“Young Scientists” through IBSE

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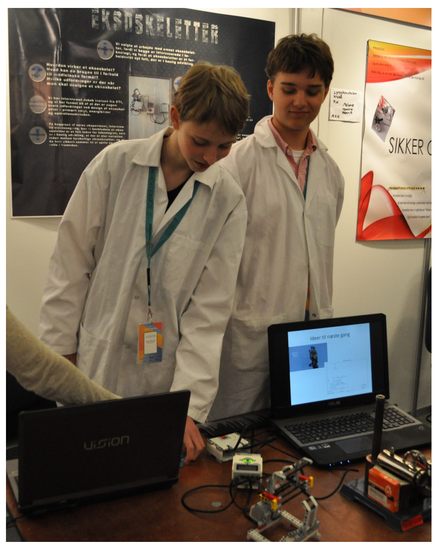
INTRODUCTION

Denmark has a special kind of boarding school which opens a lot of possibilities, for the way science is being taught. In this kind of school there is time and resources to have lessons where we are not tied up to the national curriculum.
This presentation reveals the output from multiple 16-17 -year-old students who participated in the international competition “Young Scientists” 2014. IBSE is used as the method to guide the students to find a scientific subject they want to study in depth for a longer period of time. The students themselves choose subject, method, design, and how they want to verify their experiments and compare their hypothesis with valid science. In Denmark it is common to divide the subject science into different parts; chemistry, physics, biology and geography, but in this project the wide understanding of science is applied.
The project is evaluated by using survey and the teacher’s observations of the scientific and inquiry skills of the students during the project.

PRACTICAL SETTING



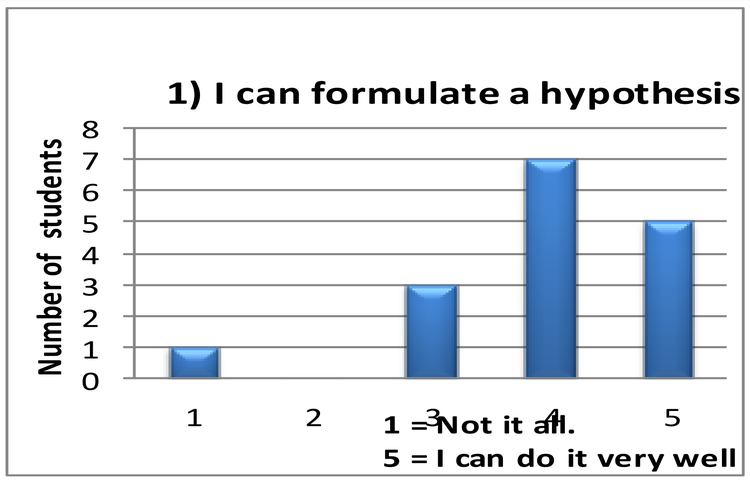
15 student participate in ”Young Scientist” They had following topics:

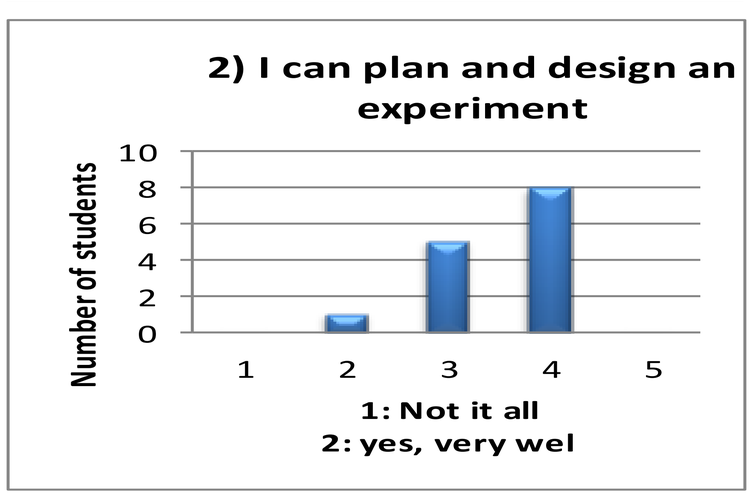
. Sleep
. Parabens
. Exoskeleton
. Transform brain activity to computerdata
. Smoking
. Anger

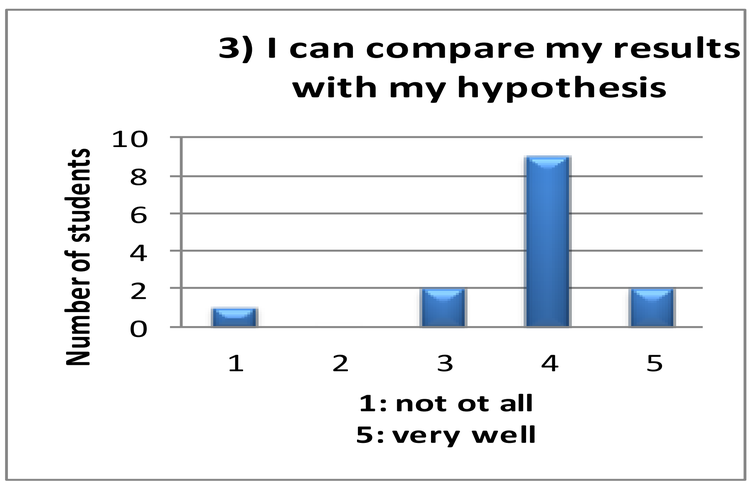
METHODOLOGY

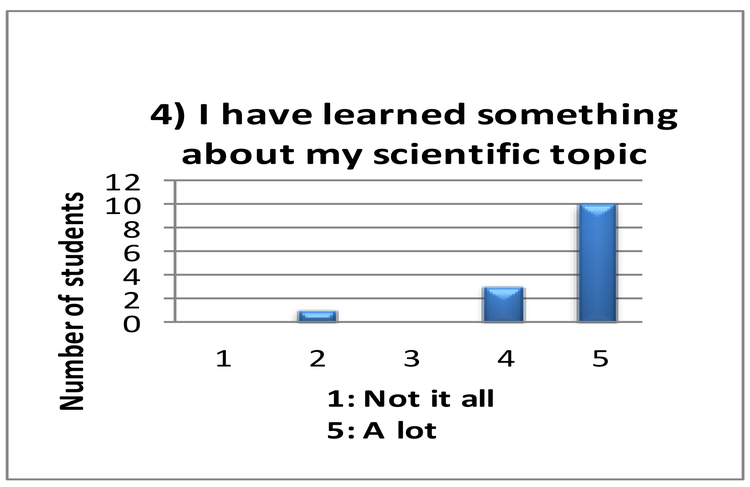
.	Observation	Participating observer
.	Interview	Groupinterview
.	Survey	The students respond individually

ASSESSMENT



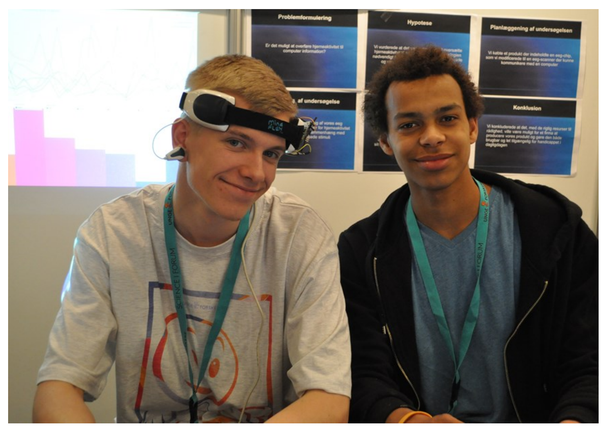






CONCLUSION

This evaluation shows that the students participating in “Young Scientists” end up having a self-confidence in scientific knowledge and inquiry based methods. The students admit that they have a lot more to learn and suggest several things they could do better next time. The teacher finds that the students are surprisingly good at estimating their own level.



SAILS
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