

ORSEN: Learning games for dyslexic youngsters in inclusive education

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The Problem 1

Dyslexia is a multi-faceted issue that impacts many life skills. Interactive exercises can help to train specific skills of dyslexic persons. Such exercises are available, but the majority of them is focused on children. Youngsters stop to use them because these exercises are too childish for them.

The Problem 2

Specialised trainers and teachers want to have ready-made learning games available and they want to be able to create easily “own” learning games.

Background

Projects

So far, the firm E-Learning concepts participated in three EC funded projects which were focused on problem solution:

**EDYSGATE (Grundtvig 2006-2008),
DYS 2.0 (Grundtvig 2008-2010) and
ORSEN (Comenius 2010-2012).**

Background

Training Areas



- 1. Visual discrimination**
- 2. Visual memory**
- 3. Visual sequence**
- 4. Auditory discrimination**
- 5. Auditory memory**
- 6. Auditory sequence**
- 7. Spatial position**

EDYSGATE

The starting point

EDYSGATE provided a motivating and stimulating learning environment for all 7 training areas known to be important for young dyslexic adults.

175 learning games were developed and evaluated by trainers and users in six countries.

800 registered users.

EDYSGATE

Awards

EDysGate won the Austrian State Award for Multimedia & E-Business 2008 and the World Summit Award 2009 in the category Education & E-Learning.

EDYSGATE

...new challenges

- Trainers want to get**
- exercises with more levels of difficulty,**
 - the possibility to create “own” learning games,**
 - classroom functionalities at the platform.**

DYS 2.0

The second project

DYS 2.0 transferred the existing EDYSGATE learning games into 3 new languages, developed 7 online game configurators, 100 new learning games with three levels of difficulty and added classroom functionalities to the platform.

8.580 registered users

DYS 2.0

...new challenges

Trainers want to get

- game configurators outside of the DYS 2.0 platform, which can be integrated into school websites,**
- the possibility to create games which can be attached to emails or disseminated offline, e.g. by USB stick.**

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The ORSEN project is not mainly focused on learning games. Whilst EDYSGATE and DYS 2.0 were focused on the so called afternoon learning, ORSEN is focused on inclusive education at regular schools.

We developed learning game configurators which can be applied outside of the DYS 2.0 platform. We tested how the training of perception can be combined with the learning subjects.

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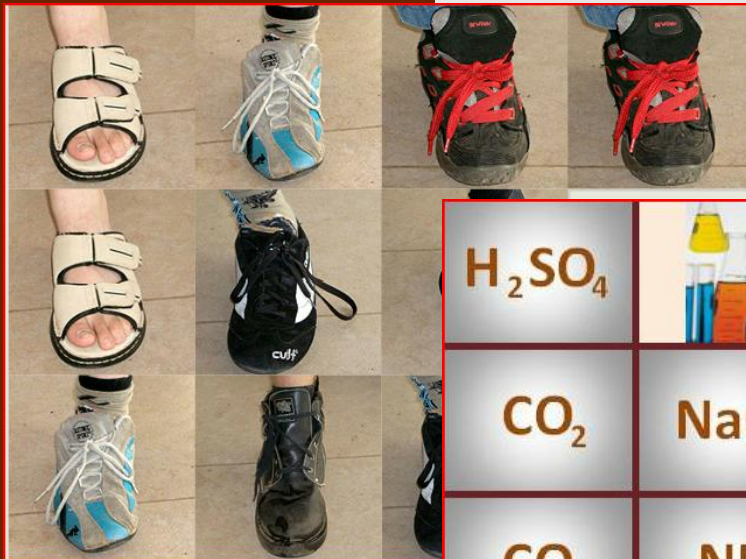
Training Areas






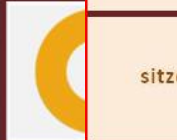
1. Visual discrimination
2. Visual memory
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Conception of the visual memory games



1. "simple" duplication of pictures, words, etc.

H_2SO_4			NH_3
CO_2	$NaCl$	HCl	
CO_2	NH_3	$NaCl$	
CO	HCl	O_2	H_2




laufen	schaufen	küssen	riechen
sitzen	leben	sitzen	sehen
laufen	leben	rennen	sehen
	riechen	küssen	schaufen

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Conception of the visual memory games

NaOH	Schwefelsäure	O ₃	Kohlendioxid	Sauerstoff	Kohlenmonoxid	
	Ozon	Salz	NH ₃	O ₂		
Lachgas	NaCl		Main	Dresden	Oder	Halle
Alkohol	N ₂ H ₅ OH	Natron	Spree	Rhein	Elbe	
			Havel		Berlin	
			Frankfurt	Saale	Görlitz	

2. creating pairs of pictures, words etc.

Standort eines Fußgängerstreifens	Achtung! Überholen ist verboten	Achtung! Abbiegen nach rechts ist verboten	Hinweis Hauptstrasse biegt ab
		Achtung! Allgemeines Fahrverbot in beiden Richtungen	Achtung! Schleudergefahr
Achtung! Dem Gegenverkehr Vortritt lassen	Achtung! Höchstgeschwindigkeit 70 Km/h		
			

1. “simple” duplication of sounds, spoken words or sentences

2. Creating pairs of sounds, spoken words or sentences, e.g.

rhymes, identification of the same starting letters

language training (dictionary)

1. “simple” duplication – is a nice lesson enrichment. Games can increase pupils concentration and fun. But, it is difficult to apply this kind of games to the lesson content.

2. Creating pairs – is a good approach for drill & practice exercises. The learning & teaching of the subject can be combined with a training of perception.

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Implementation

Before the lesson

possible, but not in case of the first use of the learning games.

During the lesson

possible, but the technical conditions are a barrier. Good use for whiteboards.

After the lesson

best choice: individual home work, re-freshment etc.



Guides for teachers:

www.orsenproject.eu

**Download of the Learning Game
Builder:**

<http://lgb.orsenproject.eu>

**More about learning games for
dyslexic youngsters**

www.dys2.org

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Mrs. Petra Rietsch

E-Learning specialist with a focus on learning games, she managed the dyslexia EC projects EDYSGATE and DYS 2.0 and was involved as a specialist in FP6 projects and into other European educational projects. She is a former senior manager of an international auditing firm and has a long experience in working in East European countries. Mrs. Rietsch has been in charge as evaluator at EACEA Brussels. She is an Ass.Prof. at the University of Economics and Business Administration in Vienna for E-Learning & E-Business. Many publications in this field.

Thank you very much for your attention!

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