


PROVISION

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# PROCESSING VISUAL INFORMATION IN CHILDREN

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[www.pro-vision-dortmund.de](http://www.pro-vision-dortmund.de)

The research project Pro-VisIoN (“Processing Visual Information in childreN”) is located at Dortmund University (TU Dortmund). Headed by Prof. Renate Walthes (Dortmund) and supported by Prof. Lea Hyvärinen (Helsinki), an interdisciplinary competence centre has been in progress since February 2010. Besides conducting research, the team offers lectures and workshops as well as advanced training of professionals. In order to promote international cooperation and communication in visual processing research, Pro-VisIoN organizes international conferences.

## Research

Understanding children’s visual functioning is compelling. Children born with visual processing problems are usually unable to tell what makes their vision different from that of other people. Therefore, it is crucial to develop task-dependent approaches which help to develop observation and assessment strategies for everyday life, at home, at kindergarten and at school. Indeed, children with probable visual processing problems show a broad variety of behavior in order to master social and educational requirements. Pro-VisIoN conducts multimethodical case studies to study visual abilities as well as demands faced by each child in depth. These demands may include tasks in orientation and movement, activities of daily life, visual communication and sustained near vision tasks such as reading, sewing, writing and maths. In doing so, Pro-VisIoN cooperates with specialists working in the field of medicine, psychology, early intervention, education and therapy.

In a nutshell, elements of Pro-VisIoN research are:

- interviews with parents and professionals,
- assessment report analysis,
- functional visual assessment,
- interpreting results of assessment and observation; deducing strategies for support.

Subsequently, all the individual case studies and longitudinal studies are analysed and edited for publication in scientific journals.

## Lectures, Workshops and Further Training

Pro-VisIoN aims to offer the opportunity for professionals to learn and understand more about cerebral processing problems and functional visual assessment. This is achieved through lectures and workshops where we provide general information about problems processing visual information.

For those who wish to achieve a formal qualification we offer further training with modules in which the participants study specialist literature and address several questions such as:

1. What can we observe and which questions need to be asked?
2. What are the basics in neurosciences, visual perception and visual processing problems?
3. Why do we need interdisciplinary cooperation for our assessment and intervention?
4. Why do we need to interview the parents about their observations?
5. How can functional visual assessment be planned, conducted, and documented?
6. What do assessment reports tell us and what information is missing?
7. What kind of supportive strategies can be developed for the children?

The final examination involves participants conducting an assessment and presenting their theoretical approaches, videos, results and further steps to the whole group.

These measures are part of our attempt to raise society’s awareness about vision-related conditions.