# ERI LECTURA: RESERARCH FOR ENHANCING READING COMPREHENSION

## INVENTION DESCRIPTION

The ERI Lectura is an interdisciplinary structure created at the University of Valencia in order to promote the research in reading and focuses its main action lines on studying reading processes in alphabetical and non-alphabetical languages, reading competence in children, teenagers and adults or reading comprehension in people with functional diversity.

Its research also tackles reading neuropsychology, reading in technological areas, cognitive ergonomics and design of reading devices.

The ERI is composed by recognized international prestige members, experts in different fields, whose progresses and technology products derive from scientifically tested models and look for transferring knowledge into applied areas.

In order to accomplish its research, the ERI has several laboratories of Eye-Tracking Recording and Evoked-Potential Test, that have equipment for recording the brain activity in reading and cognitive processes, as well as monitoring the eye movement in real situations and internet reading. It also has a driving simulator for reading and comprehension studies of traffic signs.

As a result of their research, the ERI Lectura has a very long history in developing methodology and reading-process software tools based on Information and Communication Technologies (Virtual Reality, Internet and mobile devices), being pioneers in this field.

## BUSINESS APPLICATION SECTORS

The ERI Lectura collaborates with institutions, organizations and enterprises dedicated to the reading, whose objective is to understand or improve the texts comprehension, in paper as well as in digital form, by the users.

**Education area**: evaluation tests of the reading competence in children, adolescents and university students, based on the automation and use of interactive technology; development of intelligent tutors that guide the student in the study and provide the teacher with information about de student progress; technical advice about reading and books fomenting plans, as well as reading education programs.

**People with functional disorders area**: use of new technologies for helping to solve reading problems in people with functional diversity (intellectual or sensorial). For example, to achieve that hearing-impaired people could reach a good reading level, properly access to education and other services.

**Reading area in daily life situations:** cognitive ergonomics in devices design and quotidian life elements, as are the traffic signs, tablets or websites, in order to improve the legibility and comprehension in people with-or-without reading disorders, as dyslexia or autism spectrum disorder.

## TECHNICAL ADVANTAGES AND BUSINESS BENEFITS

The ERI Lectura brings so many advantages since the new technologies can turn into excellent allies to solve reading problems as well as to teach and promote the 2.0 web reading.

Thanks to the joint work of experts from different areas is possible to delve into the learning and reading comprehension of texts, the expositive texts improvement, the integration of information in texts, the automatic analysis of the speech and cognitive ergonomics in reading devices design.

The ERI Lectura gives support for developing new tools, as are the on-line platforms, that can complement the educational material used in centers. In this way, public or private companies related to the sector, publishers and more, can benefit from this structure. Likewise, it spreads the reading-area innovations obtained in scientific environments and between experts and organizations interested in people's reading competence improvement. For this purpose, it organizes every year the "ERI-Lectura Conferences" and advises educational centers, enterprises and institutions.

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### DEVELOPMENT STATUS OF TECHNOLOGY

The methodology developed by the ERI has been successfully applied in education centers, social sectors and people with psychological disorders, intellectual and physical functional diversity, with the aim of helping them to improve their quality of life. Among the developed tools you can find (more details in http:www.uv.es/EriLecturaTecnologia):

- TuinLEC: Smart tutor to teach reading competence to children at school in a fun way. It has been successfully approved in educational centers.

- ECompLEC: program that assess the reading competences of high school students following the PISA (Program for International Students Assessment) scheme promoted by the OCDE.

- LEECOM: instruction software of the reading comprehension for people with hearing impairment.

- WebLEC: assess the digital reading competence of high school students. It provides indicators about the efficiency and efficacy of internet surfing.

Another developed tools: Read&Answer, RADAR, EdiLEC, SupLEC and Operative Memory Test.
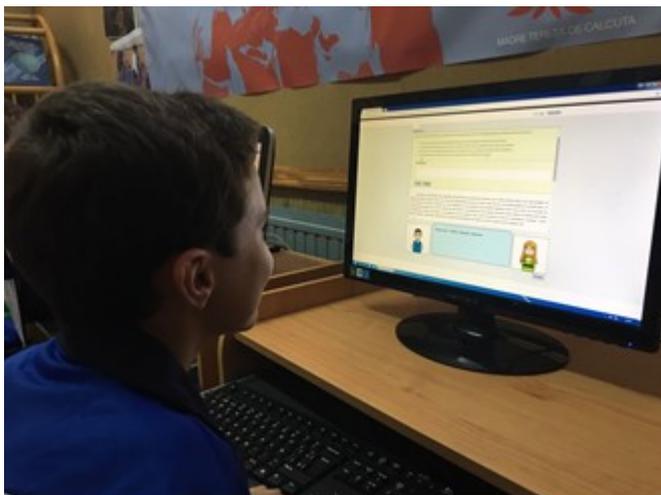
### INTELLECTUAL PROPERTY RIGHTS

The technology is protected through the intellectual property rights.

### COLLABORATION SOUGHT

- Usage license agreement of software and tools developed by the structure.

- Development of collaboration R&D projects.

- Collaboration license agreement with enterprises and other institutions.

- Collaborating agreement with entities and associations of people with functional diversity.

### RELATED IMAGES



### CONTACT

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