

HABITS & HEALTHY LIFESTYLES



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A SSIBL Approach with Interdisciplinary Studies & ICT

Introduction & Aim

The health situation for youngsters is problematic in many countries. In Sweden, for example obesity, diabetes and stress related issues are increasing. Hence working with this socio-scientific issue is important.

The aim of this poster is to present an interdisciplinary health project where teachers from several subject collaborate to develop students' knowledge about healthy food and healthy lifestyles and develop action competence for life. Focus is on the teaching method and the self-evaluation tool the students used to evaluate their inquiry-based project and the final presentation.

Teaching Sequence

The inquiry-based health project emphasized interdisciplinary studies and the use of Information and Communication Technology, ICT. A two hour introduction started with a short film, "Hungry Planet", about different global food habits. Information was also given about physical activity, sleep behavior and "hidden" sugar to give students diversity perspective of this socio-scientific issue. In pairs students discussed their families food for a week and the cost of it. Students learnt and practiced how to make an authentic question that is relevant, interesting, focused and suitable.

In pairs student made

- one question to investigate, then searched information and statistics to find answers (in all lessons)
- composed a Healthy Smoothie recipe with necessary biomolecules, made it and measured pH with red cabbage
- an interview with a couple of elder and asked how it was when they were young (Historical perspective)
- new questions were formulated that would be interesting to work further with
- presented their sources and gave source criticism
- made a Powerpoint presentation about their question that was recorded in English

During each lesson specific subject content were provided and discussed, figure 1. During and after the work students and teachers used a *Self-evaluation tool*, figure 2, to get and give feedback, formative assessment.

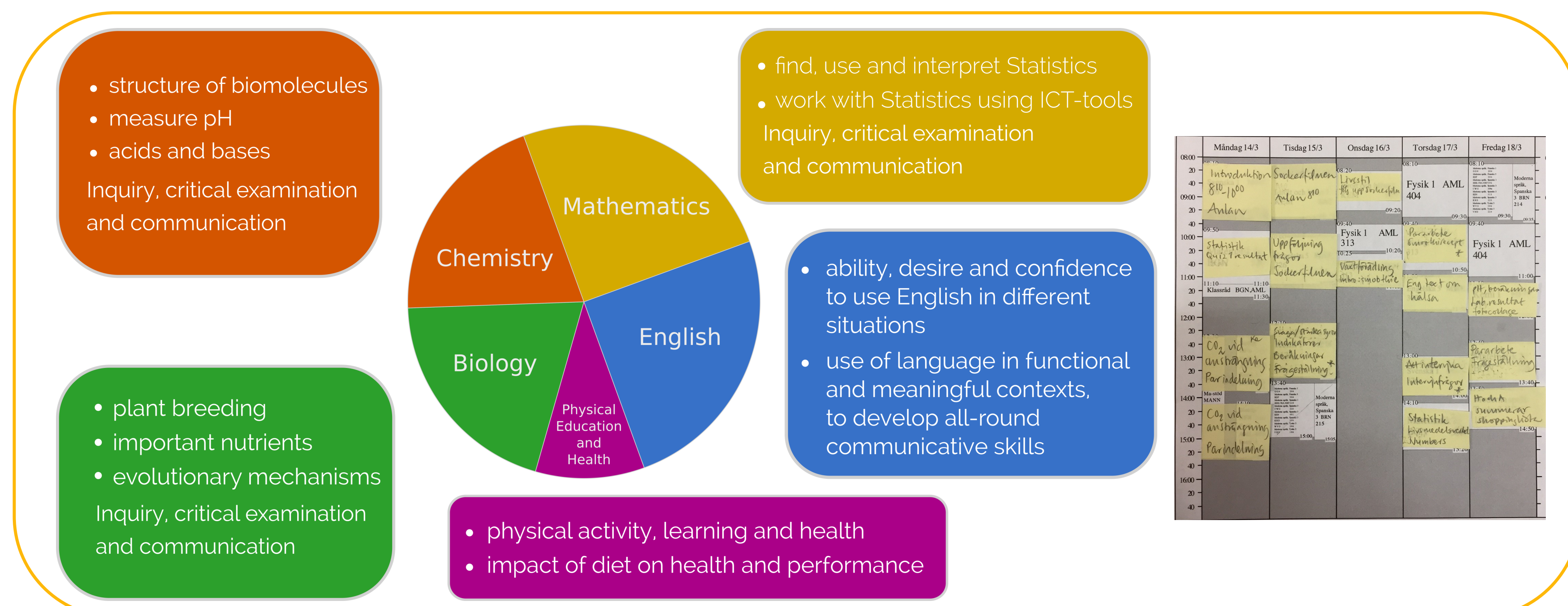


Figure 1. Interdisciplinary studies & students schedule

RESULTS

Students gained more knowledge and action competences about healthy food and lifestyles. Most of them realized the complexity of the global situation with obesity, diabetes and stress. Some changed their breakfast habits which is a result of developing action competence.

Students got higher skills in ICT such as

- use of Powerpoint, Excel, Mentimeter, Padlet, Kahoot!, Gapminder
- search information on Internet
- to be source-critical

Most pair of students formulated new interesting questions to investigate further.

Almost 80 % of the students thought that it worked well to work in pairs and to have the end product written and recorded in English.

Why should we decrease the meat consumption? HOW DOES SLEEP DEPRIVATION AFFECT A HIGH SCHOOL STUDENTS ABILITY TO LEARN?			
Question/issue	The question / issue is relevant.	The question / issue is to a large extent relevant.	The question / issue is to some extent relevant.
	The question / issue is interesting, focused & appropriate for the work.	The question / issue is interesting and to a large extent focused.	The question is interesting but narrow, making it difficult to answer.
Clear line of thought & disposition	The presentation has a clear line of thought which makes it easy to understand descriptions as well as reasoning and conclusions.	The presentation has a clear line of thought which makes it easy to understand descriptions and discussions.	A clear line of thought is suggested, the content is understandable and possible to follow.
Adapted to recipient	The content is varied and adapted to recipient (eg. specific ideas are explained)	The content is to a large extent varied and adapted to recipient.	The content is to some extent varied and adapted to recipient.
Pictures	The pictures are relevant for the chosen topic, which makes it easier to understand the presentation.	The pictures are to a large extent relevant for the chosen topic which makes it to understand the presentation.	The pictures are to some extent relevant for the chosen topic.
	There is a clear link between the pictures and the presentation.	There is a relatively clear link between the pictures and the presentation.	The link between the pictures and the presentation is somewhat clear.
Discussion	The student presents well-grounded arguments when it comes to making choices based on the question at hand.	The student presents own arguments when it comes to making choices based on the question at hand.	The student presents their own simple arguments when it comes to making choices based on the question at hand.
	Furthermore the student gives reasons for, and/or consequences of the health issues connected with the chosen question/topic.	Furthermore the student gives reasons for, and/or consequences of the health issues connected with the chosen question/topic.	Furthermore the student gives reasons for, and/or consequences of the health issues connected with the chosen
Question/issue	The question is fully answered and/or new questions have been formulated.	The question is to a large extent answered.	The question is to a certain extent answered.
Sources	The presentation refers to several relevant and trustworthy sources.	The presentation refers to some relevant and trustworthy sources.	The presentation refers to a few relevant and trustworthy sources.

Figure 2. Self-evaluation tool

Some changed their breakfast habits.

Working with the same project in many subjects has improved my learning.

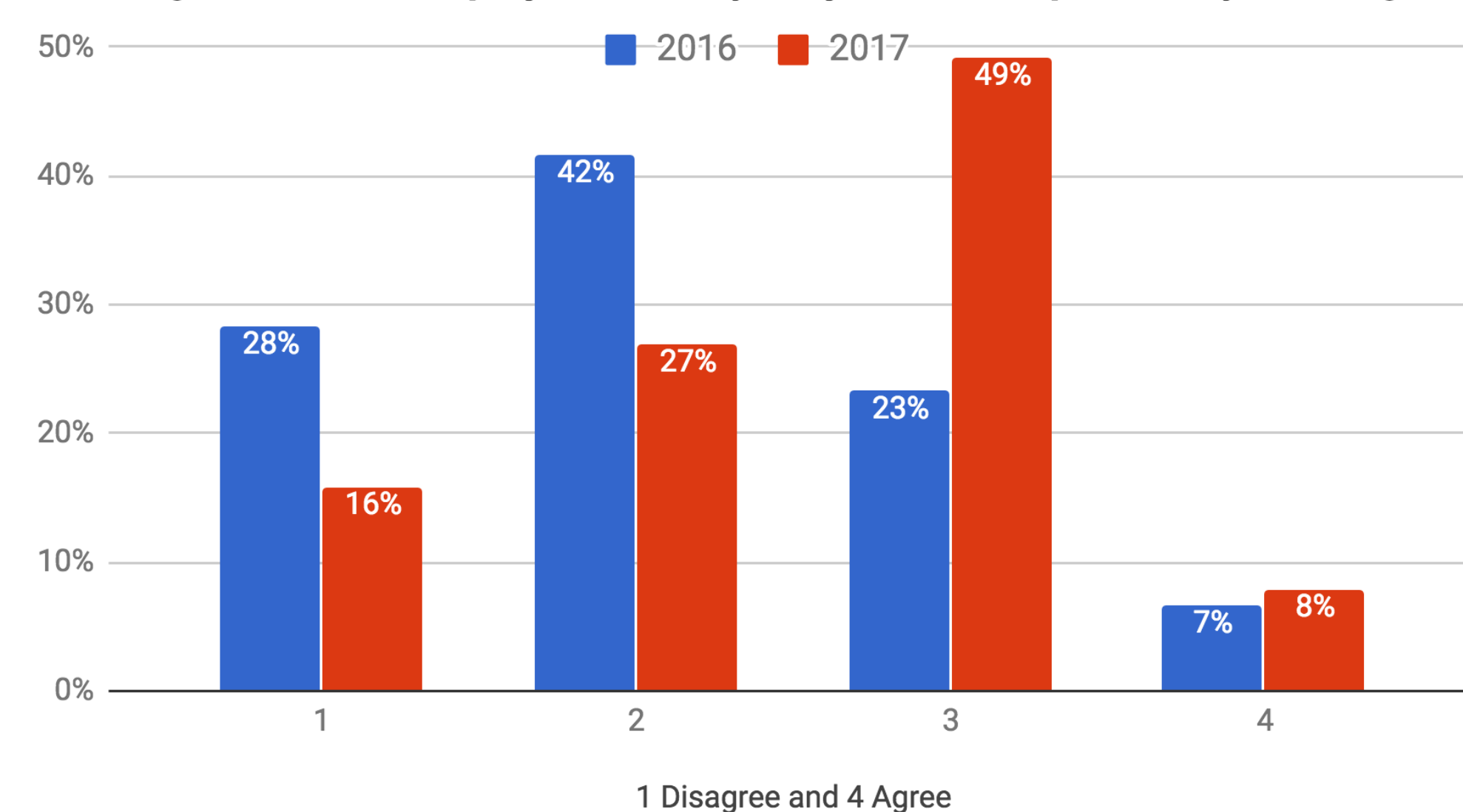


Diagram 1. Habits & healthy lifestyles 2016 & 2017

Conclusions

This inquiry-based learning activity gave access to a wide range of viewpoints for students and teachers which was facilitated by interdisciplinary studies and gave a good citizenship education.

Teachers discussed formative assessment through the project and the conclusion is that it is a good learning activity for students. Each subject make their own examination at another time.

The first time teachers collaborated it took time to plan and implement the work with students. Teachers needed to have meetings to discuss and calibrate the process. It is important to be clear to the students about the purpose of the project. Students feelings are that they don't make school work.

This Health project has been carried out twice with different students and the second time more than 50% of the students though that Interdisciplinary studies improved their learning, diagram 1. Our conclusion is that teachers are more prepared and have more knowledge about the content of all subjects involved the second time.

Almost 100 students have been involved from the Natural science program and Business program at upper secondary school Örnsköldsviks gymnasium in Sweden.

QR code for more information and for students recorded presentations.

