



**BARTIMEUS**

**CONSULTING**

**The use of tactile graphics and models, and RFID in the education of pupils with a visual impairment.**



**Enabling independent learning**

Bartiméus is a nation-wide organisation in the Netherlands that provides personal advice and support to individuals with a visual impairment, and to those who are professionally or personally involved with them. A proportion of our clients live, work and receive education within the organisation's regional centres.

**Mission**

When life, learning, working and living with a visual impairment raises questions, Bartiméus is there to provide a personalised and professional answer.

75% of our pupils attend mainstream education. It is our vision to enable blind and partially sighted children and adolescents to lead full and independent lives; with the right provisions these pupils can participate fully within mainstream classrooms, working optimally alongside their sighted peers.

**ICT**

Information computer technology (ICT) plays an important role in enabling curriculum access to visually impaired pupils. From an early stage, our pupils make use of laptop computers and acquire the same efficacy in ICT skills as their sighted peers. One of the special programs we have developed for this target group is the Braille Studio, software enabling young children to learn Braille via the computer. For pupils in secondary and higher education, we have developed a computer-friendly Braille notation to enable access to the science and maths curricular. Our on-going project 'Software in Zicht' provides a central database detailing the accessibility of educational software available in the Netherlands.

**Tactile learning material**

Graphic learning materials provide a challenge to pupils reliant on Braille.

Written descriptions are often inadequate when a new concept or mental image needs to be formed. Reality is not always 'at hand' or touchable (for example, the constellations of the stars, an amoeba, the carbon cycle or an elephant). Where possible, our pupils work with models and relief drawings.

### **Models with audio-description**

By equipping models with special RFID (radio frequency identification) tags, a pupil can be instructed on how to use tactile learning materials independently. The tags can be activated to provide auditory information. Despite the intimidating name, Bartiméus has co-developed a product that is user-friendly both for pupils and teachers, and which is even attractive to learners without visual impairments. RFID can also be used on relief drawings, such as maps.

### **Relief drawings**

Bartiméus cooperates with experts in the field of relief drawing production and use. Training is required to work effectively with relief drawings. ViewFree develops training and lesson materials within the Netherlands. Mrs Corvest-Morel from the Museum of Science and Industry in Paris has developed a method to make

3D subject-matter accessible through the medium of tactile graphics. Together with the Louvre, she organises workshops for adults in the technique of tactile graphic reading. She carries out research into different materials and techniques.

### **Partners**

Bartiméus can advise and help in the development of new products and welcomes cooperation and participation in national and international projects. We are particularly interested in working with individuals and organisations who are active in the field of tactile graphics and model development.

If you would like to know more, please get in contact with Dick Lunenburg:  
dlunenburg@bartimeus.nl



Would you like to know more about the possibilities at Bartiméus? Then go to [www.bartimeus.nl](http://www.bartimeus.nl)



or contact the **Bartiméus Info Line**  
0900 - 77 888 99 (€ 0,05 p/m)



**BARTIMEUS**

**SEES OPPORTUNITIES**