

Digital Single Market

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Engage, excite and educate with 'Photonics Explorer'

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Light and optics in secondary schools now brought by 'Photonics Explorer'

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Yesterday, the [Brussels Photonics Team \(B-PHOT\)](#) [1] along with [TE Connectivity](#) [2] and [EYESTvzw](#) [3] launched a new tool to engage, excite and educate secondary school students for Science, Engineering and Technology!

This new tool is the 'Photonics Explorer' educational kit and it has been developed by B-PHOT in the framework of a European Project, with the voluntary efforts of over 35 teachers, scientists and experts in pedagogy from 11 EU countries!

While most outreach projects are designed as extra-curricular activities, the Photonics Explorer is different in that it is designed to integrate easily into the regular secondary school curricula across Europe.

Each kit contains a class-set of experimental material such that 25-30 students can work hands-on, at a time. This is provided within a supporting didactic framework (worksheets, factsheets, teacher

guides and multimedia) for 8 topics dealing with light and optics.

The didactics is based on proven guided inquiry-based learning techniques with a strong emphasis on hands-on experiments. By working with the Photonics Explorer students can enhance their scientific and analytical skills, relate abstract concepts to everyday technologies and hone their problem solving and critical thinking abilities. The most exciting aspect of this kit is that it allows students to work like scientists and engineers in the classroom, with real optical components like lasers, LEDs, polarisers and many more!

The Photonics Explorer has already been tested with over 1500 students in 7 EU countries in the local language; Belgium, Bulgaria, France, Germany, Poland, Spain and UK. A team of experts has also evaluated the actual impact of the kit and the results are very positive! It is seen that working with the Photonics Explorer not only raises the self-efficacy and interest of students in science overall, it also helps girls gain more confidence in their scientific abilities. This is a key outcome since encouraging girls to pursue science and engineering is a global priority today!

The Photonics Explorer is distributed to teachers completely free of charge, in conjunction with teacher training courses. EYESTvzw is a Belgium based non-profit organisation that is handling the EU wide distribution of these kits. 11 EU countries are already implementing the Photonics Explorer in their schools and we hope that soon, with sponsorship from European industry, organisations and governments the kit can reach over 2.5 million students across Europe. The aim is to bring the excitement of light and optics to every classroom in Europe and help raise the next generation of scientists and engineers!

Vice-Minister President Ingrid Lieten, Werner De Wolf (Vice President of TE Connectivity), Dr. Ronan Burgess Deputy Head of Photonics Unit EC and Prof. Paul De Knop Rector of the Vrije Universiteit Brussel spoke at the launch event yesterday, lending their support to this initiative.

To find out more about the Photonics Explorer you contact Amrita Prasad, CEO-EYESTvzw on info@eyest.eu [4]. More information can also be found on www.eyest.eu [3]. Watch our [video](#) [5]

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