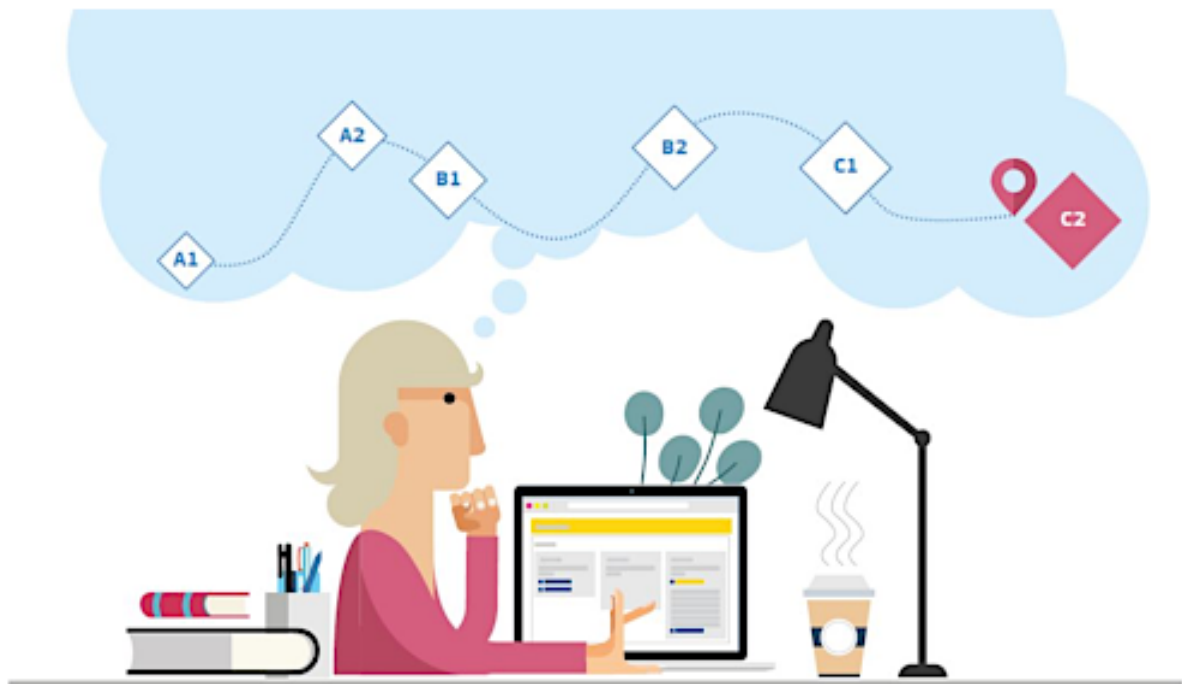


## **SELFIE tool for the teacher - evaluation of our initiatives a year ago**

A year has now passed since we started our exciting and educational project. We started our cooperation with a project that helped us to point out the status of our professional level in the area of technology understanding and at the same time we described forward-looking goals for what we would like to achieve in the coming year that has now passed.

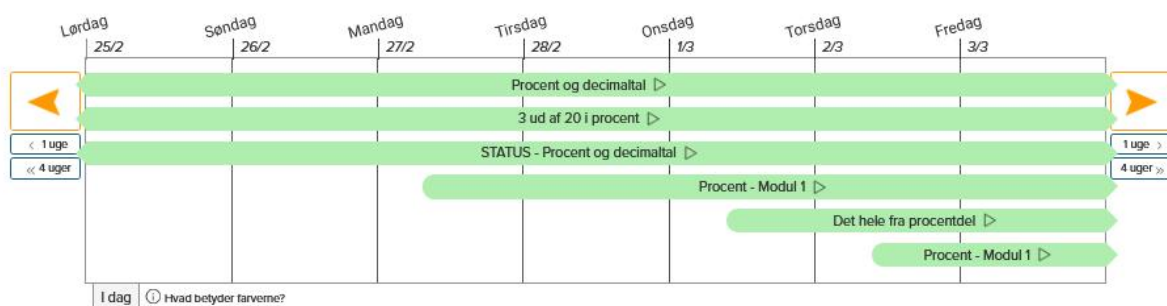
We have worked intensely and concentrated on our goals. This work has consisted of testing and developing our goals in practice together with the pupils at our school, who should benefit from this process and now it is time for evaluation as a working tool for ourselves.

At our school, we described 3 development scenarios that we have been working with for the past year. Below is a description of our three development scenarios, as well as a description of what we have learned from experience and learning, as well as what we have not achieved and therefore will continue to work on in the future



## Our first development scenario:

**Teaching:** We wish to extend a special focus on being able to support and challenge the learning of the most talented pupils. In the future, we will specifically work with this through the online portal which offers individually planned and self-correcting tasks and video presentations. Here, we as teachers, can control the level so that it strengthens and matches the student at the same time as they become more independent during the lessons, which gives us, as teachers, extra time to support and help the academically weak pupils. Our objective with this focus is, that when we evaluate the effort in a year, we will clearly observe, among the academically strong pupils, that they have been academically challenged to suit their level.



The development scenario unfolds as below:

Overall, we have achieved our focus areas well: many of the academically talented pupils have been well challenged in the daily teaching with the individually arranged and self-correcting tasks and video presentations. This combined with the fact that these pupils have also regularly made presentations to the entire class about, for example, an algorithm they have worked towards or another method, video or explanation, which has given them extra insight. This clearly shows that they have been professionally challenged in a way that suits their level. This overall independent work has been of great benefit to the academically weak pupils, who have thus been able to get more help and support.

However, this insight has also provided new challenges and insights. For example, it has become clear that it is not good for the pupils that all their work with the mathematical subjects is centered on a computer. It is important to have variety in the work, and here the work includes, among other things, tasks that must be solved with pencil and paper, small experiments, for example with programming Lego robots (calculation of



percentages, area and circumference of circles and practical use of measuring degrees ), mathematics play with good physical activity or something as old-fashioned as the work of making an explanatory board or a description for a common analogue set of rules.

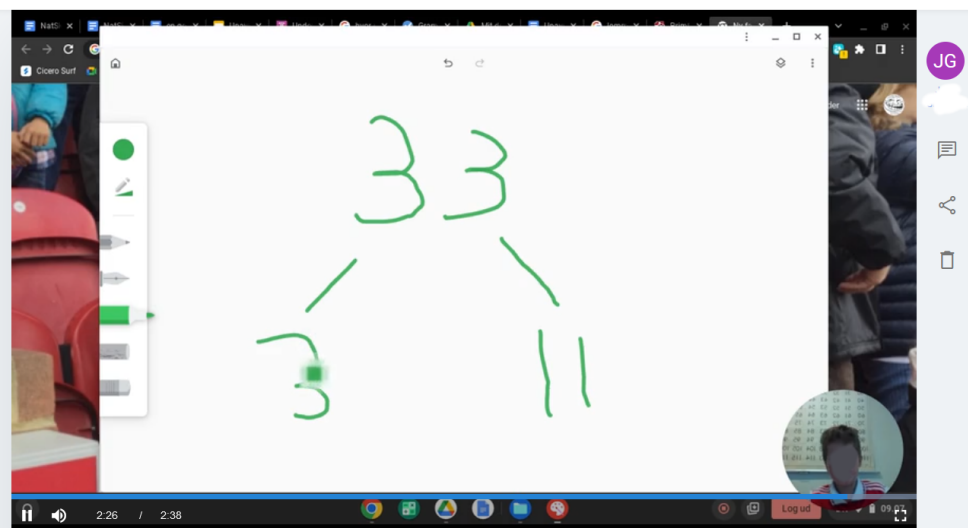
## Our second development scenario:

**Content creation:** *In our context, we have chosen to focus on linguisticizing what has been taught. This way our starting point is the Russian theorist Vygotsky, who points out the importance of interaction between the individual and culture. We are particularly interested in Vygotsky's thoughts on language skills, which affect learning in all areas. We like to do this by using video as an evaluation/assessment tool in mathematics. Our focus is that pupils learn to create digital artefacts that strengthen their expression and learning. In a video that as an example both linguistically and pictorially describes a given mathematical algorithm, the pupils will have to put into words what they have learned, which according to the above theory will have a positive effect on learning. Also the pupils' digital products can be used as teaching and inspirational material for younger pupils or others who work with the same subject.*

*In the same context, we will guide students to understand copyright rules, attribute licences and how to give credits of the material used.*

The development scenario unfolds as below:

We have achieved a really good model regarding the use of self-created digital artefacts, which strengthen both the pupil's expression and learning. An excellent example of the pupil's work is the use of screen capture programs, where the pupil as an example drawn on the computer screen simultaneously explained and elaborated verbally. For many of the pupils, it has especially been a fun detail to put a small video of themselves in the corner of the screen, where you can see the narrator while speaking and explaining.



These screen captures have both been shown and commented on in the pupil's own class, and at the same time they are also offered as inspiration for slightly younger classes.

The pupils, who have chosen other methods for evaluation, have been fond of the Google presentation, which has been presented and at the same time thoroughly explained to the class.

Along the way, we have used images and sound from a Danish portal (skoletube.dk), which is specially designed for pupils and at the same time complies with all GDPR regulations. In this context, we have spent time talking about the fact that rights have been paid for all material from this portal, and the material can therefore be freely used by the pupils. However, this does not necessarily apply to all other places on the internet where images and music can be downloaded, and it has therefore been clarified which rules must be observed instead.

Regne med procent, decimaltal og brøker

1 Regne med procent, decimaltal og brøker  
2 Hvordan regner man fra decimaltal til procent?  
3 Hvordan regner man fra decimaltal til brøker?  
4 Hvordan regner man procent til decimal?  
5 Hvordan regner man brøker til procent?

Hvordan regner man fra decimaltal til procent?

% betyder 100 del. Det man gør hvis man har tallet 0,45 starter man med at man tager 45 tallet og kun 45 tallet hen til procenttallet og så har du resultatet.

Men hvis vi nu har decimaltallet 2,55 og man skal omskrive dette skal man bare gøre det samme, hvor det giver 255%.

0,5                      0,45

## Our third development scenario:

**6.5 Responsible use:** *Several classes will participate in a course in digital social skills and consequent ethics that will help and instruct them to act in a responsible and ethical way when working online.*

*This course will also help the pupils understand and get knowledge about personal identity protection when installing new apps and giving permission without thinking about what it entails.*

*We want to try out different online material, but are also lucky to have a colleague who has a great knowledge and insight into the subject and how best to provide communication to pupils our age group. One of the online resources we will make use of is the material*

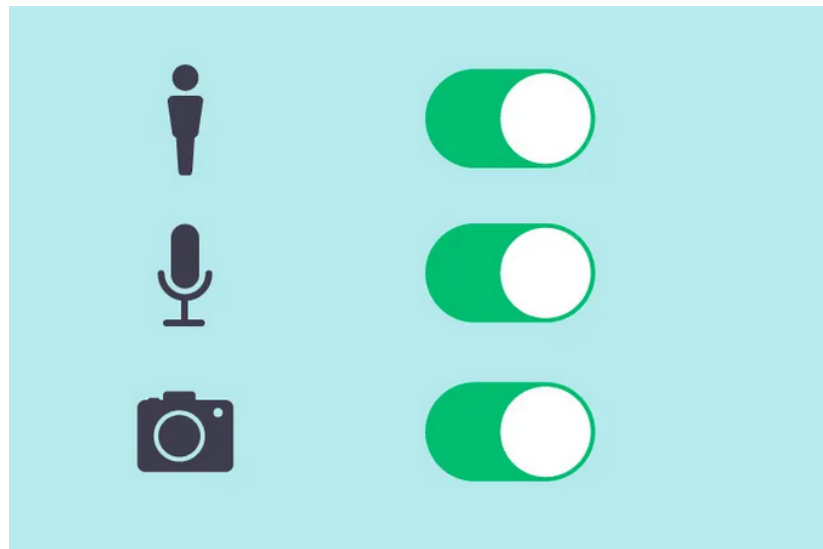
*<https://dataethics.eu/about/> bescribed by themselves as "DataEthics.eu*

*is a think tank working to promote data ethics products and services. We are politically independent and focus on action”.*

The development scenario unfolds as below:

A topic about digital security that has a lot of focus at the time of writing is the problems in relation to the Chinese app TikTok. Many believe that the manufacturer (and perhaps also the Chinese government)

can monitor e.g. all conversations that take place around the phone via the permissions that the user himself gives. Many times the user (in our case the pupil) without knowing any better, gives a new app far too many permissions compared to what is necessary.



The 6th class will therefore work with some of the basic and essential danger signals in order to understand what it is necessary to pay close attention to.

Our focus areas in this context:

Apps where the user gives access to their own contacts. This gives the right to use the device's contacts, which includes the ability to read and modify contacts. Apps with social features (such as Facebook or TikTok) need this permission to work. But if an app asks for permission without it being necessary for the function, then you should think carefully before giving permission. An example could be a malicious app that uses email addresses from the phone's contacts to send malicious files or links from an email address that looks like one you know from your own contacts.

In relation to apps that allow the phone and SMS function, it is important to know that these two app permissions make visible who you have called or texted with, as well as allowing you to make calls or send text messages on your behalf. Apps that replace your phone's keyboard, for example, need this permission. But an app that contains ringtones does not. Apps that let you modify text and add images yourself (anything that shares media) may need the permission. The most important point here

is to be extremely careful with any app that asks for one of these permissions.

This initial work has made the pupils aware of mistakes that you easily make as a user and especially as an inexperienced user. At the same time, they have gained experience in how to judge a given app in relation to one's personal security.