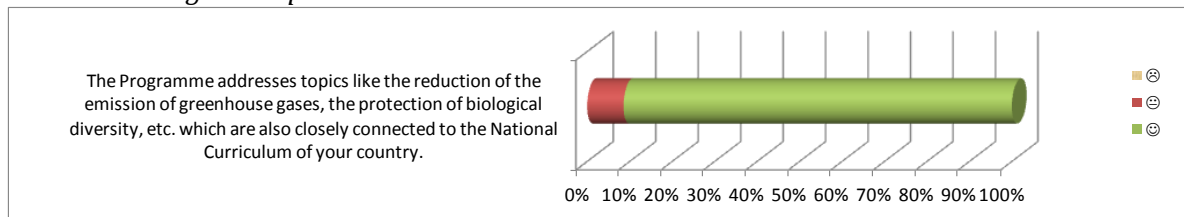
Based on the questionnaire (cf. Annex 1) the evaluation shows following results:

Section 1: Feedback for the event:



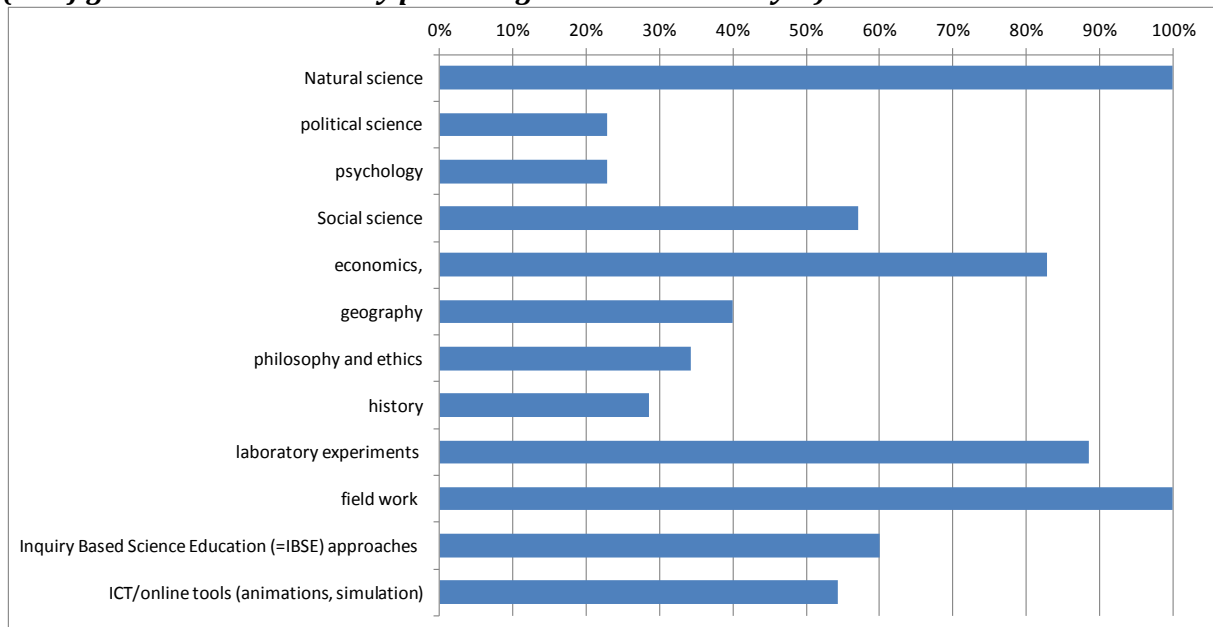
Section 2: “voice of user”:

1 Relation to a green topic and to the National Curriculum

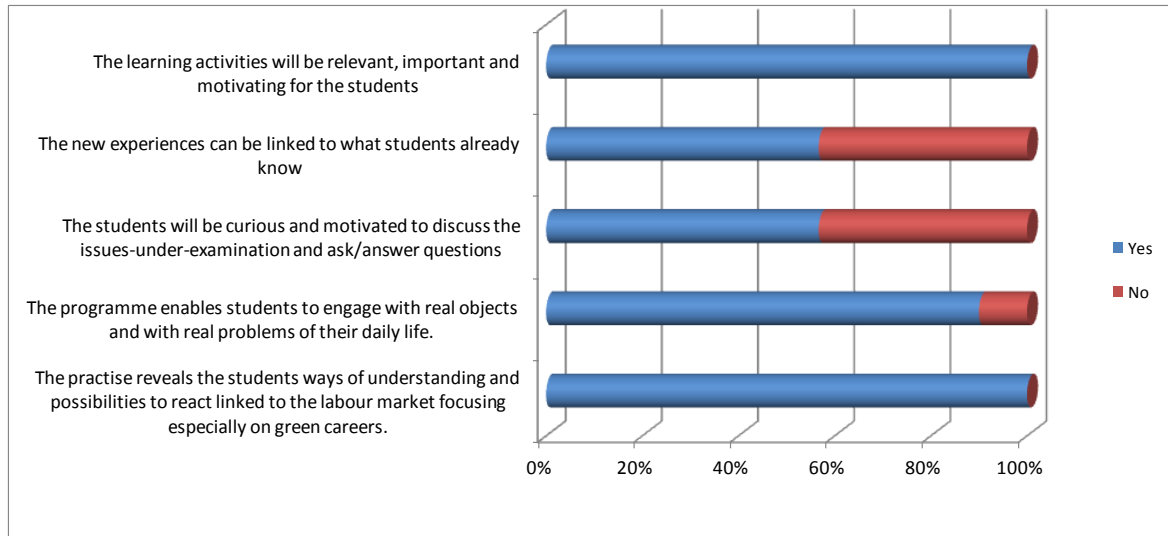


2. Being interdisciplinary: Drawing upon many academic disciplines and teaching methods, does the programme include following elements?

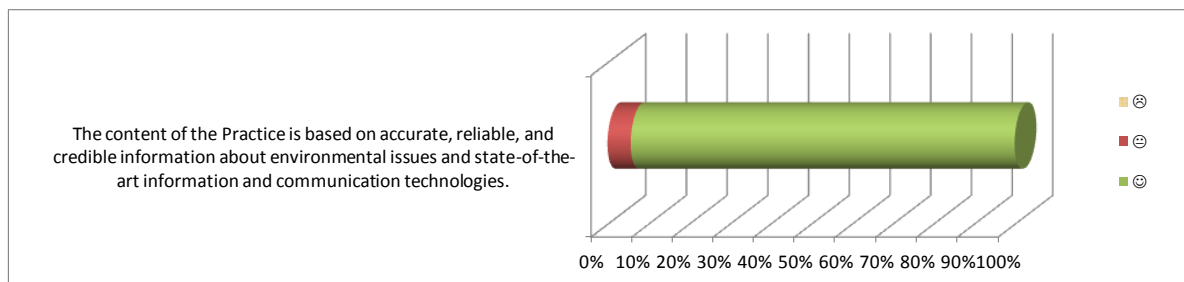
(The figures shows how many percentage t answered with yes)



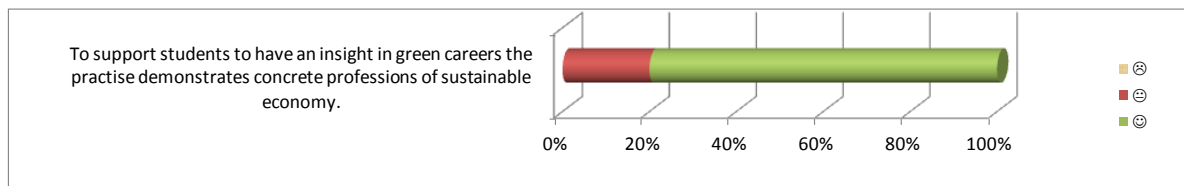
3. Relevance to the daily life of students



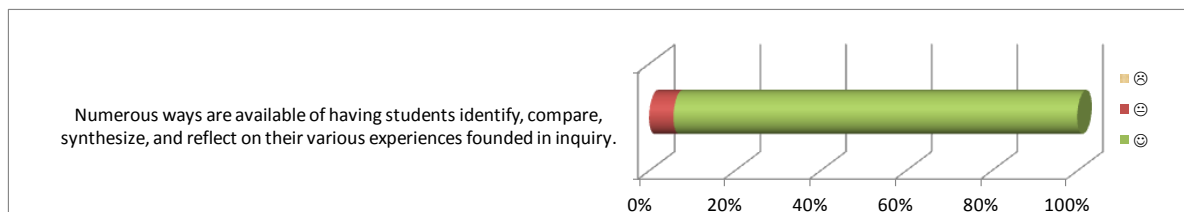
4. Based on accurate and factual professional expertise



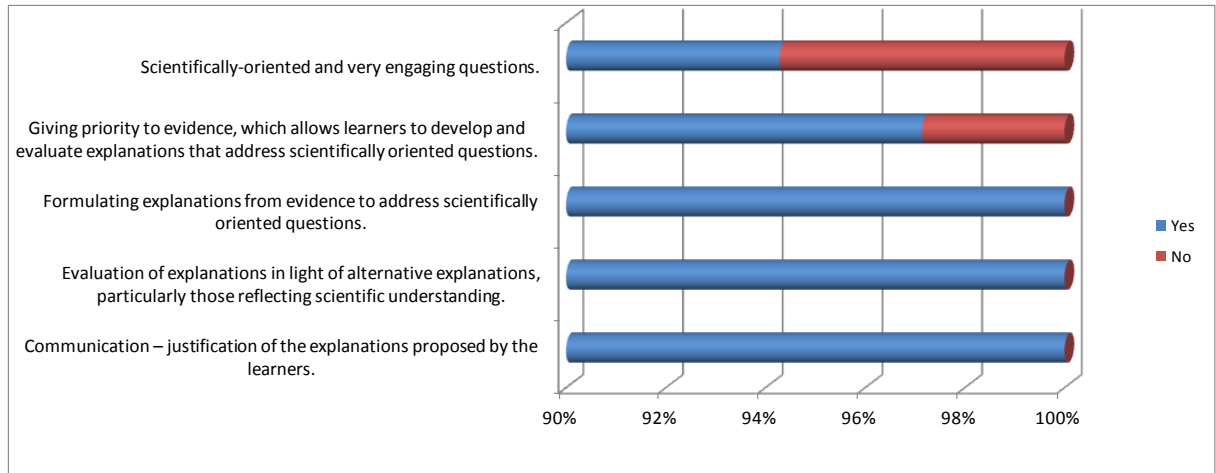
5. Connection to professions in the green labour market



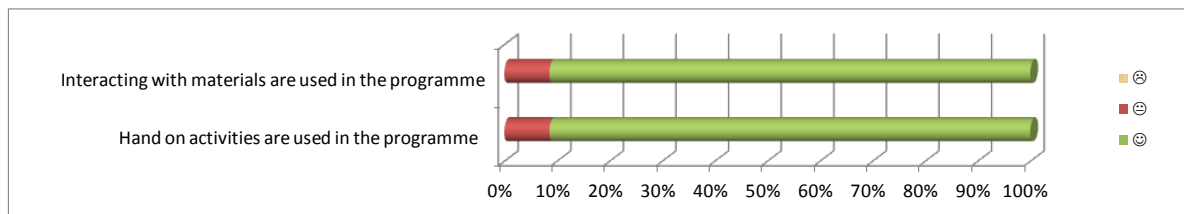
6. Learning by research and inquiry



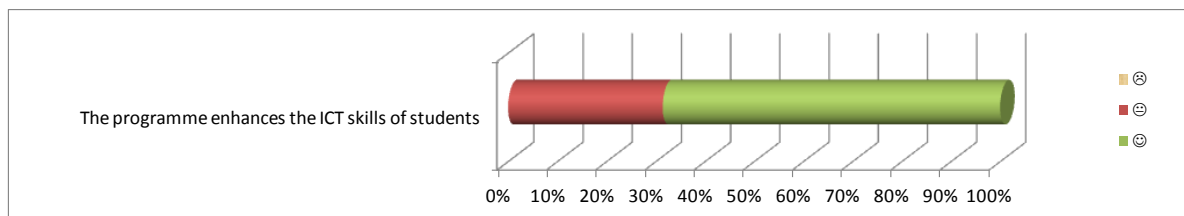
The learning activity supports following features:



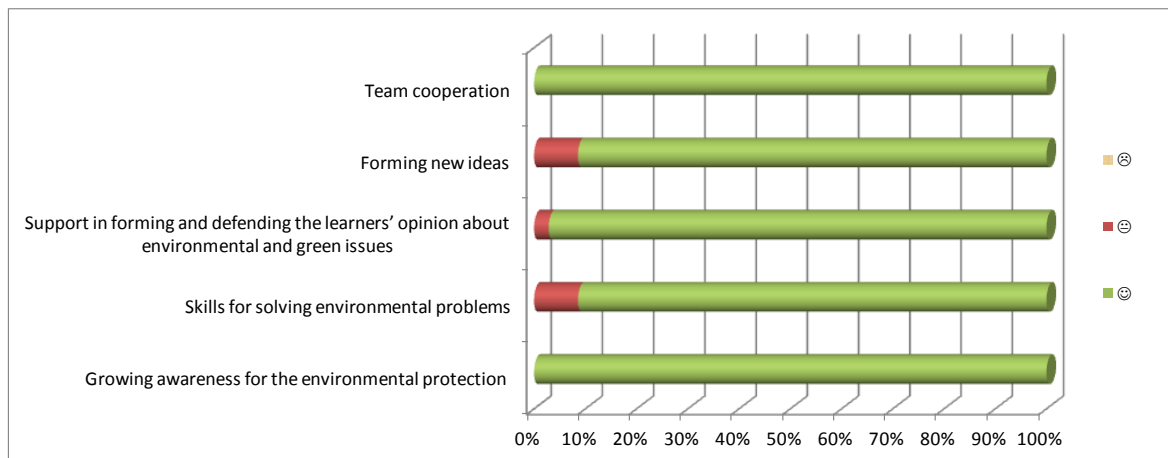
7. Activation of the students by hands-on



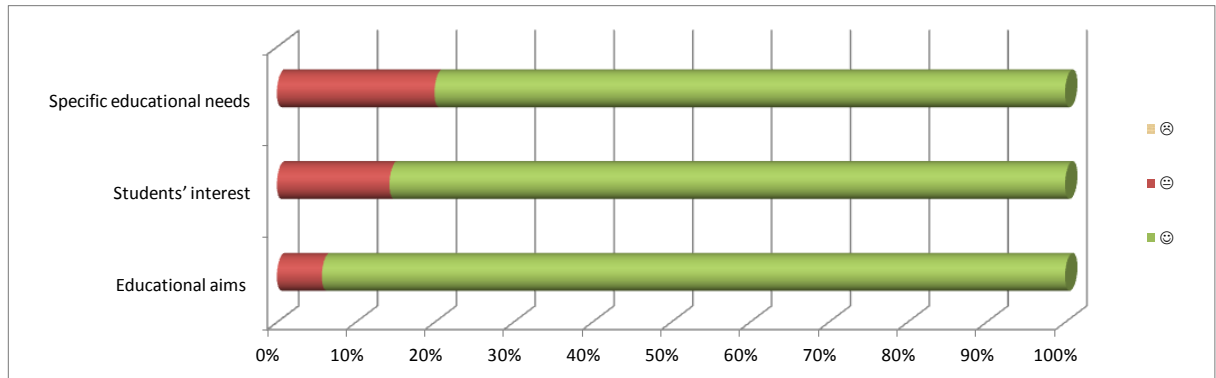
8. Enhancement of students' ICT skills



9. The learning activity supports the development of following social skills



10. The programme is easily adaptably for



3.8 Rio 92 +

Dates of evaluation: 30.10.2014, 05.11.2014, 16.12.2014

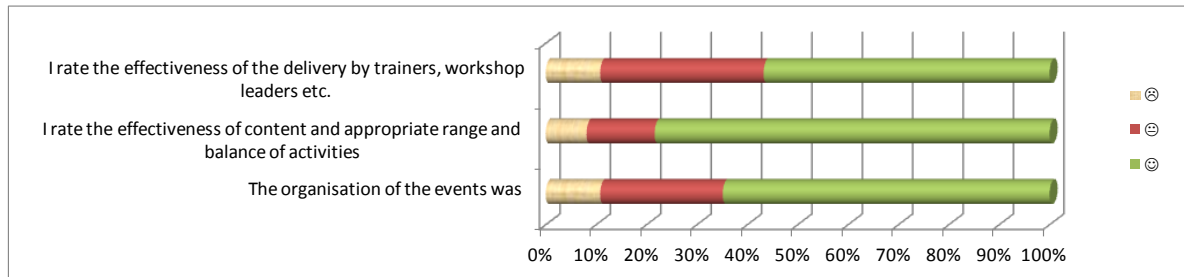
Country: Austria

Participants working with students in the age of: 16-19

Number of participants evaluated the best practice: 37

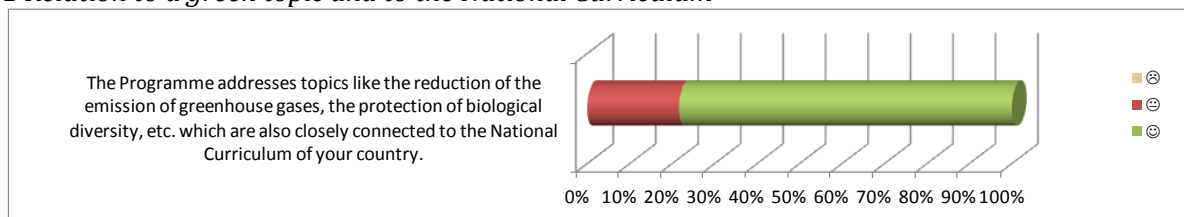
Based on the questionnaire (cf. Annex 1) the evaluation shows following results:

Section 1: Feedback for the event:



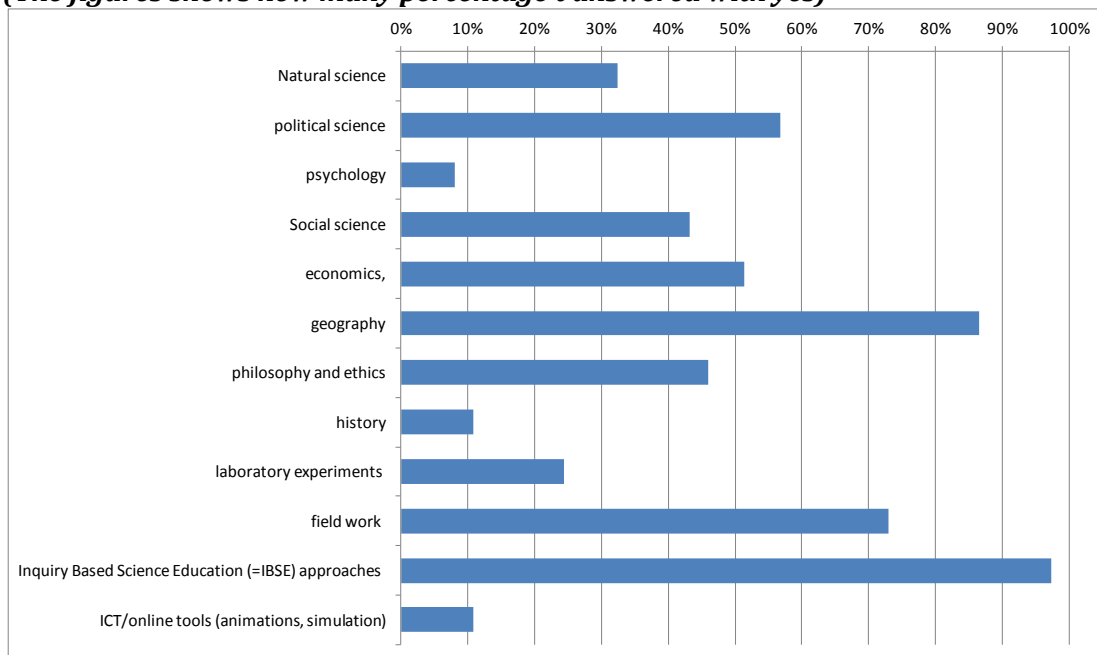
Section 2: “voice of user”:

1 Relation to a green topic and to the National Curriculum

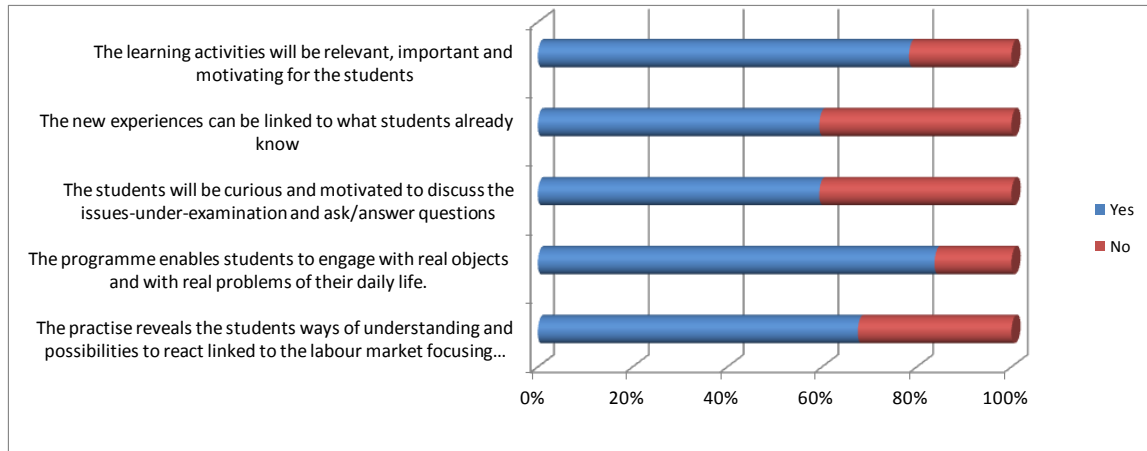


2. Being interdisciplinary: Drawing upon many academic disciplines and teaching methods, does the programme include following elements?

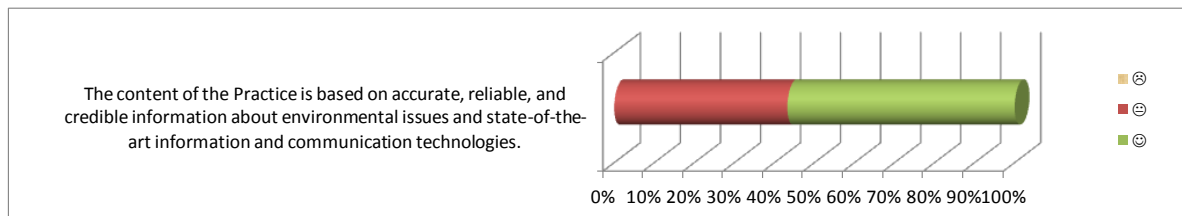
(The figures shows how many percentage t answered with yes)



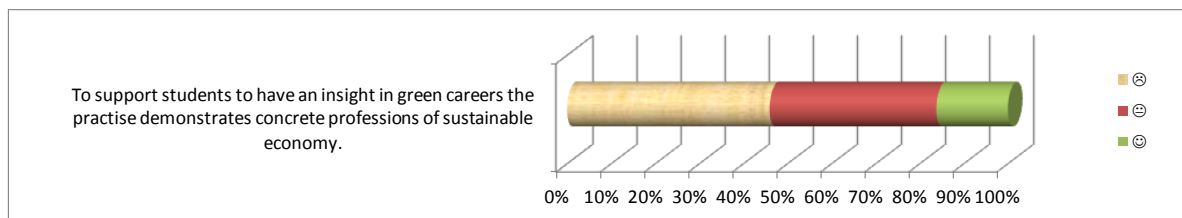
3. Relevance to the daily life of students



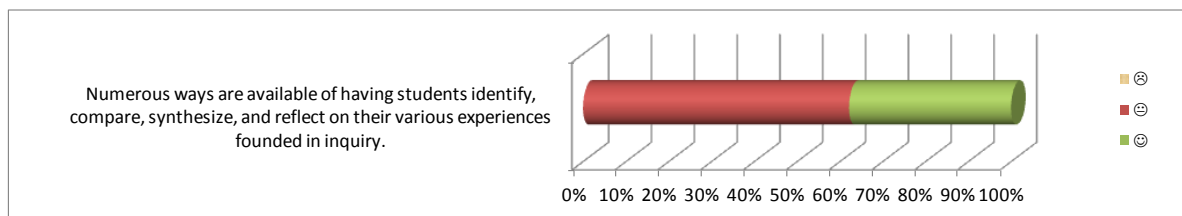
4. Based on accurate and factual professional expertise



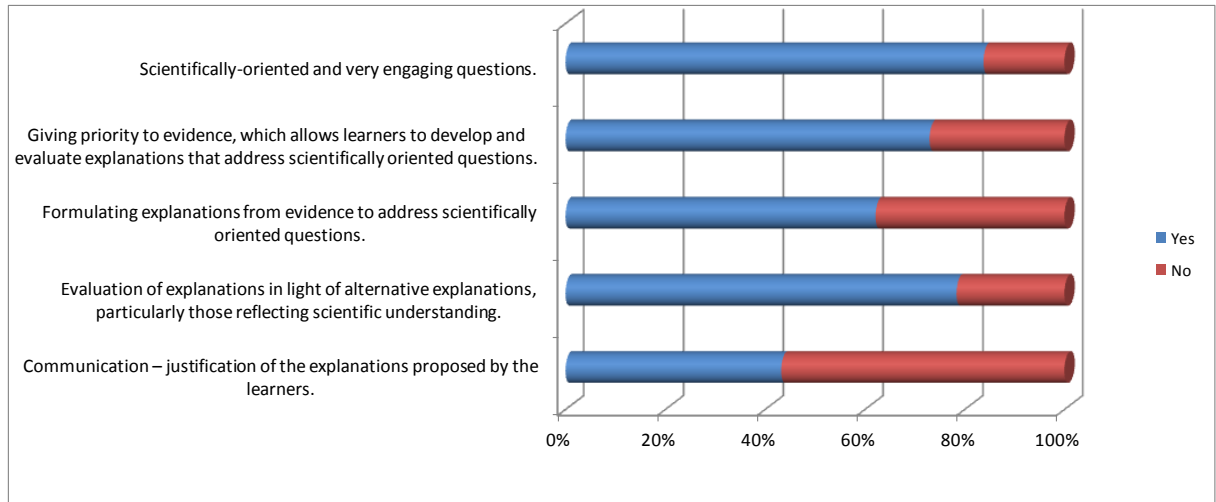
5. Connection to professions in the green labour market



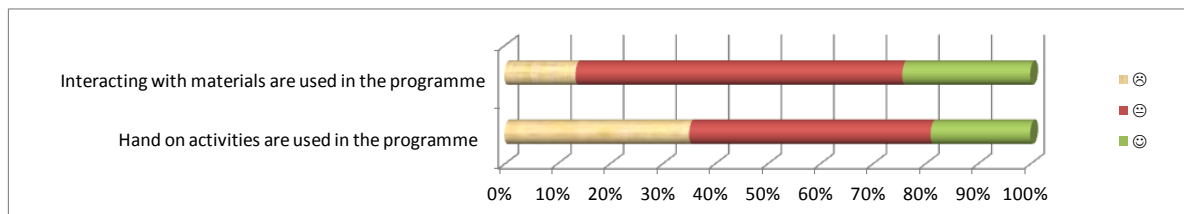
6. Learning by research and inquiry



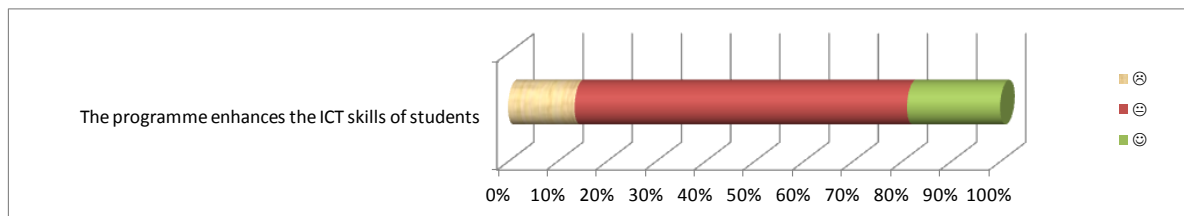
The learning activity supports following features:



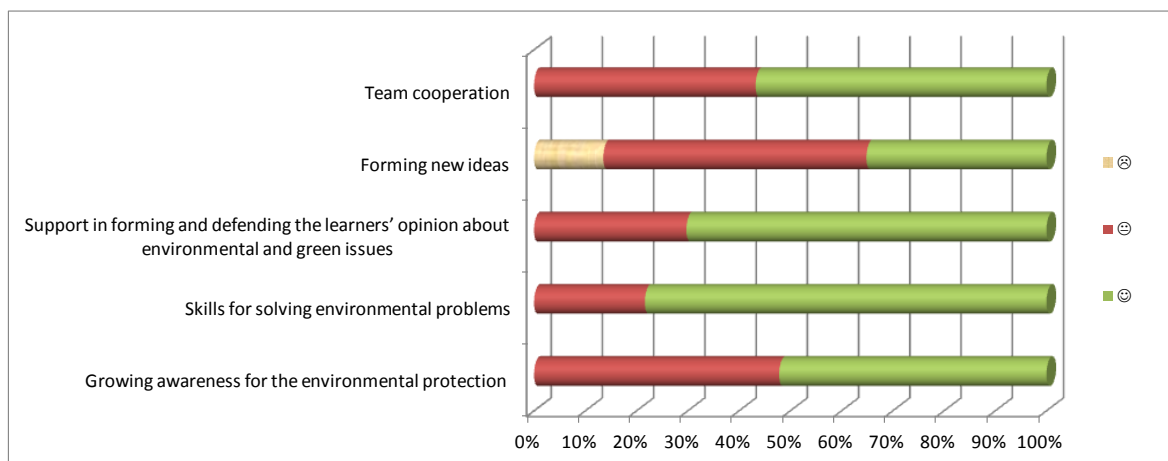
7. Activation of the students by hands-on



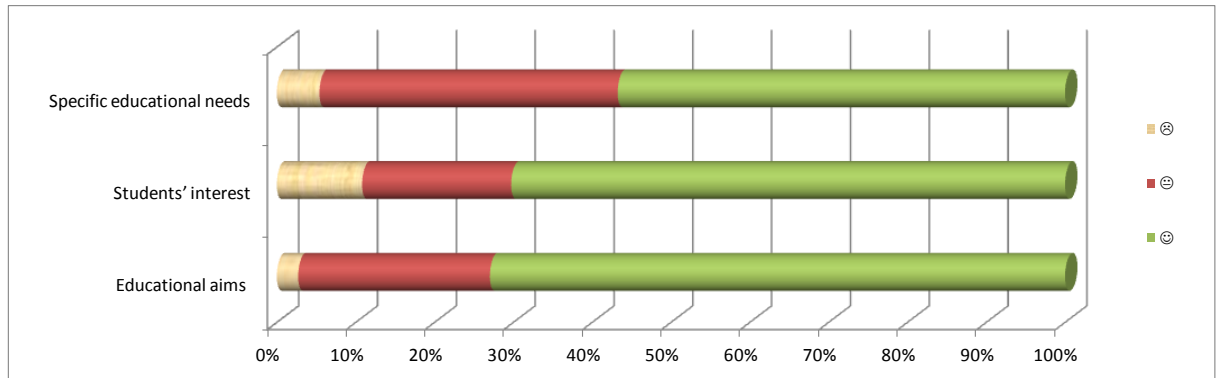
8. Enhancement of students' ICT skills



9. The learning activity supports the development of following social skills



10. The programme is easily adaptably for



3.9 Schule des Essens

Dates of evaluation: 16.03, 08.04, 09.04.10.04.2015

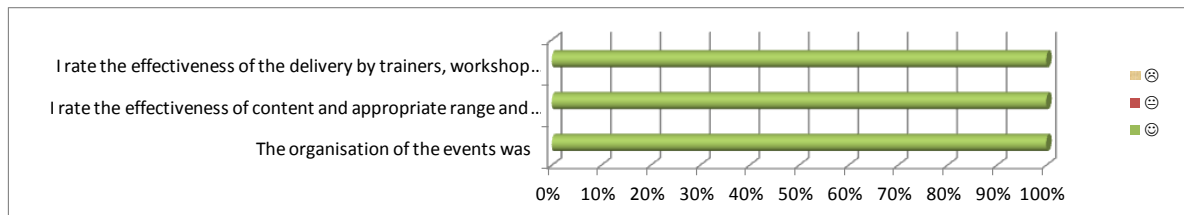
Country: Austria

Participants working with students in the age of: 6-12, 13 -15

Number of participants evaluated the best practice: 12

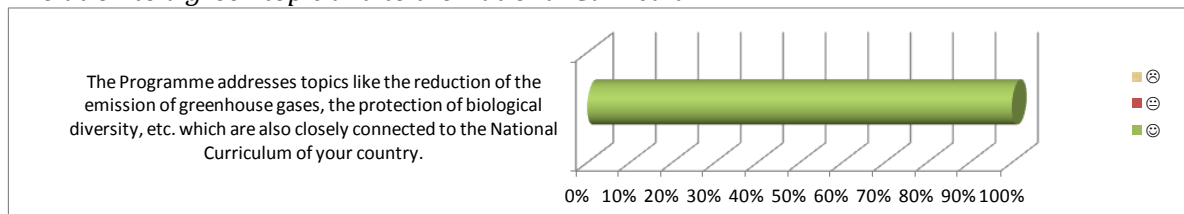
Based on the questionnaire (cf. Annex 1) the evaluation shows following results:

Section 1: Feedback for the event:



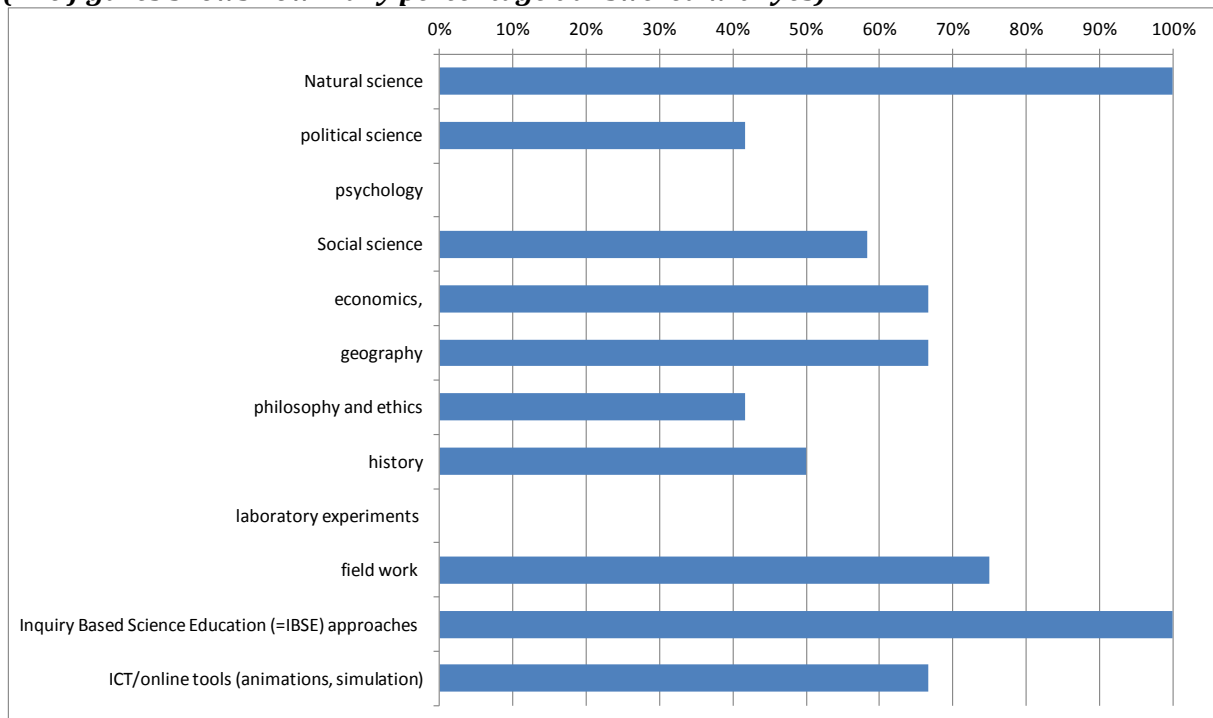
Section 2: “voice of user”:

1 Relation to a green topic and to the National Curriculum

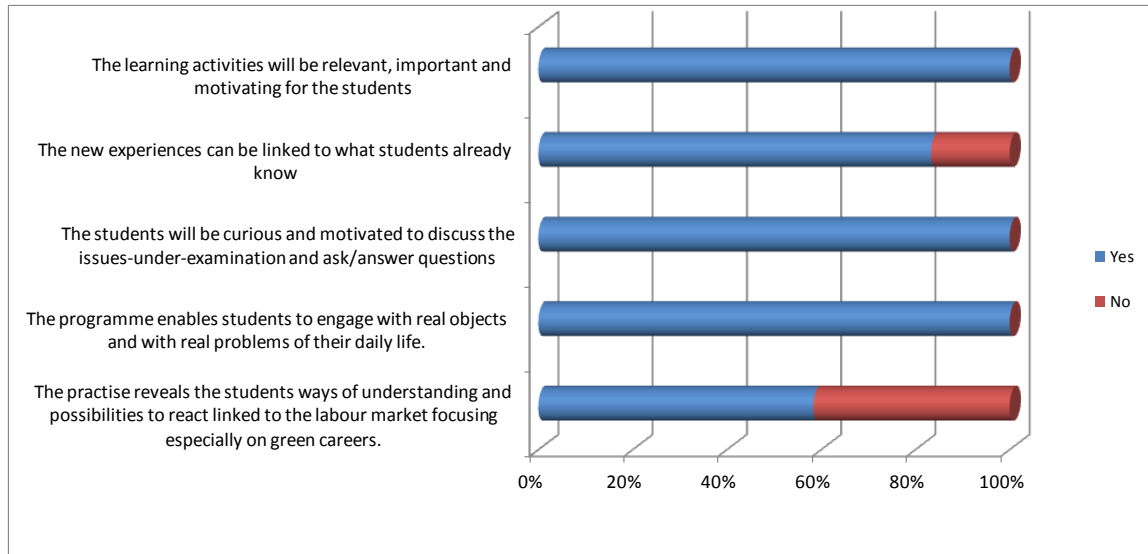


2. Being interdisciplinary: Drawing upon many academic disciplines and teaching methods, does the programme include following elements?

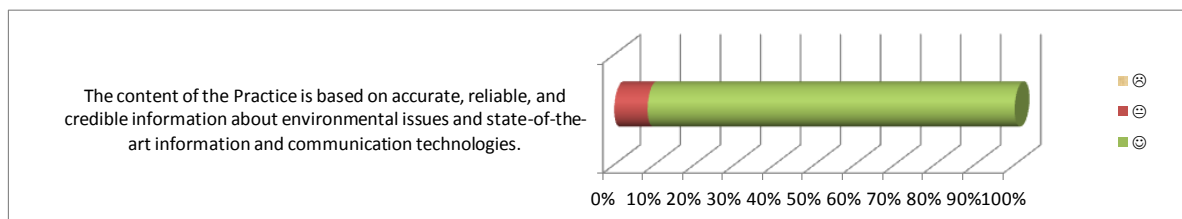
(The figures shows how many percentage t answered with yes)



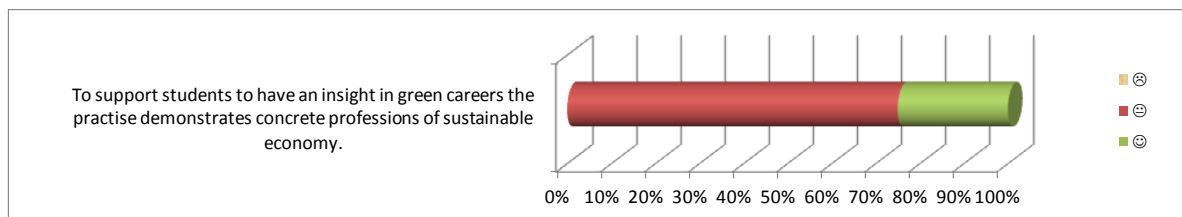
3. Relevance to the daily life of students



4. Based on accurate and factual professional expertise



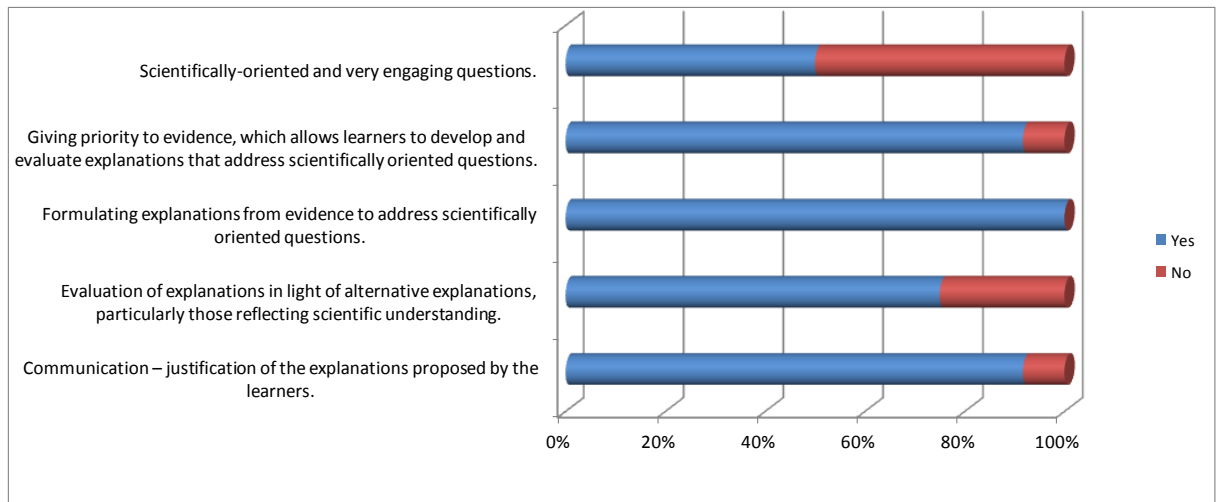
5. Connection to professions in the green labour market



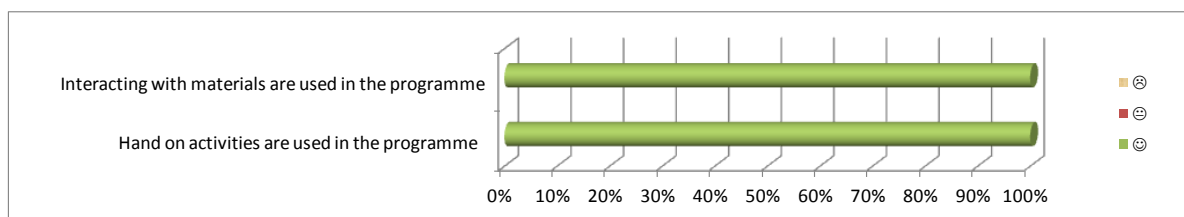
6. Learning by research and inquiry

No answers for the first question

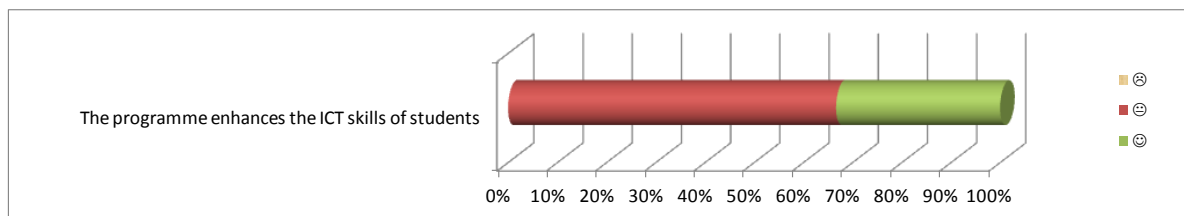
The learning activity supports following features:



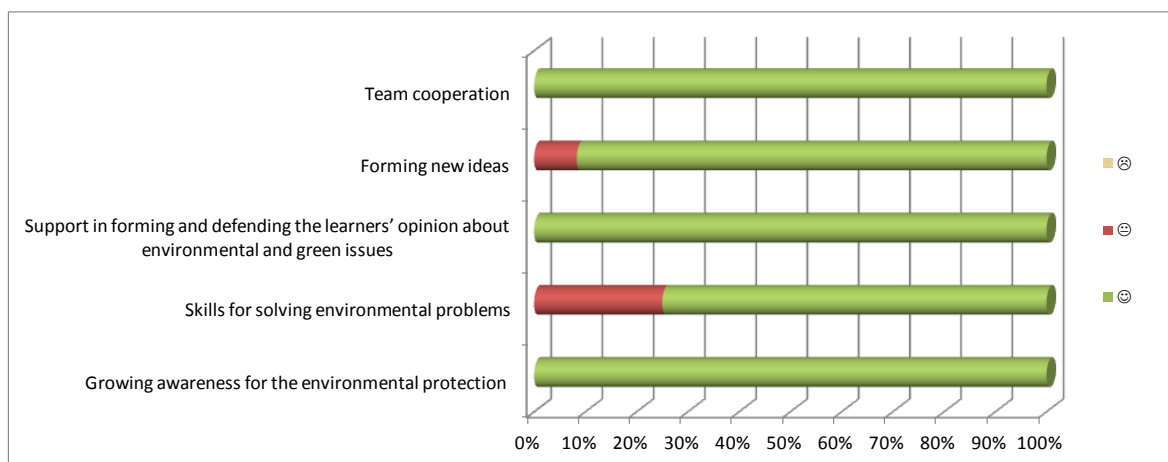
7. Activation of the students by hands-on



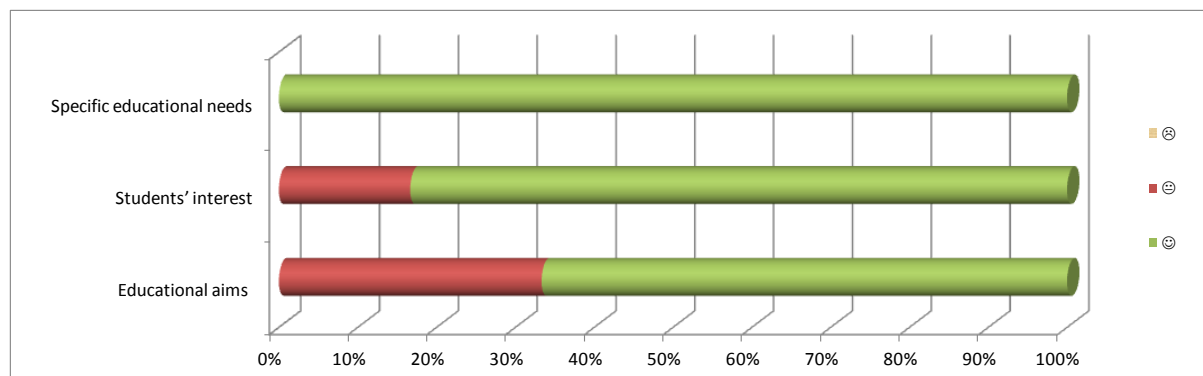
8. Enhancement of students' ICT skills



9. The learning activity supports the development of following social skills



10. The programme is easily adaptably for



Comments, Consequences, Conclusions

General remarks to the evaluation of the 2nd circle

The second circle to evaluate best practices was following the same procedures and method as in the first phase.

The evaluation approach in the second phase compares the results and outcomes of evaluation in the second phase with the results in the first phase.

This approach should consider the recommendations made by evaluation in the first phase, see D5.3.

These recommendations were divided into general recommendations concerning the process of implementation of best practices in sum and recommendations concerning the sections asked by the questionnaire.

Reflection of general recommendations from 1st circle

- To come closer to a common format concerning quantitative dimensions: it was intended, the participation in 2nd circle differs from 7 to 52, regarding the various conditions of implementation...
- The number of evaluated best practices should be increased – this aim could not be reached; instead of the recommended 20 best practices 15 in sum were evaluated
- The other aspects of general recommendations were respected and fulfilled within the ongoing project process

Recommendations concerning Sections

Evaluation regarding the recommendations focussed on section 1 to 10 of the committed criteria should be divided into the

- comparison of evaluated best practices in both circles and a
- comparison of different best practices

Only two best practices were evaluated in both circles:

- Energy Tomorrow
- School garden

There is no significant difference visible in the results of the evaluation

This could be interpreted in different ways

- No progress and effects from 1st phase to 2nd phase concerning the recommendation
- Valid outcome of evaluation - second evaluation confirm the evidence of first evaluation
- Time slot – time span to react is too short within a few months between 1st and 2nd phase

Evaluation of other best practices

The results of the evaluation should be interpreted in the same way as in the first circle.

Content and context of the best practices should be considered and interpreted.

As expressed before: The outcome of evaluation is not a kind of „ranking“, it should be a support for using practices in the right context, within the best fitting frameworks, and to improve elements and criteria to make the best benefit out of them.

Consequences

The common conclusions from the evaluation process within Circle1 and Circle2 are elements and criteria for the recommendations for the Validation phase, see Chapter 5

4 General events with specific focus within the 1st and 2nd implementation circle

4.1 Overview and method

If events within the 1st implementation circle were not combined explicitly to find out in detail the quality aspect of a learning activity / program or practice a general evaluation was developed. (cf. Annex 2). Additional focuses could be support the implementation within the own country. This is up the partners if they want to do so.

The decisions to use “Smiles” for evaluation were appreciated by the organizers, because it allows an easy and quick access to carry out the evaluation.

Level of Evaluation

Evaluations were undertaken by the participants of different events and activities.

The evaluation was done with paper and pencil in the national languages (if the partners wanted to do so) and summed up by the partners in an excel-sheet and by written feedback.

Table 6: Overview about general events within the 2nd implementation circle

No.	Country	The event was focused on...	Type of event	date	no of participants	Level of event	Teachers	Trainers	Stakeholders
1	ES	Support in conducting a Waste Prevention	Training activity	02.07.2014	11	local	11	0	0
2	ES	Working day of "Corporate Social Responsibility"	Working group	24.04.2014	9	local	9	0	0
3	AT	eLearning Conference Eisenstadt 2014	Working group	08.10.2014	8	national	5	1	2
			Total	5	28	0	25	1	2

Additional to the activities of implementation of best practices which were focussed on the evaluation of the practices 3 events were held in 2 countries of the network to promote the best practices and to require teachers, trainers and stakeholders to use different best practices in their own settings of daily work.

Following the results of the evaluations of the events are shown.

4.2 Austria

Name of Event: eLearning Conference Eisenstadt 2014

Date: 08.01.2014

Venue Eisenstadt

Level of Event: national

Kind of Event: working group

Number of participants: 8

Male: 4

Female: 4

Kind of participants:

Teachers: 5

Trainers: 1

Stakeholders: 2

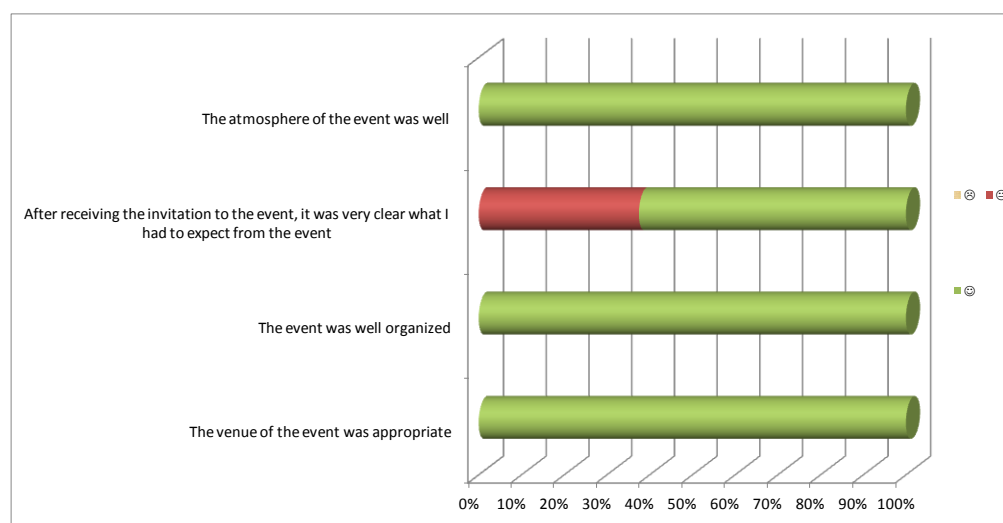
The implementation WS/ working group in the GreenNET project took place in the framework of the 3days “elearning Conference Eisenstadt 2014”

http://homepage.bildungserver.com/scms/content/index.php?kat_id=310&id=1012&bname=Programm+&schul_id=1033

The working group was called “GreenNET und Open Discovery Space: "Best Practice Beispiele" zur Umweltbildung unter innovativer Nutzung eines Metaportals” (GreenNET and ODS: Best Practices of environmental education and innovative usage of a metaportal”) and was held on 08.10.2014, 13:00 – 15:30

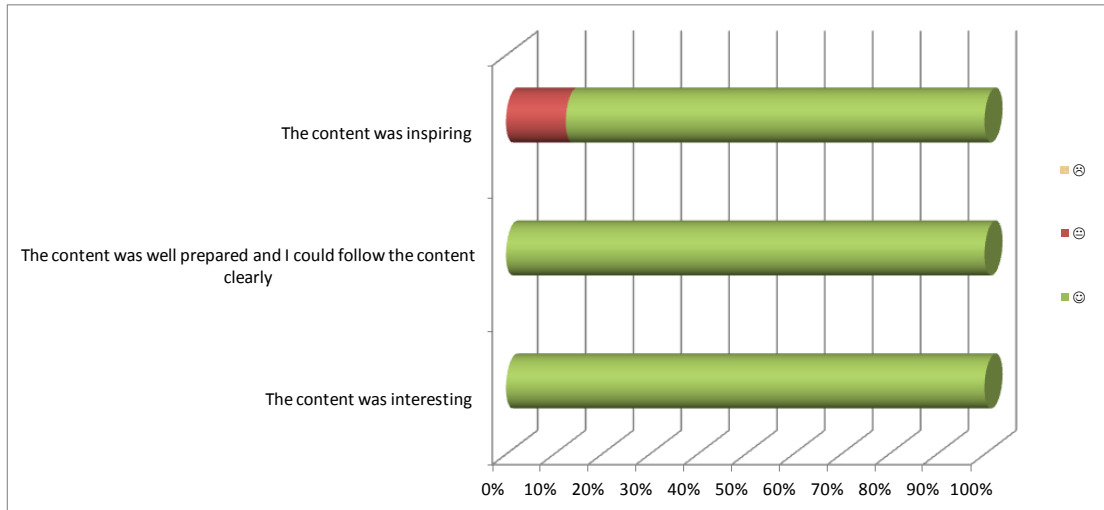
The results of the evaluation shows following:

1. Organisation



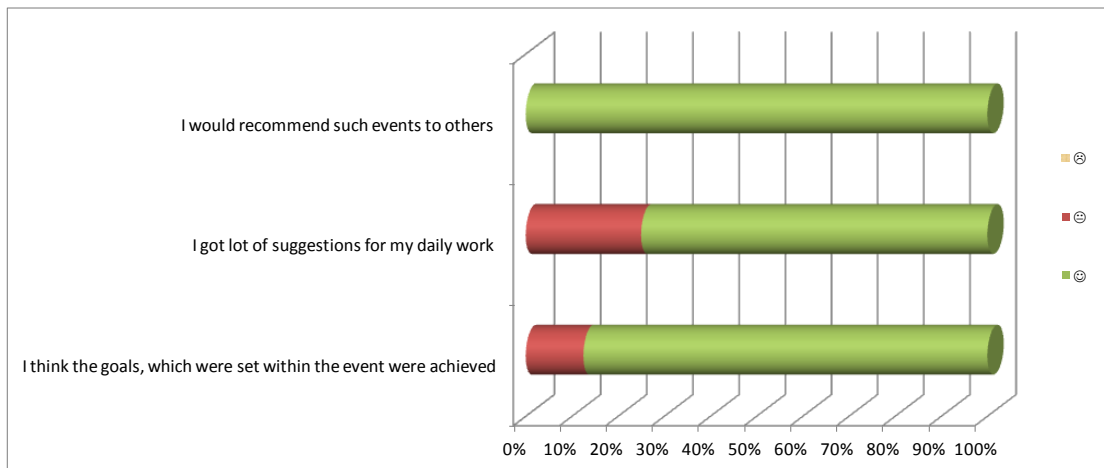
The event was highly evaluated concerning all indicators.

2. Content



The results of this area of evaluation shows a very high satisfaction with the content provided the organisers.

3. Results



Only the second question concerning the suggestions for daily work was not evaluated and the 3rd was evaluated a little bit lower.

4.3 Spain

Name of event: Working day of "Corporate Social Responsibility"

Date: 24.04.2014

Venue: IES Narcís Monturiol, Barcelona

Level of event: Local

Kind of event working group

Number of participants: 9

Male 5

Female 4

Kind of participants:

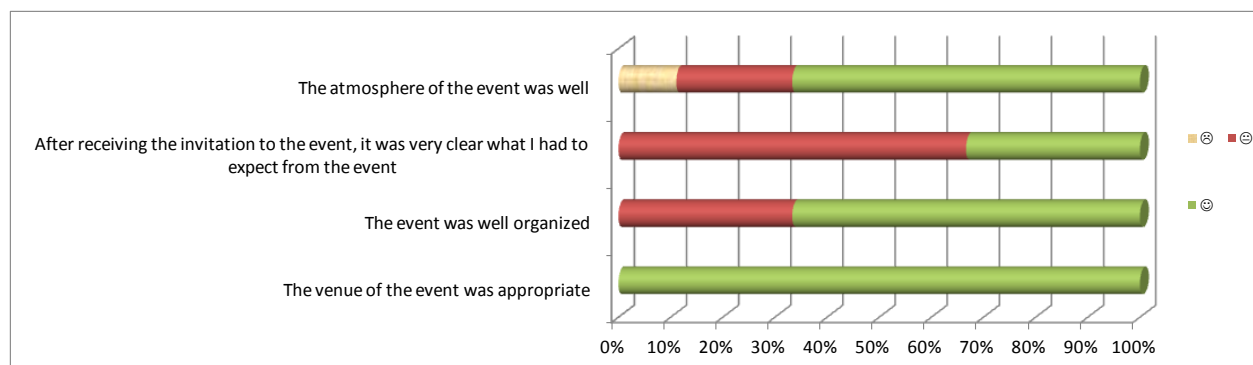
Teachers: 6

Trainers:

Stakeholders:

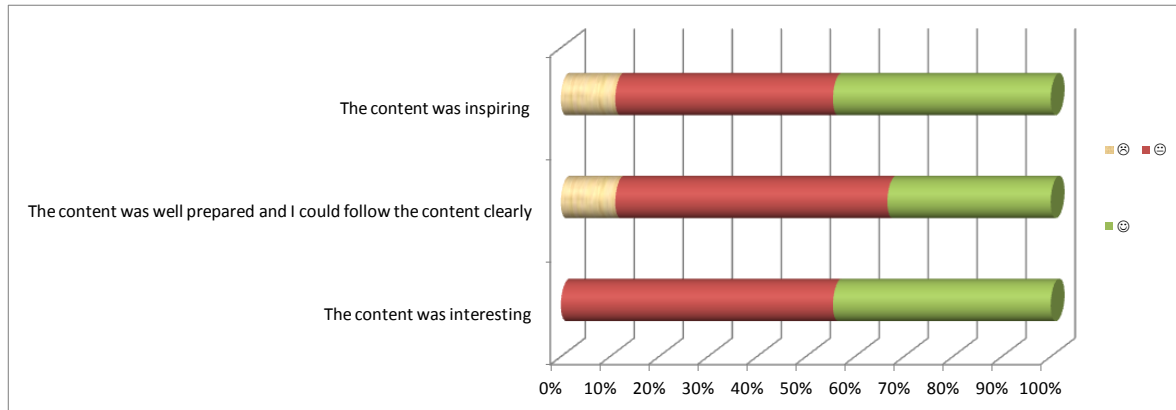
The workshop was a training activity for teachers and students of professional training from 3 different schools involved in the Barcelona School Agenda 21 Programme. The aim of the session was explain what is "Corporate Social Responsibility" from theoretical concept to some practical applications in the world of entrepreneurship.

1. Organisation

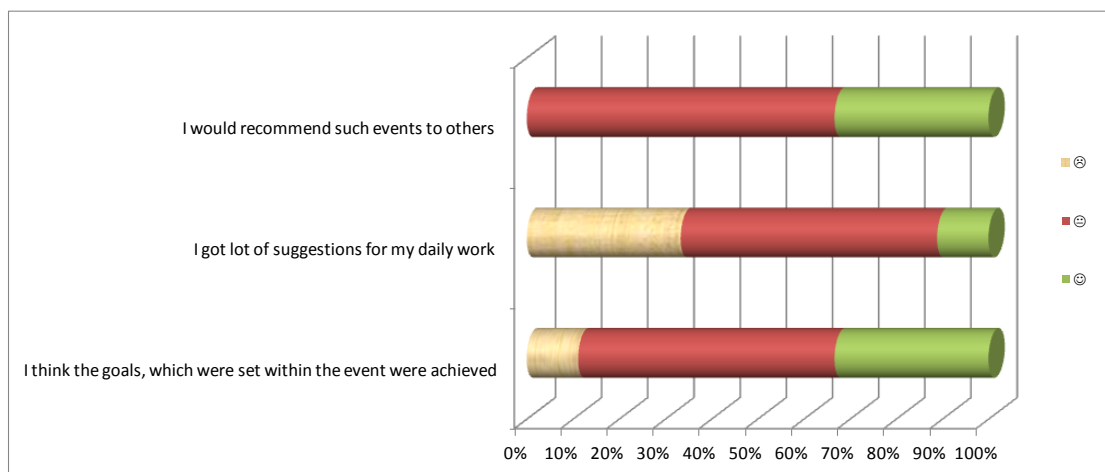


The evaluation gives the impression of a high quality of organisation of the event concerning the venue, the goals after the invitation; only the atmosphere was not highly evaluation from all participants; whereas the content – see below was evaluated differently.

2. Content



3. Results



One thesis if looking on these results of the evaluation could be to give more hands on activities for the daily work for the teachers.

Name of event: Support in conducting a Waste Prevention

Date: 02.07.2014

Venue: IES Narcís Monturiol, Barcelona

Level of event: Local

Kind of event Training activity

Number of participants: 11

Male 3

Female 8

Kind of participants:

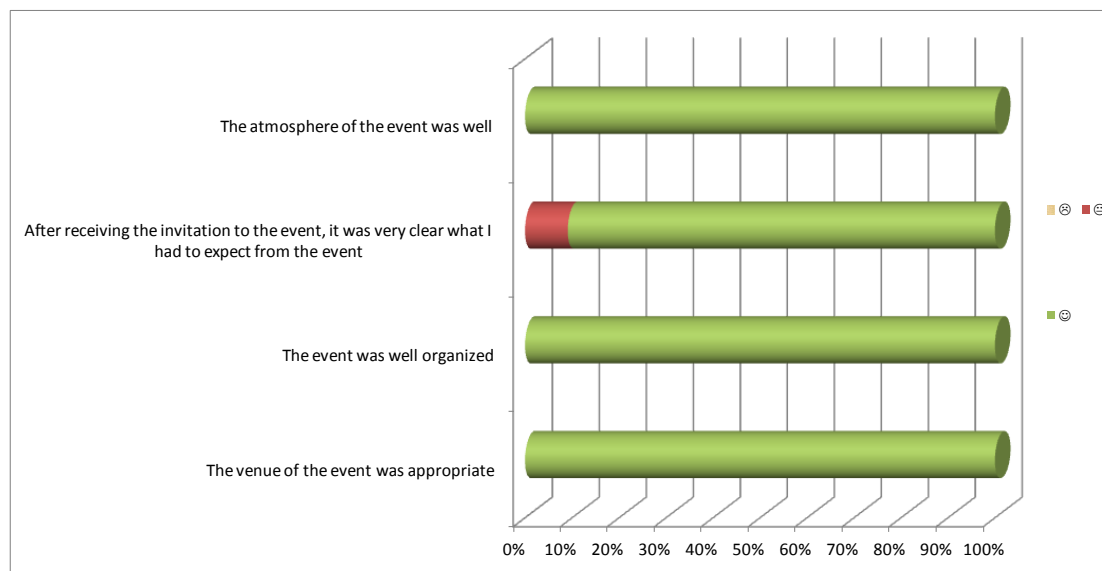
Teachers: 11

Trainers:

Stakeholders:

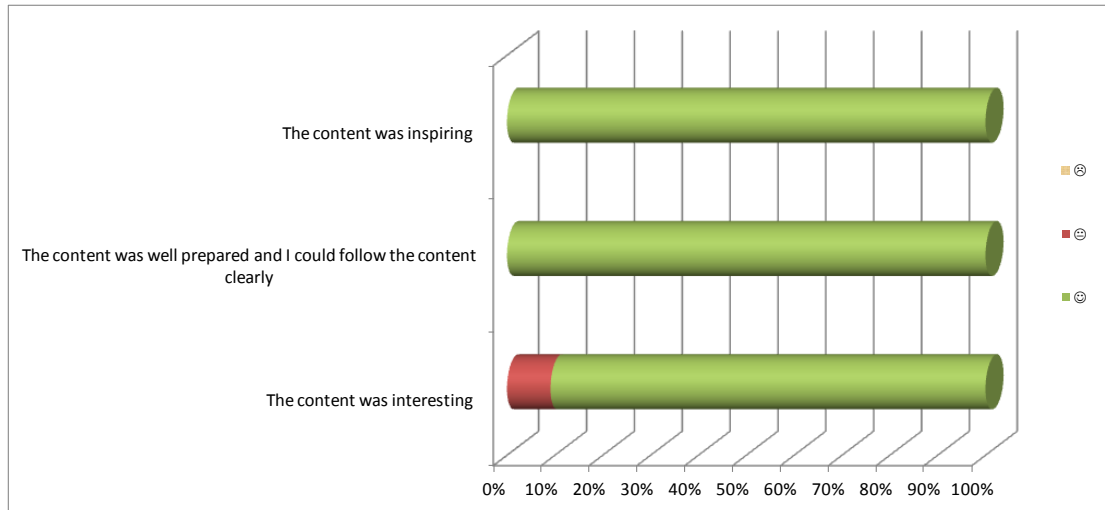
It was the four training activity addressed to the teachers of eight centres of “The Barcelona School Agenda 21 Programme”, which are participating in a project for developing Waste Prevention Plans in schools. The objective of this waste project is to give support at teachers by 4 training group activities and 16 individual implementation visits at school (2 visits at each school, 2 x 8 = 16 visits).

1. Organisation

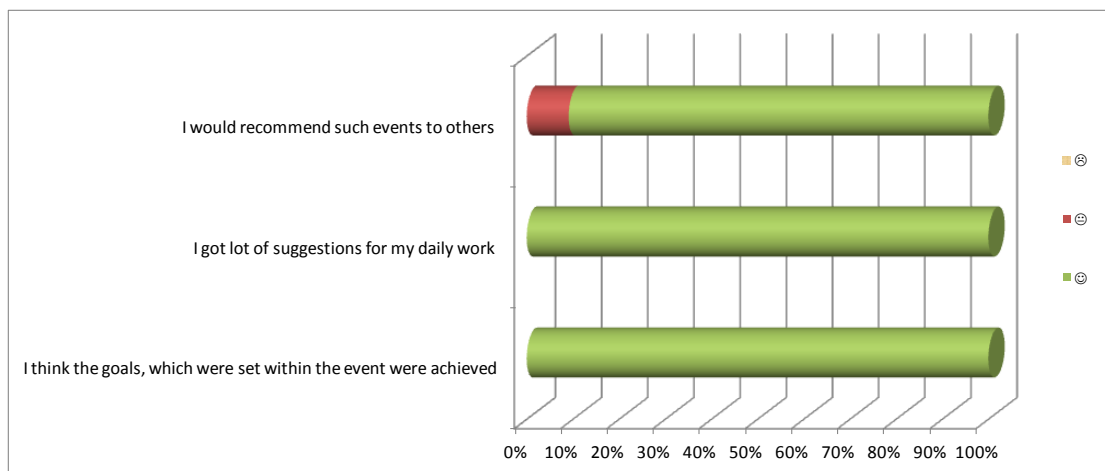


The evaluation results show in all 3 categories very high level of satisfaction of the participants!

2. Content



3. Results



The evaluation of the events within GreeNET shows no consistent picture.

- There are some outstanding positive results as well as quite problematic feedbacks concerning preparation, interesting contents and satisfaction of participants.
- Respecting the number of evaluated events this is not a representative documentation.
- But; it is a clear order to take the responsibility for high quality, user friendly and client orientated organization of any events d activities

All events are additionally described as events and available in the internal platform.

5 Recommendations for Validation Phase

5.2 *Evaluation of Best Practices*

The detailed evaluation of the best practices is based on the feedback of users on 9 best practices, out of 7 partners, used in sum 13 times.

The number of feedbacks per evaluated best practice differs from 7 to 52. The difference between the numbers of users is less than in the first circle, but also a great variety concerning quality and validity of the evaluation outcomes exists. It can be explained due to the fact of differences in organising such events in the different countries based on the different conditions especially when organising events and trainings for teachers.

The evaluation of best practices in GreeNET within the 2nd circle follows the principles, criteria and processes of the evaluation within the 1st circle, in respect of the general and special recommendations documented in the Evaluation of the 1st implementation circle.

In the 2nd circle 9 best practice projects and programmes were evaluated, 2 of them the second time, in sum in circle one and 2 35 implementation

A progress in central quality elements in the ongoing implementation process is visible, data are more complete, feedback becomes more consistent, in sum 444 participants in 142 schools give a qualitative insight in relevant aspects of implementation following the common evaluation questionnaire. Some developments concerning common aims and objectives, as there are e.g. the stronger focus on a „green labour market“ could be seen.

Depending on different circumstances in various cases of implementation, also caused by different approaches of best practice programmes, of different conditions for implementation in the partner countries there could not be an exact comparability of the results. But, in a broader view, the messages out of the evaluation can give a helpful orientation for further processes, within GreeNET validation process and further activities beyond the lifetime of the network GreeNET.

The following general recommendation should give an incentive to work together, and in each responsibility area of the partners and their local, national and European networks and co-operations

General Recommendations

- Results of the Evaluation should be discussed within the remaining duration of GreeNET, reflecting the outcomes of additional working approaches of the network.
- Each partner should have a closer look to the results of implementation processes they are responsible for, also in comparison to implementation processes in other countries.

- Each partner should analyse differences, pro's and con's between interesting implementation processes, and filter out the essential elements to improve own activities, to support adaptation and transfer activities – outgoing and incoming, also in other European countries.
- A continuous focus must be given on the aspect of benefit for participants on green education *programmes for existing and upcoming areas of labour market. Contact and co-operation with enterprises and experts out of the „green labour market“*. This aspect is not restricted on special branches in that area, the necessity of „green thinking“ and „environmental emphasis“ is a need in a growing field of labour market.
- The remaining common working time within GreeNET should be used to bring together the result of this evaluation with all other outcomes within GreeNET and find common perspectives to use all outcomes and results in a continuous and sustainable way further on.

Section 1 Organization, effectiveness of content and delivery

- In comparison to the first circle the satisfaction by the participants with the effectiveness of the delivery by trainers, workshop leaders etc. was significant increasing.
- Also the participants rated the effectiveness of content and appropriate range and valance of activities better than in the first circle.
- Also the organisation of events was rated on a significant higher level.

In all 3 areas the recommendations were taken under consideration.

Recommendation for validation phase: To continue the good progress for the organisation of events, contents, methods for the events etc.

Section 2: “Voice of user”:

1. Relation to a green topic and to the National Curriculum

The results of the evaluation of the second circle show a progress in the right direction. It seems the practices were explained in a better way concerning the national curricula and concerning the age group of the practices. It is important to show the connection between the program and the national curricula in a visible and detailed way.

Recommendation for validation phase: It seems to be useful to discuss more in detail about the practises within and after implementation to find out the proper links to the curricula in each country.

2. Being interdisciplinary: Drawing upon many academic disciplines and teaching methods

The results show a continuing different approach of interdisciplinarity like in the first circle. There is no significant difference to the impression of the first circle evaluation. So the same recommendation is given for the validation phase.

Recommendation for validation phase: clear focus on interdisciplinary practices, but not to overload single issues with all possible aspects

3. Relevance to the daily life of students

Again most of best practices are rated high or very high to the issue “relevance for daily life” – with some little exceptions.

This underlines that it seems to be a very positive aspect from the personal and pedagogical point of view.

Recommendation for validation phase: To continue this aspect consequently during the network lifetime within the next phase of validation and beyond.

4. Based on accurate and factual professional expertise

Like in the first phase in this issue great differences are visible.

Recommendation for validation phase: Stakeholder analysis can be useful to come to consistent results concerning professional for best practises and in general concerning the state of the art.

5. Connection to professions in the green labour market

The results are still quite different, but it is visible that in the second circle was a stronger focus on this issue. But still due to the fact of the focus of the networks activities more information and feedback is needed for this topic.

Recommendation for validation phase: To involve more companies in the next phase to check their expectations concerning practises at schools and the relevance of the connection between practises and the green labour market.

6. Learning by research and inquiry

It is still obvious that not all of the best practice examples could have the same background of research and inquiry. But, no “best practice” should be used without any background of research and inquiry. Based first the first recommendation to make more visible a research and inquire background a smooth improvement can be seen in this topic. Also more materials were available on the platform and moodle during the second phase.

Recommendation for validation phase: It is recommend to focus in same events on special topics to go more in detail also for research and inquiry based activities.

7. Activation of the students by hands-on

Enough data were collected the results show a high level of hands on activation by the students, which are relevant also for e.g. career guidance and counseling to be able to connect hands on with working life but also for personal life.

Recommendation for validation phase: Activation and motivation by interaction and hands on should be an element of all practises in the next phase.

8. Enhancement of students' ICT skills

Enough are collected and some practises show a high level also for the ICT skills. It is a core competence also on labour market but should not substitute hands on activities which foster more in a personal way the environmental education of young people.

Recommendation for validation phase: The databases and moodle and ODS should be distributed amongst the teachers to promote also ICT skills in EE.

9. The learning activity supports the development of following social skills

Some effects are visible like team cooperation and Learners opinion about environmental and green issues. This is essential for EE.

Recommendation for validation phase: Continuation of dissemination of the effects for development of social skills by practises at school.

10. The programme is easily adaptably for...

The data underlines the first estimation of a positive effect concerning the aspect of adaptation and transferability, addressing both educational aims as well as students' interests. But of course it is depending on the topic of the practise.

Recommendation for validation phase: The next phase gives the opportunities to have a closer look to the principles and criteria of the different practises to find out how they are they transferable for the different purposes and under different conditions.

Section 3: The materials of the programme / practice and general feedback

Still after the second phase the available data show positive effects concerning the items practicability of materials, structure, pedagogical methods etc. Due to the fact of necessity for translation of practices of other countries this would need more time also for evaluation.

Recommendation for validation phase: It is recommended to give as more detailed materials as possible to the platforms like moodle and ODS.

Section 4: Feedback concerning the training

The data available for this section was not enough to make comparable analysis.

Recommendation for Validation phase: Re-evaluation if this sections is needed.

5.3 *General events*

3 general events were organized within the 2nd implementation circle with topics of use E-Learning, Cooperation Social Responsibility and Waste Prevention with local and national scope.

Most of participants were teachers and also some stakeholder took part in one of these events.

The feedback concerning organizational and content topics seems quite positive.

The only issue which was not considered from the responders as important was the connection of the event with the teacher's daily work.

General recommendation

Based on the feedback of the 3 events in Spain and Austria are to have more incentives for the teachers and trainers with materials and inputs for their daily work. This can be undertaken with materials for teaching or hits and tips and links for where they can find more materials.

6 Annexes

6.2 Annex 1: GreeNET Implementation Activity: Questionnaire for Teachers / Trainers

GreeNET Implementation Feedback Form

Name of programme:

Questionnaire for Teachers / Trainers

Country:

Name of school:

Type of school:

Please let us know the age of students in your school:

- 6-12 13-15 16-19
Subject you teach: Physics Mathematics
 Biology Chemistry
 other _____

You are female male
(Please mark)

Thank you for supporting us with feedback on the activity you participated in 😊

Section 1: Please support us first with your feedback for the event:

The organisation of the event was

☹ 😐 😊

I rate the effectiveness of content and appropriate range and balance of activities

☹ 😐 😊

I rate the effectiveness of the delivery by trainers, workshop leaders etc.

☹ 😐 😊

Section 2: Please support us with your “voice of user”:

1. Relation to a green topic and to the National Curriculum

The Programme addresses topics that are closely connected to the National Curriculum of your country.

☹ 😐 😊

Remarks for improving:

2. Being interdisciplinary: Drawing upon many academic disciplines and teaching methods

- | | | |
|--|--|-------------------------------------|
| <input type="checkbox"/> Natural science | <input type="checkbox"/> Social science | <input type="checkbox"/> economics, |
| <input type="checkbox"/> political science | <input type="checkbox"/> history | <input type="checkbox"/> geography |
| <input type="checkbox"/> psychology | <input type="checkbox"/> philosophy and ethics | |

The programme includes

- laboratory experiments
- field work
- Enquiry Based Science Education approaches
- ICT/online tools (animations, simulation)

Remarks for improving:

3. Relevance to the daily life of students

The learning activities will be relevant, important and motivating for the students	yes	no
The new experiences can be linked to what students already know	yes	no
The students will be curious and motivated to discuss the issues-under-examination and ask/answer questions	yes	no
The learning activity enables students to engage with real objects and with real problems of their daily life	yes	no
The practise reveals to the students new ways of understanding and possibilities for personal choices especially linked to green careers	yes	no

Remarks for improving:

4. Based on accurate and factual professional expertise

The content of the learning activity _____ is based on accurate, reliable, and credible information about environmental issues and on state-of-the-art information and communication technologies.

☹ 😐 ☺

Remarks for improving:

5. Connection to professions in the green labour market

The learning activity _____ demonstrates concrete professions of sustainable economy, to support students to have an insight in green careers.

☹ 😐 ☺

Remarks for improving:

6. Learning by research and enquiry

There are numerous enquiry-based ways of inspiring students to identify, compare, synthesize, and reflect on their various experiences.

I believe that the learning activity _____ supports the following features:

Scientifically-oriented and very engaging questions.	yes	no
Giving priority to evidence, which allows learners to develop and evaluate explanations that address scientifically oriented questions.	yes	no
Formulating explanations from evidence to address scientifically oriented questions.	yes	no
Evaluation of explanations in light of alternative explanations, particularly those reflecting scientific understanding.	yes	no
Communication – justification of the explanations proposed by the learners.	yes	no

Remarks for improving:

7. Activation of the students by hands-on

The learning activity includes hands-on activities ☹️ 😐 😊	The learning activity includes interaction with various materials ☹️ 😐 😊
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Remarks for improving:

8. Enhancement of students' ICT skills

The programme enhances the ICT skills of students

☹️ 😐 😊

Remarks for improving:

9. The learning activity supports the development of following social skills

Team cooperation ☹️ 😐 😊	Forming new ideas ☹️ 😐 😊
Support in forming and defending the learners' opinion about environmental and green issues ☹️ 😐 😊	Skills for solving environmental problems ☹️ 😐 😊
Growing awareness for the environmental protection ☹️ 😐 😊	

Remarks for improving:

10. The programme is easily adaptable for

Specific educational needs ☹️ 😐 😊	Students' interest ☹️ 😐 😊
Educational aims ☹️ 😐 😊	

Remarks for improving:

Section 3: The materials of the programme / practice and general feedback

The structure supports easy retrieval of themes and topics for teaching elements of environmental education as an opportunity to make environmental education accessible at primary and secondary school level.

The spelling style is linked to the target group: teachers / trainers

Subject-related vocabulary is used

Didactic concepts and methods used are appropriate

The structure of the practices is well explained and useable for the teachers to find out elements for daily work

The content is adequate for using it in the teaching unit

The time practicability is described in a proper way

Section 4: Feedback concerning the training

The training approach used in this event was for you



Please give a feedback for the educational approach and ideas



The materials you got are in your opinion



Section 5: You are kindly invited to give any general remarks:

Thank you for your support!

6.3 Annex 2: Feedback form / Evaluation form for general events

Date: (insert the date)

Venue. (please insert the venue)

Dear participant of the event (insert the name of the event)

Thank you for your participation.

Please support us with your feedback to some areas.

1. Organisation

The venue of the event was appropriate

The event was well organized

After receiving the invitation to the event, it was very clear what I had to expect from the event

The atmosphere of the event was well

2. Content

The content was interesting

The content was well prepared and I could follow the content clearly

The content was inspiring

3. Results

I think the goals, which were set within the event were achieved

I got lot of suggestions for my daily work

I would recommend such events to others

General remarks.....

Thank you for your feedback!