



## 1. What is Binogi?

Binogi is a Swedish educational tool emerging from an urgent need of supporting teaching in classrooms with many newly arrived migrants and/or students that speak very little or no Swedish at all. The tool features a multitude of short, animated videos/lessons in 13 theoretical subjects; Mathematics, Physics, Chemistry, Biology, Swedish, Social Studies, History, Geography, Religion, English, Technology, PE and Domestic science. Complicated key concepts and subject specific vocabulary are explained in playful and simplified ways. Sound as well as subtitles are available in 7 languages; Swedish, Finnish, English, Arabic, Somali, Dari, Tigrini and even more languages are about to be introduced. Although the content targets school curricula for the 7-9 grades (students aged 13-15) the videos have proven valuable for both younger and older students. Binogi is also available in Germany and Canada under the name Binogi and there are plans to deploy the tool in refugee camps where education is often put on hold.



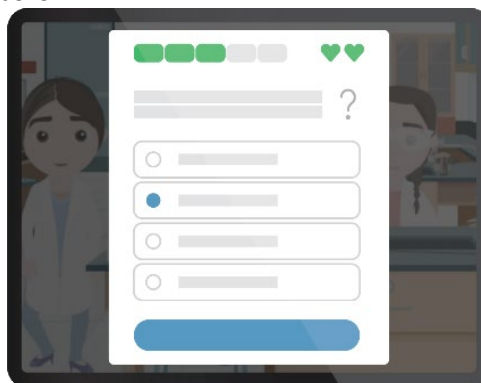
## 2. How can Binogi make learning more personalized?

By using the video material as part of the instruction practices, teachers make it possible for students to actively participate in ordinary class, independently of their proficiency in the Swedish language. Furthermore, this approach removes many linguistic barriers for students to learn the content in other subjects at the same level as their Swedish speaking peers. The linguistic personalization also means social inclusion and equity for these students. By using the videos both at home and in class, students are given the chance to prepare and revisit the material in advance in their own language. They can also, while in class, choose different subtitles when the teacher is introducing the same video in Swedish (or in a different language). From a personalization angle, this means that students can self-pace in accordance with their interests and needs in different subjects.

Each film is accompanied with a quiz in three difficulty levels. The quiz motivates students to revisit the content and assess what they have learned, while at the same time offering

differentiated learning paths based on the student's level of understanding. In addition, a gamification feature is built into the quizzes so that students can collect points and awards after each completed quiz, which can be both motivating and strengthen the learning. Students can, but don't have to, set up their own, individual account where their usage is registered and where they can track their individual "studi-path" and progress in different subjects. There is additional support for students with special needs through, for example, speech synthesis and sign language video.

Teachers are equally equipped with a learning analytics interface where they can follow all students' performances on an individual and group level and through which they can assign different students different tasks.



### 3. What to consider when implementing Binogi?

Getting started with Binogi study, without implementing all features, only requires registering an account. During the pandemic the tool has been offered for free. Teachers need to understand how to share the videos and it gives added value to track how students have used material and responded in the quizzes, however this is not mandatory. The tool offers guidance material for teachers and there is a FAQ section that is constantly updated.

More importantly than understanding how the tool works, teachers need to change their mindset around how to work with a flipped classroom, differentiated teaching, learning analytics and foremost teaching in multilingual classrooms and the importance of creating equal conditions for all students to obtain knowledge in all school subjects. Although the initial focus of Binogi was to integrate newly arrived students in ordinary classes, the way content is delivered has turned out to be very popular among all students; particularly those that struggle and have a hard time to focus in the classroom.

### 4. Where can I get started with Binogi?

Once you register an account at [binogi.se](https://binogi.se) you can access several lessons. To access the complete material in Sweden your school needs to become a partner. If you are a Binogi user you can access the app here: <https://app.binogi.com/signup>

In addition the E2L project has developed a CPD related to the learning analytics features of Binogi that can be of interest to teachers and schools. (Link to CPD)



