



Bridging the gap between research and practice

Dicke Nilpferd Bertha sonnte sich an einem heißen Sommertag auf der
 neben dem Fluss. Berthas Freund Rudi, der Otter, kam aus seinem Bau
 am Ufer des Flusses und stöhnte und ächzte. Dann ließ er sich neben Bertha
 auf den Rücken fallen und blieb liegen. „Was ist denn mit dir los?“, fragte
 Bertha. „Ich habe mich mit einem riesigen Pflanzengedächtnis verheddert“,
 krächzte Rudi. „Aber ich dachte, in deinem Bau ist es immer kühl“, wunderte
 sich Bertha. Sie schlürfte ihn gerade durch einen Strohhalm. „Stimmt. Aber
 nicht wenn die ganze Familie zu Besuch ist. Alle sind gekommen. Tanten,
 Onkel, Brüder, Schwestern, Nichten und Neffen ...“, seufzte der Otter. „Nanu,
 warum?“ Rudi setzte sich auf und strahlte. „Ich habe heute
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A dream...

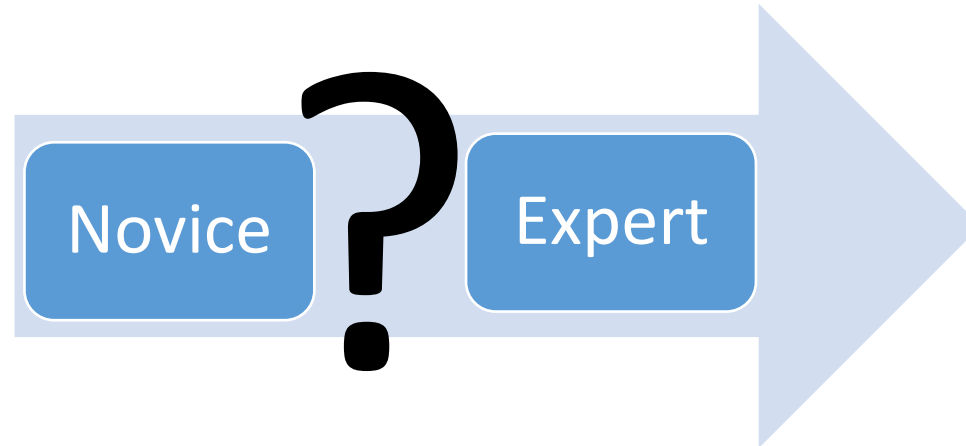
Novice

Expert





A dream...





Is it possible to SEE how students learn?



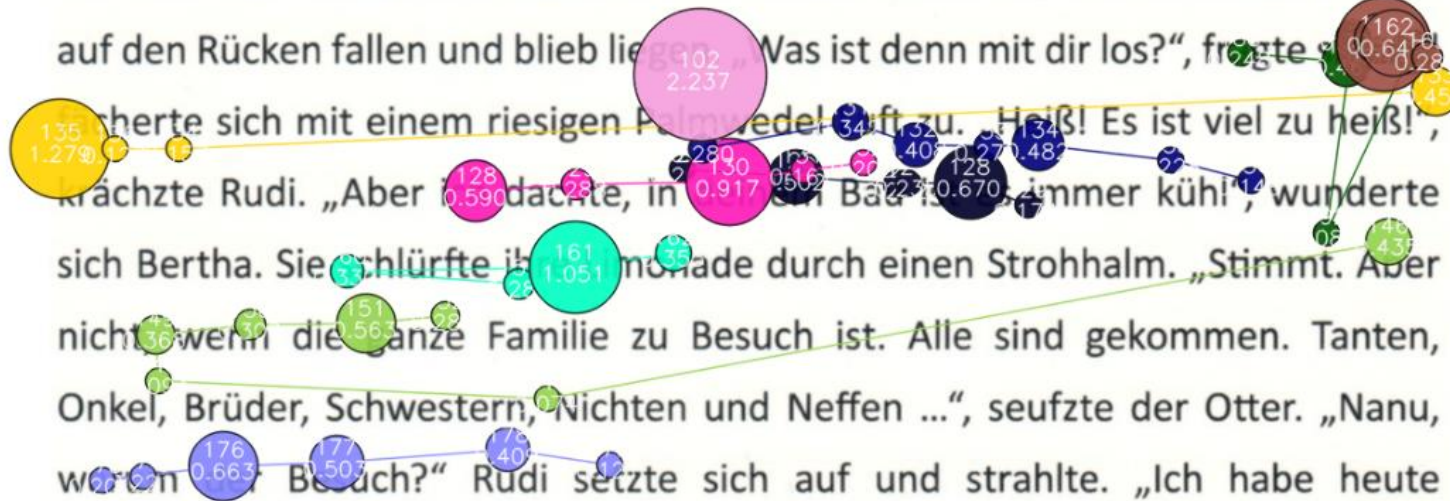


- Small steps
- A huge amount of steps
- Interaction with learning material





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Extent of the problem



32,3 %
of the 4th graders didn't achieve the
norm standards in reading.
(IQB-Bildungstrend 2021)

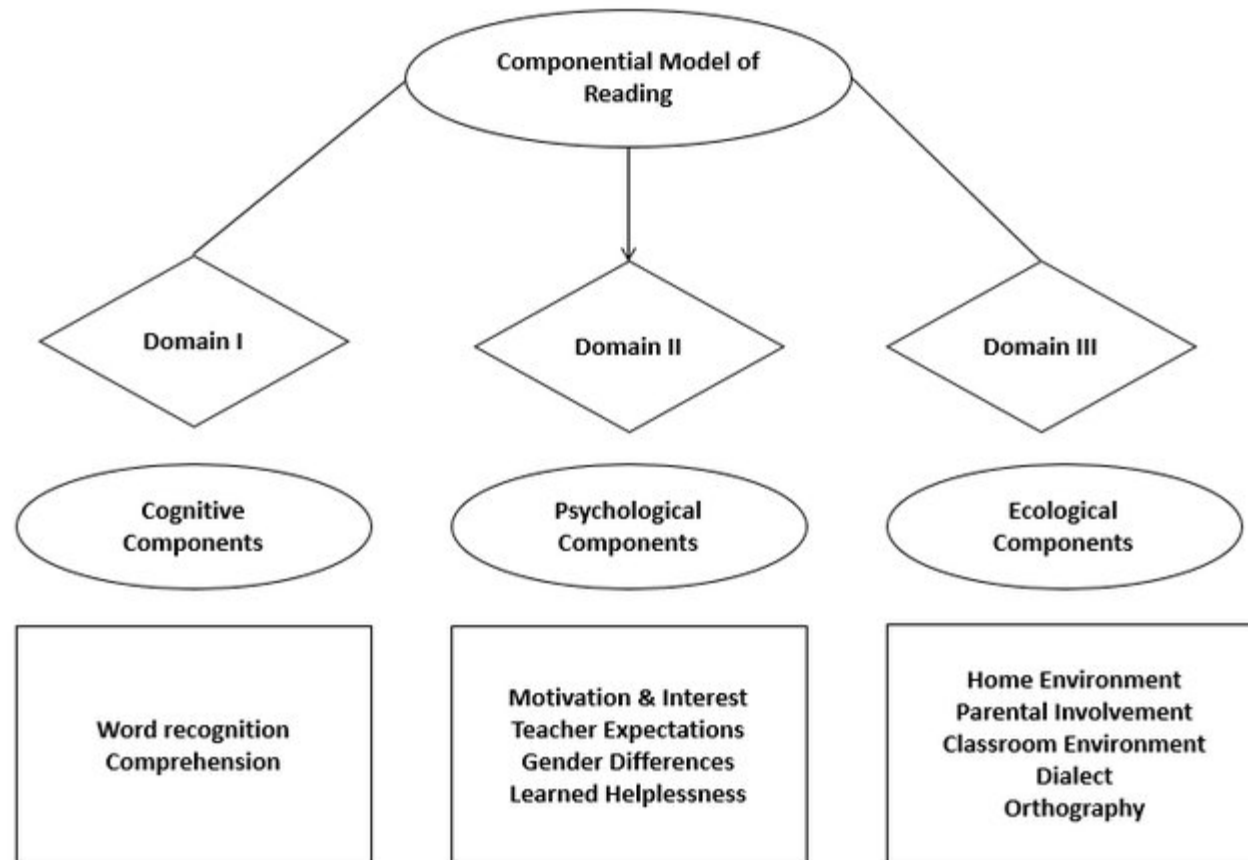
Efficacy of support



- The most reading programs are not very effective
- Accuracy in targeting the individual needs of students is crucial for success

(Kilpatrick 2021)

Componential Model of Reading (CMR)

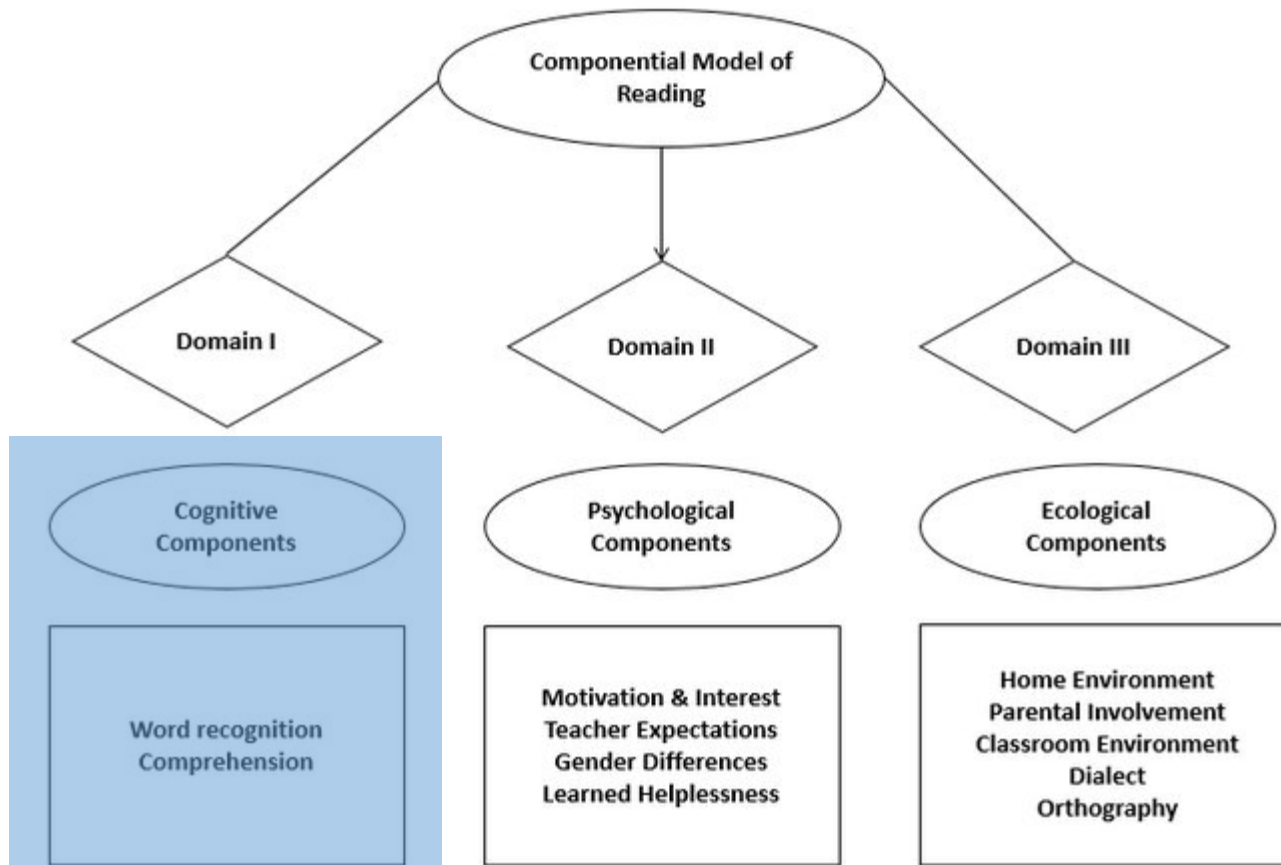


Based on Simple View of Reading, SVR (Gough & Tumber, 1986)

Cognitive components explain 40-80% of the variance in reading comprehension (Joshi, 2021)

Aaron et al., 2008

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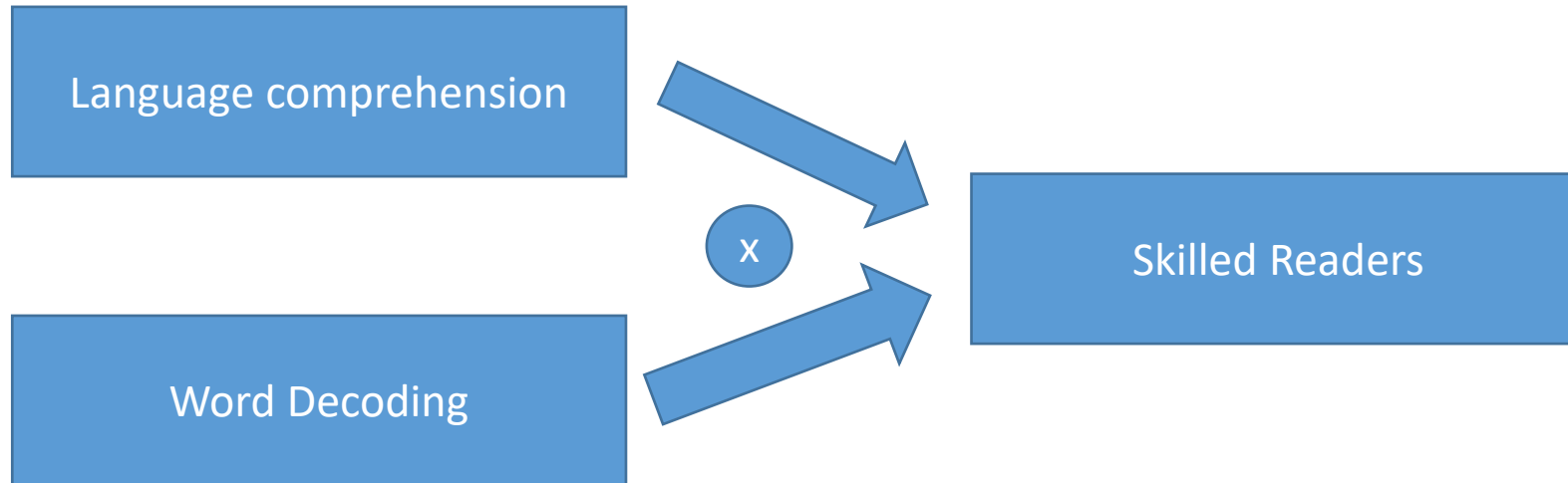
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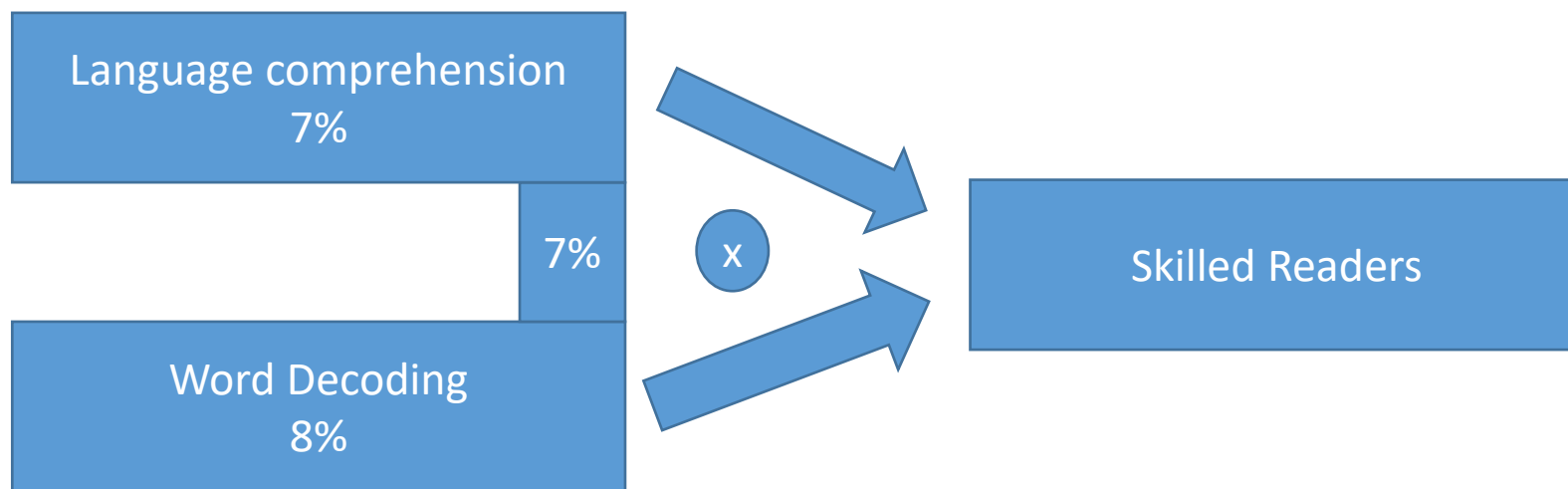
Simple View of Reading (SVR)

(Gough & Tunmer, 1986)



Sources of poor reading

(Gough & Tunmer, 1986)



Kilpatrick 2021

About the school



- Public School
- Middle track secondary school („Realschule“)
- ~ 600 students (~ 50% female)
- 5th – 10th graders
- Age 10 - 17
- ~ 45 teachers



Basic goals

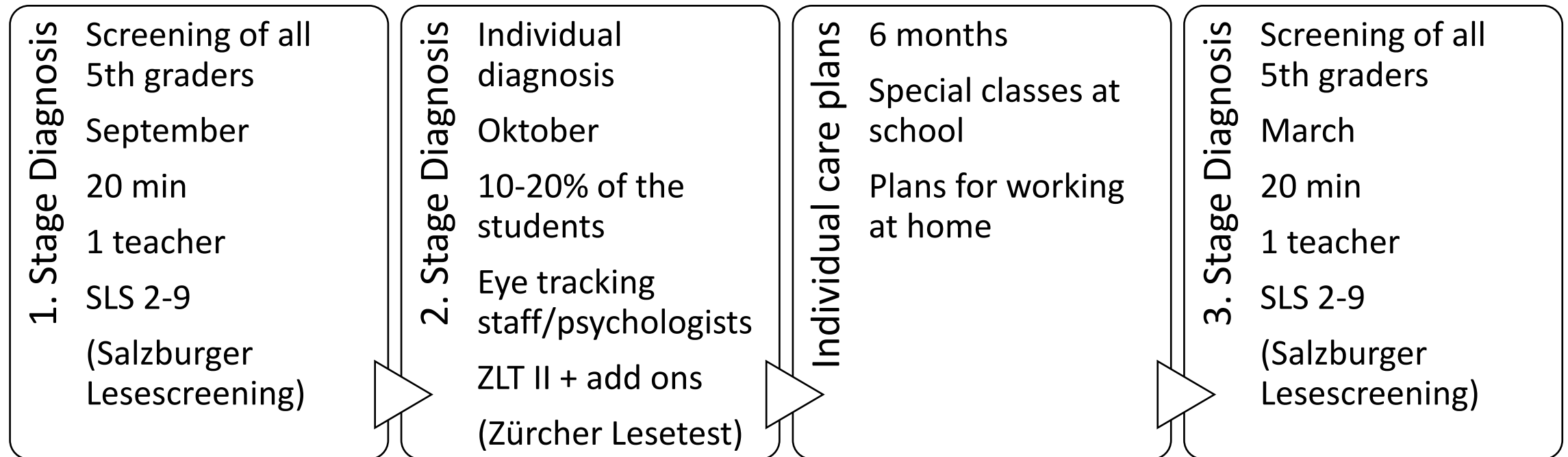
- Students' self-efficacy
- Teachers' motivation



Structure of the reading program



- Start: 2018; second version: 2022



1. Stage Diagnosis



Snow is red.	✓	⊗
Sharks are sleepig in the forest.	✓	X
In the forest there are many trees.	✓	X

1. Stage Diagnosis
Screening of all
5th graders
September
20 min
1 teacher
SLS 2-9
(Salzburger
Lesescreening)

Screening results



Klasse	Geschlecht	Roh	LQ4	LQ5	LQ	Leseförderung
5A	M	56	113	103	108	NEIN
5A	M	46	96	88	92	NEIN
5A	M	50	103	94	98,5	NEIN
5A	M	45	94	86	90	NEIN
5A	M	36	79	73	76	JA
5A	M	60	120	109	114,5	NEIN
5A	M	47	98	89	93,5	NEIN
5A	M	49	101	92	96,5	NEIN
5A	M	50	103	94	98,5	NEIN
5A	M	44	92	85	88,5	NEIN
5A	M	52	106	97	101,5	NEIN
5A	M	46	96	88	92	NEIN
5A	M	45	94	86	90	NEIN
5A	M	46	96	88	92	NEIN
5B	M	43	91	83	87	JA
5B	M	39	84	77	80,5	JA
5B	M	60	120	109	114,5	NEIN
5B	M		#NV	#NV	#NV	#NV
5B	M	41	87	80	83,5	JA
5B	M	65	128	117	122,5	NEIN
5B	M	52	106	97	101,5	NEIN
5B	M	48	99	91	95	NEIN
5B	M	50	103	94	98,5	NEIN
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„Eye-trackers“: LQ < 88

Stage 2 Diagnosis



2. Stage Diagnosis

Individual diagnosis

Oktober

10-20% of the students

Eye tracking
staff/psychologists

ZLT II + add ons

(Zürcher Lesetest)

- Visual problems
- Listening comprehension
- Pre-word-Level:
 - Letter-sound-knowledge
 - Phonetic Awareness
 - Rapid automatized naming
 - Orthographic lexicon/memory
 - Persist over time
- Word-Level:
 - Sightwords/Vocabulary
 - Pseudo-words/Nonsense-words
 - Word-combos
- Sentence-/Textlevel:
 - Silent/Oral reading
 - Persist over time
 - Grammar knowledge

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Stage 2 Conducted Measurements



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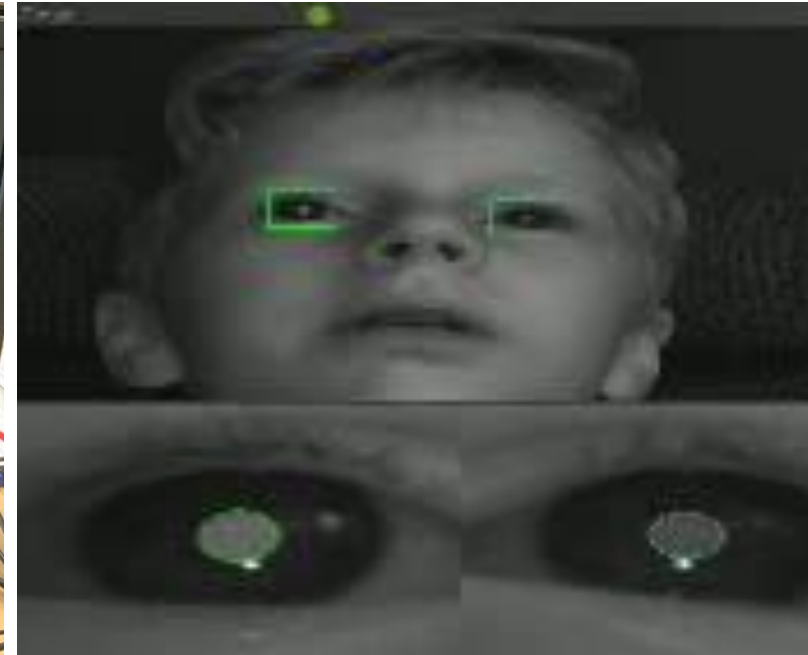
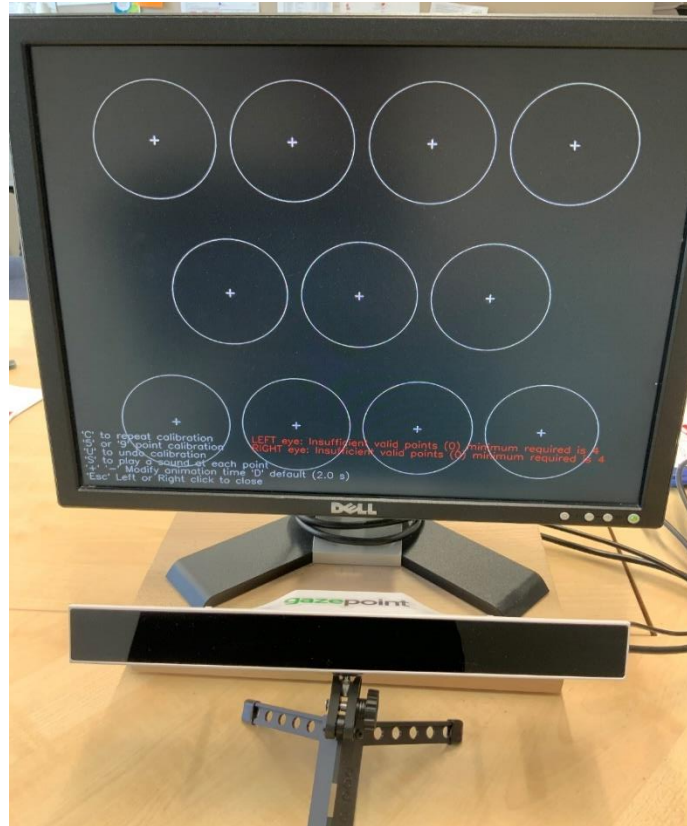
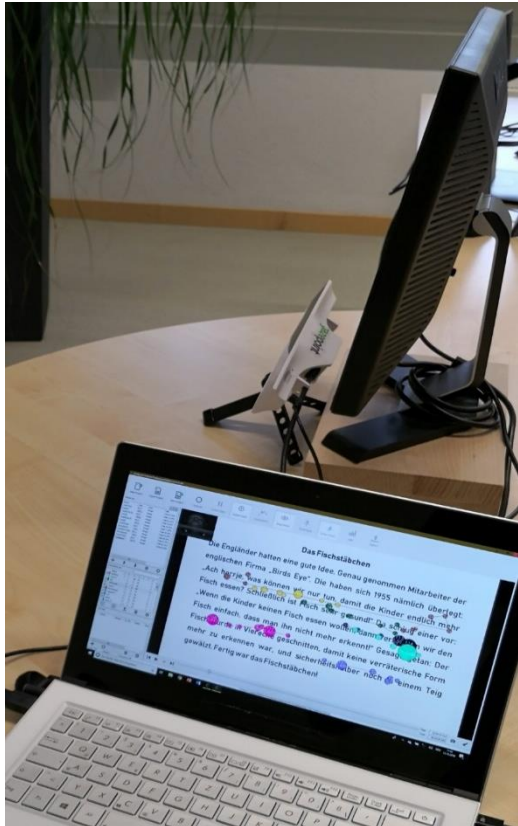
- Number of „Loosing lines“ (straight, curved)
- Total reading time (word/sentence/text)
- Total dwell time (word/sentence/text)
- Number of fixation on AOI (word segment, word, sentence, „grammar markers“)
- Mean fixation duration (silent/oral, depending on task)
- Number of passes (jump backs)
- Distance between spoken word and fixation
- Reading speed (wpm, total, over time)

For more:
(Conklin et al., 2018)

Equipment



GP3 HD, 150 Hz (Gazepoint)



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Setup

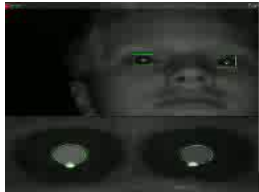


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Es ist viel zu heiß!“, schrie Rudi. „Aber ich dachte, in dem Bach ist es immer kühl“,
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Example



Das Fischstäbchen

gländer hatten eine gute Idee. Genau genommen Mitarbeiter der englischen Firma „Birds Eye“. Die haben sich 1955 nämlich überlegt: „Ach herrje, was können wir nur tun, damit die Kinder endlich mehr Fisch essen? Schließlich ist Fisch sehr gesund!“ Da schlug einer vor: „Wenn die Kinder keinen Fisch essen wollen, dann verkleiden wir den Fisch einfach, dass man ihn nicht mehr erkennt!“ Gesagt, getan: Der Fisch wurde in Vierecke geschnitten, damit keine verräterische Form mehr zu erkennen war, und sicherheitshalber noch in einem Teig gewälzt. Fertig war das Fischstäbchen!

2. Stage Diagnosis
Individual diagnosis
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10-20% of the students
Eye tracking staff/psychologists
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Skills	Stage 0	Stage 1	Stage 2	Stage 3a	Stage 3b	Stage 4					
Age	1-6	6-7	7-9	9-12	12-14	15-18					
Concepts of Print (Chall, 1996)	Follows pictures/shared reading. Engages in pseudo-reading (e.g. page turning). Attends to print features. Knowledge of letter names and sounds emerges. Knows less than half the alphabet. Knows you read from left to right (directionality). Concept of a Word in Print/Text.	Accurately tracks print. Knows the alphabet. Identifies beginning & end consonant sounds. Locates print convention (punctuation, capitals). Ultimately, the child knows a book, how books are organised and know what we do with books (e.g. tell stories, explore information).									
Letter-Sound Knowledge	Knows some letters and the according sound (e.g. letters of his/her name)	Knows the most (>95%) letter-sound combinations.	Knows all letter-sound combinations								
Orthographic lexicon/memory	Recognizing first word structures (e.g. of the own name)	Recognizing word structures of the 1 st grade basic vocabulary. Rearranging parts to learn new words.	Recognizing word structures of the 2 nd to 3 rd grade basic vocabulary. Rearranging parts to learn new words.	Recognizing 80 % of the common word structures. Rearranging parts to learn new words.	Recognizing 90 % of the common word structures. Rearranging parts to learn new words.	Recognizing 100 % of the common word structures. Rearranging parts to learn new words.					
Phonetic Awareness (Chall, 1996)	Awareness of rhyme emerges & Ability to produce rhyme emerges = 24 - 36 mths. (rote imitation of rhymes)/ alliteration = 4 yrs old. Rhyme recognition, odd word out, phonemic changes in words. Clap, count syllables = 5 yrs old. Ability to segment words into phonemes begins = 5 - 7 yrs old. Noticing/remembering separate phonemes in a series = 5.5 yrs old.	Compound word deletion & Syllable deletion = 6 yrs. Blending 2-3 phonemes = 6 yrs. Segment phonemes in words with simple syllables with 2-3 phonemes (no blends) = 6 yrs. Segment phonemes in words that have up to 3-4 phonemes (include blends) = 6.5 yrs old. Substitute phoneme to build words with simple syllables (no blends) = 6.5 yrs old.	Sound deletion (initial and final positions) = 7 yrs old. Sound deletion (initial position, include blends) = 8 yrs old. Sound deletion (medial and final blend positions) = 9 yrs old. Ages when 80-90 % of typical students achieved a phonological skill.								
Alphabetic Principle/Spelling (Chall, 1996)	Pre-alphabetic phase (by visual/contextual cues) = 3 - 5 yrs old. Emergent (Print Concept) Spellers = 3 - 5 yrs old. Knowledge of letter names and sounds emerges = 4 - 5 yrs old. Partial alphabetic phase (by visual & salient parts) = 4 - 6 Spell it like it sounds = 4 - 7 Letter Name-Alphabetic (SemiPhonetic) Spelling = 4 - 7 yrs. States 40 sight words in 45 seconds* = 6 - 7 yrs old. Decoding (alphabetic) phase (by grapheme & phoneme) = 6 - 7 yrs old. States 50 sight words in 45 seconds* = 7 - 8 yrs old. Morphological (by meaningful units) = 9 yrs old.	Partial alphabetic phase (by visual & salient parts) = 4 - 6 Spell it like it sounds = 4 - 7 Letter Name-Alphabetic (SemiPhonetic) Spelling = 4 - 7 yrs. States 40 sight words in 45 seconds* = 6 - 7 yrs old. Decoding (alphabetic) phase (by grapheme & phoneme) = 6 - 7 yrs old. States 50 sight words in 45 seconds* = 7 - 8 yrs old.	States 50 sight words in 45 seconds* = 7 - 8 yrs old. Consolidated (orthographic) phase = 7 - 9 yrs old. Within-Word Pattern (Transitional) Spelling = 7 - 9 Spell it by pattern = 7 - 9 yrs. States 60 sight words in 45 seconds* = 8 - 9 yrs old. Morphological (by meaningful units) = 9 yrs old.	Spell it by rule = 9 - 11 yrs old. States 70 sight words in 45 seconds* = 9 - 12 yrs old. Coordinate several strategies & Derivational Relations (Advanced) Spelling = 11 - 14. States 80 sight words in 45 seconds* = 12 - 13 yrs old. Knows Stress Rules (yellow jacket vs. yellow jacket) 12 - 14 Spell it from knowledge = 13 yrs and old.							
Rapid automatized naming (Pictures pm) → ZLS based	20-40	40-60	60-70	70-80							
Fluency (Chall, 1996)	For most children, the brain has not matured enough for a child to read even the simplest connected text independently prior to the age of 5. Therefore, fluency instruction for Stage 0 includes practice reading high frequency words, sight words, rhyming texts and choral reading.	Grade 1: (WCPI 20); (40) In Stage 1, children require regular practice with connected text to develop fluency and literal comprehension. Children should also expand their sight word vocabulary and reading common phrases with accuracy, speed and prosody.	Grade 2: (40); (62); (92) Grade 3: (79); (93); (114) In Stage 2, there is a considerable emphasis on children learning to read fluently so they can successfully make the transition to reading to learn in Stage 3. Further reading: fluency practice.	Grade 4: (99); (112); (118) Grade 5: (105); (118); (128) Grade 6: (118); (132); (145) In Stage 3a, students should be consolidating their ability to read age-appropriate trade and academic texts fluently. Fluency is defined by three qualities: accuracy, speed and prosody. Fluency readers also have strong vocabularies.	Grade 7: (147); (158); (167) Grade 8: (156); (167); (171) Silent Reading Gr 9: 214wpm Oral fluency rates should plateau at the end of Grade 8. Learners may increase their silent reading rate, but their oral reading rates stay fairly steady thereafter. At Stage 3b, students need to read fluently, with comprehension and with stamina.						
Vocabulary (Chall, 1996)	3-50 words. Name people & objects = 8 - 12 mths. Average expressive vocab: 50-100 = 12 - 18 mths. Average expressive vocab size: 200-300 = 18 - 24 mths. Uses/knows spatial terms (in, on) = 30 - 36 mths. Knows colours & kinship terms = 36 - 42 mths. Knows shapes & size words (small) = 42 - 48 mths.	Organisation of lexical knowledge from episodic to semantic networks. Average expressive vocabulary size: 5,000 words. = 5 - 7 yrs. Focus on consolidating Tier One words and introducing Tier Two words. Most children can understand up to 4000 words when heard but can read about 600.	School introduces new words not encountered in conversation (Tier Two and Tier Three words). Word definitions include synonyms and categories. At the end of Stage 2, about 3000 words can be read and understood and about 9000 are known when heard. Listening is still more effective than reading.	Vocabulary in school texts is more abstract & specific than in conversation (Tier Two & Three words). Explains multiple-meaning words. Vocabulary is learned in context in wide reading, creates a virtuous or vicious cycle. By the end of Stage 3, reading & listening are equal for those who read very well; reading may be more efficient.	Abstract dictionary definitions given for words. Learners are exploring "shades of meaning". Learners are exploring complex academic language (Tier Three words) in information & academic texts. Learners often encounter diverse Tier Two words in humanities (English language arts) texts = 12 - 14 yrs old.	Vocabulary of high school graduates: around 40,000 words or more. There is a systematic study of words and word parts. Reading comprehension is better than listening comprehension of materials of difficult content and readability. For poor readers listening comprehension may be equal to reading comprehension.					
Sight words		Reading 80% of the 1 st grade words as sightwords.	Reading 80% of the 1 st -3 rd grade words as sightwords.	Reading 80% of the elementary school (1 st - 4 th grade) words as sightwords.	Reading 90% of the elementary school (1 st - 4 th grade) words as sightwords.	Reading 100% of the elementary school (1 st - 4 th grade) words as sightwords.					
Silent Reading Rates (Hasbrouck & Tindal, 2006)	1 st : 80 wpm 2 nd : 115 wpm	1 st : 80 wpm 2 nd : 115 wpm	3 rd : 138 wpm 4 th : 158 wpm	5 th : 173 wpm	6 th : 185 wpm	7 th : 195 wpm	8 th : 204 wpm	9 th : 214 wpm	10 th : 224 wpm	11 th : 237 wpm	12 th : 250 wpm University: 280 wpm
Oral Reading Rates (Hasbrouck & Tindal, 2006)	1 st : 53 wpm 2 nd : 89 wpm	1 st : 53 wpm 2 nd : 89 wpm	3 rd : 107 wpm 4 th : 123 wpm	5 th : 139 wpm	6 th : 150 wpm	7 th : 150 wpm	8 th : 151 wpm				
Persist over time			Max decrease of oral reading speed after 10 mins: 20%	Max decrease of oral reading speed after 10 mins: 18%	Max decrease of silent reading speed after 10 mins: 16%	Max decrease of silent reading speed after 10 mins: 14%	Max decrease of silent reading speed after 10 mins: 12%	Max decrease of silent reading speed after 10 mins: 10%	Max decrease of silent reading speed after 10 mins: 8%	Max decrease of silent reading speed after 10 mins: 6%	
Reading comprehension (SLS 2-9)	Recognizing single words, e.g. name or logos of companies.	Spelling, Reading and comprehending 3-word-sentences.	Reading and comprehending words and sentences. Combining dispersed information.	Reading and comprehending and sentences and subordinate clauses. Combining dispersed information.	Comprehend simple texts in different text styles. Knowing where to find help for understanding.	Understanding different text types and simple argumental structures.	Understanding feelings, emotion and attitudes in texts. Successful searching for information about products.	Summarizing and contributing of newspaper articles. Combining information of different sources. Using structural text elements for comprehension.	Summarizing and contributing of demanding texts even if there is misleading information.	Comprehension of complex and demanding narrative texts with multiple storylines and multiple parties with no connection to students' life.	Arguing based on different demanding texts.
Listening comprehension	Comprehending simple and important information. Using pictures and gesture.	Listening to a person telling a story and understanding simple sentences.	Understanding simple communication about common topics. Understanding short stories e.g. fairy tales.	Understanding of route descriptions.	Understanding of the topics of news in radio and television. Understanding of short manuals.						
Grammar		Knowing the alphabet	Distinguishing vowels and consonants	Distinguishing parts of sentences. Knowing word categories.	Rearranging sentences; Knowing subordinate clauses; using the tenses correctly	Knowing origins and types of words; rearranging subordinate clauses;	Explaining changes in language (e.g. influences of foreign languages)	Using grammar to improve orthography	Using grammar to achieve a planned effect.		

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Vocabulary (Chall, 1996)	3-50 words. Name people & objects = 8 - 12 mths Average expressive vocab: 50-100 = 12 - 18 mths Average expressive vocab size: 200-300 = 18 - 24 mths Uses/knows spatial terms (in, on) = 30 - 36 mths Knows colours & kinship terms = 36 - 42 mths Knows shapes & size words (small) = 42 - 48 mths	Organisation of lexical knowledge from episodic to semantic networks. Average expressive vocabulary size: 5,000 words. = 5 - 7 yrs Focus on consolidating Tier One words and introducing Tier Two words. Most children can understand up to 4000 words when heard but can read about 600.	School introduces new words not encountered in conversation (Tier Two and Tier Three words). Word definitions include synonyms and categories. At the end of Stage 2, about 3000 words can be read and understood and about 9000 are known when heard. Listening is still more effective than reading.	Vocabulary in school texts is more abstract & specific than in conversation (Tier Two & Three words). Explains multiple-meaning words. Vocabulary is learned in context in wide reading, creates a virtuous or vicious cycle. By the end of Stage 3, reading & listening are equal for those who read very well; reading may be more efficient.	Abstract dictionary definitions given for words. Learners are exploring "shades of meaning". Learners are exploring complex academic language (Tier Three words) in information & academic texts. Learners often encounter diverse Tier Two words in humanities (English language arts) texts = 12 - 14 yrs old	Vocabulary of high school graduates: around 40,000 words or more. There is a systematic study of words and word parts. Reading comprehension is better than listening comprehension of materials of difficult content and readability. For poor readers listening comprehension may be equal to reading comprehension.	
Sight words		Reading 80% of the 1 st grade words as sightwords.	Reading 80% of the 1 st -3 rd grade words as sightwords.	Reading 80% of the elementary school (1 st - 4 th grade) words as sightwords.	Reading 90% of the elementary school (1 st - 4 th grade) words as sightwords.	Reading 100% of the elementary school (1 st - 4 th grade) words as sightwords.	
Silent Reading Rates (Hasbrouck & Tindal, 2006)	1 st : 80 wpm 2 nd : 115 wpm	1 st : 80 wpm 2 nd : 115 wpm	1 st : 138 wpm 4 th : 158 wpm	5 th : 173 wpm	6 th : 185 wpm 7 th : 195 wpm	8 th : 204 wpm 9 th : 214 wpm	
Oral Reading Rates (Hasbrouck & Tindal, 2006)	1 st : 53 wpm 2 nd : 89 wpm	1 st : 53 wpm 2 nd : 89 wpm	1 st : 107 wpm 4 th : 123 wpm	5 th : 119 wpm	6 th : 150 wpm 7 th : 150 wpm	8 th : 151 wpm	
Persist over time			Max decrease of oral reading speed after 10 mins: 20%	Max decrease of oral reading speed after 10 mins: 18%	Max decrease of silent reading speed after 10 mins: 16%	Max decrease of silent reading speed after 10 mins: 12%	
Reading comprehension (SLS 2-9)	Recognizing single words, e.g. name or logos of companies.	Spelling, Reading and comprehending 3-word-sentences.	Reading and comprehending words and sentences. Combining dispersed information.	Reading and comprehending words and sentences. Combining dispersed information.	Comprehend simple texts in different text styles. Knowing where to find help for understanding.	Understanding different text types and simple argumental structures. Successful searching for information about products.	
Listening comprehension	Comprehending simple and important information. Using pictures and gesture.	Listening to a person telling a story and understanding simple sentences.	Understanding simple communication about common topics. Understanding short stories e.g. fairy tales.	Understanding of route descriptions	Understanding of the topics of news in radio and television. Understanding of short manuals.	Understanding of long newspaper articles. Combining information of different sources. Using structural text elements for comprehension.	
Grammar		Knowing the alphabet	Distinguishing vowels and consonants	Distinguishing parts of sentences. Knowing word categories.	Rearranging sentences; Knowing subordinate clauses; using the senses correctly.	Knowing origins and types of words; rearranging subordinate clauses.	
					Explaining changes in language (e.g. influences of foreign languages)	Using grammar to improve orthography	
						Using grammar to achieve a planned effect.	


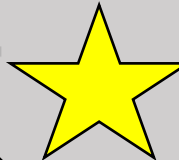

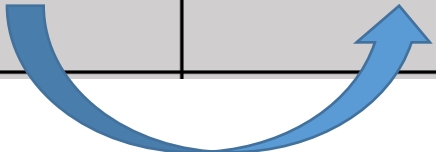
Skills	Stage 0	Stage 1	Stage 2	Stage 3a	Stage 3b	Stage 4					
Age	1-6	6-7	7-9	9-12	12-14	15-18					
Concepts of Print (Chall, 1996)	Follows pictures/shared reading. Engages in pseudo-reading (e.g. page turning). Attends to print features. Knowledge of letter names and sounds emerges. Knows less than half the alphabet. Knows you read from left to right (directionality). Concept of a Word in Print/Text.	Accurately tracks print. Knows the alphabet. Identifies beginning & end consonant sounds. Locates print convention (punctuation, capitals). Ultimately, the child knows a book, how books are organised and know what we do with books (e.g. tell stories, explore information).									
Letter-Sound Knowledge	Knows some letters and the according sound (e.g. name of his/her name)	Knows the most (>95%) letter-sound combinations.	Knows all letter-sound combinations								
Orthographic lexicon/memory	Recognizing first word structures (e.g. of the own name)	Recognizing word structures of the 1 st grade basic vocabulary. Rearranging parts to learn new words.	Recognizing word structures of the 2 nd to 3 rd grade basic vocabulary. Rearranging parts to learn new words.	Recognizing 80 % of the common word structures. Rearranging parts to learn new words.	Recognizing 90 % of the common word structures. Rearranging parts to learn new words.	Recognizing 100 % of the common word structures. Rearranging parts to learn new words.					
Phonetic Awareness (Chall, 1996)	Awareness of rhyme emerges & Ability to produce rhyme emerges = 24 - 36 mths. (rote imitation of rhymes)/ alliteration = 4 yrs old. Rhyme recognition, odd word out, phonemic changes in words. Clap, count syllables = 5 yrs old. Ability to segment words into phonemes begins = 5 - 7 yrs old. Noticing/remembering separate phonemes in a series = 5.5 yrs old.	Compound word deletion & Syllable deletion = 6 yrs. Blending 2-3 phonemes = 6 yrs. Segment phonemes in words with simple syllables with 2-3 phonemes (no blends) = 6 yrs. Segment phonemes in words that have up to 3-4 phonemes (include blends) = 6.5 yrs old. Substitute phoneme to build words with simple syllables (no blends) = 6.5 yrs old.	Sound deletion (initial and final positions) = 7 yrs old. Sound deletion (initial position, include blends) = 8 yrs old. Sound deletion (medial and final blend positions) = 9 yrs old. Ages when 80-90 % of typical students achieved a phonological skill.								
Alphabetic Principle/Spelling (Chall, 1996)	Pre-alphabetic phase (by visual/contextual cues) = 3 - 5 yrs old. Emergent (Print Concept) Spellers = 3 - 5 yrs old. Knowledge of letter names and sounds emerges = 4 - 5 yrs old. Partial alphabetic phase (by visual & salient parts) = 4 - 6 Spell it like it sounds = 4 - 7 Letter Name-Alphabetic (SemiPhonetic) Spelling = 4 - 7 yrs. States 40 sight words in 45 seconds* = 6 - 7 yrs old. Decoding (alphabetic) phase (by grapheme & phoneme) = 6 - 7 yrs old. States 50 sight words in 45 seconds* = 7 - 8 yrs old. Morphological (by meaningful units) = 9 yrs old.	Partial alphabetic phase (by visual & salient parts) = 4 - 6 Spell it like it sounds = 4 - 7 Letter Name-Alphabetic (SemiPhonetic) Spelling = 4 - 7 yrs. States 40 sight words in 45 seconds* = 6 - 7 yrs old. Decoding (alphabetic) phase (by grapheme & phoneme) = 6 - 7 yrs old. States 50 sight words in 45 seconds* = 7 - 8 yrs old.	States 50 sight words in 45 seconds* = 7 - 8 yrs old. Consolidated (orthographic) phase = 7 - 9 yrs old. Within-Word Pattern (Transitional) Spelling = 7 - 9 Spell it by pattern = 7 - 9 yrs. States 60 sight words in 45 seconds* = 8 - 9 yrs old. Morphological (by meaningful units) = 9 yrs old.	Spell it by rule = 9 - 11 yrs old. States 70 sight words in 45 seconds* = 9 - 12 yrs old. Coordinate several strategies & Derivational Relations (Advanced) Spelling = 11 - 14. States 80 sight words in 45 seconds* = 12 - 13 yrs old. Knows Stress Rules (yellow jacket vs. yellow jacket) 12 - 14 Spell it from knowledge = 13 yrs and old.							
Rapid automatized naming (Pictures pm) → ZLS based	20-40	40-60	60-70	70-80							
Fluency (Chall, 1996)	For most children, the brain has not matured enough for a child to read even the simplest connected text independently prior to the age of 5. Therefore, fluency instruction for Stage 0 includes practice reading high frequency words, sight words, rhyming texts and choral reading.	Grade 1: (WCPM 20); (40) In Stage 1, children require regular practice with connected text to develop fluency and literal comprehension. Children should also expand their sight word vocabulary and reading common phrases with accuracy, speed and prosody.	Grade 2: (40); (62); (92) Grade 3: (79); (93); (114) In Stage 2, there is a considerable emphasis on children learning to read fluently so they can successfully make the transition to reading to learn in Stage 3. Partner reading; fluency practice.	Grade 4: (99); (112); (118) Grade 5: (105); (118); (128) Grade 6: (118); (132); (145) In Stage 3a, students should be consolidating their ability to read age-appropriate trade and academic texts fluently. Fluency is defined by three qualities: accuracy, speed and prosody. Fluency readers also have strong vocabularies.	Grade 7: (147); (158); (167) Grade 8: (156); (167); (171) Silent Reading Gr 9: 214wpm Oral fluency rates should plateau at the end of Grade 8. Learners may increase their silent reading rate, but their oral reading rates stay fairly steady thereafter. At Stage 3b, students need to read fluently, with comprehension and with stamina.						
Vocabulary (Chall, 1996)	3-50 words. Name people & objects = 8 - 12 mths. Average expressive vocab: 50-100 = 12 - 18 mths. Average expressive vocab size: 200-300 = 18 - 24 mths. Uses/knows spatial terms (in, on) = 30 - 36 mths. Knows colours & kinship terms = 36 - 42 mths. Knows shapes & size words (small) = 42 - 48 mths.	Organisation of lexical knowledge from episodic to semantic networks. Average expressive vocabulary size: 5,000 words. = 5 - 7 yrs. Focus on consolidating Tier One words and introducing Tier Two words. Most children can understand up to 4000 words when heard but can read about 600.	School introduces new words not encountered in conversation (Tier Two and Tier Three words). Word definitions include synonyms and categories. At the end of Stage 2, about 3000 words can be read and understood and about 9000 are known when heard. Listening is still more effective than reading.	Vocabulary in school texts is more abstract & specific than in conversation (Tier Two & Three words). Explains multiple-meaning words. Vocabulary is learned in context in wide reading, creates a virtuous or vicious cycle. By the end of Stage 3, reading & listening are equal for those who read very well; reading may be more efficient.	Abstract dictionary definitions given for words. Learners are exploring "shades of meaning". Learners are exploring complex academic language (Tier Three words) in information & academic texts. Learners often encounter diverse Tier Two words in humanities (English language arts) texts = 12 - 14 yrs old.	Vocabulary of high school graduates: around 40,000 words or more. There is a systematic study of words and word parts. Reading comprehension is better than listening comprehension of materials of difficult content and readability. For poor readers listening comprehension may be equal to reading comprehension.					
Sight words		Reading 80% of the 1 st grade words as sight words.	Reading 80% of the 1 st -3 rd grade words as sight words.	Reading 80% of the elementary school (1 st - 4 th grade) words as sight words.	Reading 100% of the elementary school (1 st - 4 th grade) words as sight words.						
Silent Reading Rates (Hasbrouck & Tindal, 2006)		1 st : 80 wpm 2 nd : 115 wpm	3 rd : 138 wpm 4 th : 158 wpm	5 th : 173 wpm	6 th : 185 wpm	7 th : 195 wpm	8 th : 204 wpm	9 th : 214 wpm	10 th : 224 wpm	11 th : 237 wpm	12 th : 250 wpm University: 280 wpm
Oral Reading Rates (Hasbrouck & Tindal, 2006)		1 st : 53 wpm 2 nd : 89 wpm	3 rd : 107 wpm 4 th : 123 wpm	5 th : 139 wpm	6 th : 150 wpm	7 th : 150 wpm	8 th : 151 wpm				
Persist over time			Max decrease of oral reading speed after 10 mins: 20%	Max decrease of oral reading speed after 10 mins: 18%	Max decrease of silent reading speed after 10 mins: 16%	Max decrease of silent reading speed after 10 mins: 14%	Max decrease of silent reading speed after 10 mins: 12%	Max decrease of silent reading speed after 10 mins: 10%	Max decrease of silent reading speed after 10 mins: 8%	Max decrease of silent reading speed after 10 mins: 6%	
Reading comprehension (SLS 2-9)	Recognizing single words, e.g. name or logos of companies.	Spelling, reading and comprehending 3-word-sentences.	Reading and comprehending words and sentences. Combining dispersed information.	Reading and comprehending and sentences and subordinate clauses. Combining dispersed information.	Comprehend simple texts in different text styles. Knowing where to find help for understanding.	Understanding different text types and simple argumental structures.	Understanding feelings, emotion and attitudes in texts. Successful searching for information about products.	Understanding of long newspaper articles. Combining information of different sources. Using structural text elements for comprehension.	Summarizing and contributing of demanding texts even if there is misleading information.	Comprehension of complex and demanding narrative texts with multiple storylines and multiple parties with no connection to students' life.	Arguing based on different demanding texts.
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Grammar		Knowing the alphabet	Distinguishing vowels and consonants	Distinguishing parts of sentences. Knowing word categories.	Rearranging sentences; Knowing subordinate clauses; using the tenses correctly	Knowing origins and types of words; rearranging subordinate clauses;	Explaining changes in language (e.g. influences of foreign languages)	Using grammar to improve orthography	Using grammar to achieve a planned effect.		



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Skills	Stage 0	Stage 1	Stage 2	Stage 3a	Stage 3b	Stage 4					
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Orthographic lexicon/memory	Recognizing first word structures (e.g. of the own name)	Recognizing word structures of the 1 st grade level. Rearranging parts to learn new words.	Recognizing word structures of the 2 nd to 3 rd grade basic vocabulary. Rearranging parts to learn new words.	Recognizing 80 % of the common word structures. Rearranging parts to learn new words.	Recognizing 90 % of the common word structures. Rearranging parts to learn new words.	Recognizing 100 % of the common word structures. Rearranging parts to learn new words.					
Phonetic Awareness (Chall, 1996)	Awareness of rhyme emerges & Ability to produce rhyme emerges = 24 - 36 mths (Rate imitation of rhymes)/ alliteration = 4 yrs old Rhyme recognition, odd word out, phonemic changes in words Clap, count syllables = 5 yrs old Ability to segment words into phonemes begins = 5 - 7 yrs old Noticing/remembering separate phonemes in a series = 5.5 yrs old	Compound word deletion & Syllable deletion = 6 yrs Blending 2-3 phonemes = 6 yrs Segment phonemes in words with simple syllables with 2-3 phonemes (no blends) = 6 yrs Segment phonemes in words that have up to 3-4 phonemes (include blends) = 6.5 yrs old Substitute phoneme to build words with simple syllables (no blends) = 6.5 yrs old	Sound deletion (initial and final positions) = 7 yrs old Sound deletion (initial position, include blends) = 8 yrs old Sound deletion (initial and final blend positions) = 8 yrs old Students achieved phonological skill.								
Alphabetic Principle/Spelling (Chall, 1996)	Pre-alphabetic phase (by visual/contextual cues) = 3 - 5 yrs old Emergent (Print Concept) Spellers = 3 - 5 yrs old Knowledge of letter names and sounds emerges = 4 - 5 yrs old Partial alphabetic phase (by visual & salient parts) = 4 - 6 Spell it like it sounds = 4 - 7 Letter Name-Alphabetic (SemiPhonetic) Spelling = 4 - 7 yrs old States 40 sight words in 45 seconds* = 6 - 7 yrs old Decoding (alphabetic) phase (by grapheme & phoneme) = 6 - 7 yrs old States 50 sight words in 45 seconds* = 7 - 8 yrs old	Partial alphabetic phase (by visual & salient parts) = 4 - 6 Spell it like it sounds = 4 - 7 Letter Name-Alphabetic (SemiPhonetic) Spelling = 4 - 7 yrs old States 40 sight words in 45 seconds* = 6 - 7 yrs old Decoding (alphabetic) phase (by grapheme & phoneme) = 6 - 7 yrs old States 50 sight words in 45 seconds* = 7 - 8 yrs old	States 50 sight words in 45 seconds* = 7 - 8 yrs old Consolidated orthographic phase = 7 - 9 yrs old Within-Word Spelling (by final pattern) = 7 - 9 yrs old States 60 sight words in 45 seconds* = 8 - 9 yrs old Morphological (by meaningful units) = 9 yrs old	Spell it by rule = 9 - 11 yrs old States 70 sight words in 45 seconds* = 9 - 12 yrs old Coordinate several strategies & Derivational Relations (Advanced) Spelling = 11 - 14 States 80 sight words in 45 seconds* = 12 - 13 yrs old Knows Stress Rules (yellow jacket vs. yellow jacket) 12 - 14 Spell it from knowledge = 13 yrs and old							
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Skills	Stage 0	Stage 1	Stage 2	Stage 3a	Stage 3b	Stage 4					
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Alphabetic Principle/Spelling (Chall, 1996)	Pre-alphabetic phase (by visual/contextual cues) = 3 - 5 yrs old Emergent (Print Concept) Spellers = 3 - 5 yrs old Knowledge of letter names and sounds emerges = 4 - 5 yrs old Partial alphabetic phase (by visual & salient parts) = 4 - 6 Spell it like it sounds = 4 - 7 Letter Name-Alphabetic (SemiPhonetic) Spelling = 4 - 7 yrs old States 40 sight words in 45 seconds* = 6 - 7 yrs old Decoding (alphabetic) phase (by grapheme & phoneme) = 6 - 7 yrs old States 50 sight words in 45 seconds* = 7 - 8 yrs old	Partial alphabetic phase (by visual & salient parts) = 4 - 6 Spell it like it sounds = 4 - 7 Letter Name-Alphabetic (SemiPhonetic) Spelling = 4 - 7 yrs old States 40 sight words in 45 seconds* = 6 - 7 yrs old Decoding (alphabetic) phase (by grapheme & phoneme) = 6 - 7 yrs old States 50 sight words in 45 seconds* = 7 - 8 yrs old	States 50 sight words in 45 seconds* = 7 - 8 yrs old Consolidated orthographic phase = 7 - 9 yrs old Within-Word Spelling = 7 - 9 yrs old Spelling = 7 - 9 yrs old States 60 sight words in 45 seconds* = 8 - 9 yrs old Morphological (by meaningful units) = 9 yrs old	Spells it by rule = 9 - 11 yrs old States 70 sight words in 45 seconds* = 9 - 12 yrs old Coordinate several strategies & Derivational Relations (Advanced) Spelling = 11 - 14 States 80 sight words in 45 seconds* = 12 - 13 yrs old Knows Stress Rules (yellow jacket vs. yellow jacket) 12 - 14 Spell it from knowledge = 13 yrs and old							
Rapid automatized naming (Pictures pm) → ZLS based	20-40	40-60	60-70	70-80							
Fluency (Chall, 1996)	For most children, the brain has not matured enough for a child to read even the simplest connected text independently prior to the age of 5. Therefore, fluency instruction for Stage 0 includes practice reading high frequency words, sight words, rhyming texts and choral reading	Grade 1: (WCPI 20); (40) In Stage 1, children require regular practice with connected text to develop fluency and literal comprehension. Children should also expand their sight word vocabulary and reading common phrases with accuracy, speed and prosody.	Grade 2: (40); (62); (92) Grade 3: (79); (93); (114) In Stage 2, there is a considerable emphasis on children learning to read fluently. Children successfully make the transition to reading to learn in their reading fluency practice	Grade 4: (99); (112); (118) Grade 5: (105); (118); (128) Grade 6: (118); (132); (145) In Stage 3a, students should be consolidating their ability to read age-appropriate trade and academic texts fluently. Fluency is defined by three qualities: accuracy, speed and prosody. Fluency readers also have strong vocabularies.	Grade 7: (147); (158); (167) Grade 8: (156); (167); (171) Silent Reading Gr 9: 214wpm Oral fluency rates should plateau at the end of Grade 8. Learners may increase their silent reading rate, but their oral reading rates stay fairly steady thereafter. At Stage 3b, students need to read fluently, with comprehension and with stamina.						
Vocabulary (Chall, 1996)	3-50 words. Name people & objects = 8 - 12 mths Average expressive vocab: 50-100 = 12 - 18 mths Average expressive vocab size: 200-300 = 18 - 24 mths Uses/knows spatial terms (in, on) = 30 - 36 mths Knows colours & kinship terms = 36 - 42 mths Knows shapes & size words (small) = 42 - 48 mths	Organisation of lexical knowledge from episodic to semantic networks. Average expressive vocabulary size: 5,000 words. = 5 - 7 yrs Focus on consolidating Tier One words. Learners understand up to 4000 words but can read about 600.	School introduces new words not encountered in conversation (Tier Two and Tier Three words). Word definitions include synonyms and categories. At the end of Stage 2, about 3000 words can be read and understood and about 9000 are known when heard. Listening is still more effective than reading.	Vocabulary in school texts is more abstract & specific than in conversation (Tier Two & Three words). Explains multiple-meaning words. Vocabulary is learned in context in wide reading, creates a virtuous or vicious cycle. By the end of Stage 3, reading & listening are equal for those who read very well, reading may be more efficient.	Abstract dictionary definitions given for words. Learners are exploring "shades of meaning". Learners are exploring complex academic language (Tier Three words) in information & academic texts. Learners often encounter diverse Tier Two words in humanities (English language arts) texts = 12 - 14 yrs old		Vocabulary of high school graduates: around 40,000 words or more. There is a systematic study of words and word parts. Reading comprehension is better than listening comprehension of materials of difficult content and readability. For poor readers listening comprehension may be equal to reading comprehension.				
Sight words		Reading 80% of the 1 st grade words as sightwords.	Reading 80% of the 1 st -3 rd grade words as sightwords.	Reading 90% of the elementary school (1 st - 4 th grade) words as sightwords.	Reading 100% of the elementary school (1 st - 4 th grade) words as sightwords.						
Silent Reading Rates (Hasbrouck & Tindal, 2006)		1 st : 80 wpm 2 nd : 115 wpm	3 rd : 138 wpm 4 th : 158 wpm	5 th : 178 wpm	6 th : 185 wpm	7 th : 195 wpm	8 th : 204 wpm	9 th : 214 wpm	10 th : 224 wpm	11 th : 237 wpm	12 th : 250 wpm University: 280 wpm
Oral Reading Rates (Hasbrouck & Tindal, 2006)		1 st : 53 wpm 2 nd : 89 wpm	3 rd : 107 wpm 4 th : 123 wpm	5 th : 119 wpm	6 th : 150 wpm	7 th : 150 wpm	8 th : 151 wpm				
Persist over time			Max degree of oral reading speed after 10 mins: 20%	Max degree of oral reading speed after 10 mins: 18%	Max degree of silent reading speed after 10 mins: 16%	Max degree of silent reading speed after 10 mins: 14%	Max degree of silent reading speed after 10 mins: 12%	Max degree of silent reading speed after 15 mins: 16%	Max degree of silent reading speed after 15 mins: 15%		
Reading comprehension (SLS 2-9)	Recognizing single words, e.g. name or logos of companies.	Spelling, Reading and comprehending 3-word-sentences	Reading and comprehending sentences and subordinate clauses. Combining disparate information.	Reading and comprehending and sentences and subordinate clauses. Combining disparate information.	Comprehending simple texts in different text styles. Knowing where to find help for understanding.	Understanding different text types and simple argumental structures.	Understanding feelings, emotion and attitudes in texts. Successful searching for information about products.	Summarizing and continuing of newspaper articles. Combining information of different sources. Using structural text elements for comprehension.	Summarizing and continuing of demanding texts even if there is misleading information.	Comprehension of complex and demanding narrative texts with multiple storylines and multiple parties with no connection to students' life.	Arguing based on different demanding texts.
Listening comprehension	Comprehending simple and important information. Using pictures and gesture.	Listening to a person telling a story and understanding simple sentences.	Understanding simple communication about common topics. Understanding short stories e.g. fairy tales.	Understanding of route descriptions.	Understanding of the topics of news.	Understanding of short manuals.					
Grammar	Knowing the alphabet		Distinguishing vowels and consonants	Distinguishing parts of sentences. Knowing word categories.	Rearranging sentences; Knowing subordinate clauses; using the tenses correctly	Knowing origins and types of words; rearranging subordinate clauses;	Explaining changes in language (e.g. influences of foreign languages)	Using grammar to improve orthography	Using grammar to achieve a planned effect.		

Individual support plans

lesediagnostik.de

Apps Statistik Eye-Tracking Literatur-Recherche Hobbies Google Kalender ... Proofreading portalschulen.baye... Leseförderung Erasmus Möbel Digitools Wettbewerbe Schulmanager Onli... Uniculu - LE

Lesediagnostik und Leseförderung

STARTSEITE KONZEPT DIAGNOSE FÖRDERUNG EYE-TRACKING LERNMATERIAL ÜBER UNS LITERATUR IMPRESSUM DATENSCHUTZERKLÄRUNG LOGIN

„Ach herrje, was k... wir nur tun, damit die Kinder endlich mehr Fisch essen? Schließlich ist Fisch sehr gesund!“ Da... „Wenn die Kinder keinen Fisch essen wollen, dann verkte... Wir den Fisch einfach, dass man ihn nicht mehr erkennt!“ Gesagt, getan: Der

LETZTE BEITRÄGE

Realschule Regen nahe am Polarkreis mit Ihrem Leseprogramm zu Gast
Veröffentlicht am 8. Oktober 2019 von u23596
In den Allerheiligenferien wird eine Delegation unserer Schule

Neues Schuljahr gestartet – Wir werden international und sind für den Deutschen Lesepreis nominiert
Veröffentlicht am 23. September 2019 von u23596

NEUESTE BEITRÄGE

- Realschule Regen nahe am Polarkreis mit Ihrem Leseprogramm zu Gast 8. Oktober 2019
- Neues Schuljahr gestartet – Wir werden international und sind für den Deutschen Lesepreis nominiert 23. September 2019
- Neue Übungen zum Leseverständnis 17. April 2019
- Gibt es Legasthenie überhaupt? 2. April 2019
- Leseförderung zeigt Wirkung 2. April 2019
- Screening-Verfahren unter der Lupe 26. März 2019



(Hier klicken: [Zusammengesetzte Wörter Erschwert](#))

Präsentation mit 30 Satzverlängerungsfolien – leseerschwert

(hier klicken: [Sätze verlängern Aschwer](#))

Präsentation mit Text „Schneefrei“ leseeleichtert

(hier klicken: [Text1erleichtert](#))

Präsentation mit Text „Schneefrei“ normal

(hier klicken: [Text1normal](#))

Neu! Bedeutungsverständnis mittel

(Hier klicken: [Lückensatzmittel](#))

Hier kannst du deine Lesezeiten übermitteln:

Vorname *

Welche Übung hast du gemacht? *

Wie lange hast du gebraucht? *

Abschicken

Individual care plans

- 6 months
- Special classes at school
- Plans for working at home



PyramidenwörterLevelB (4) - PowerPoint

Matthias Boehm Freigeben

1 Wert wertig Wertsachen Werte	2 oben Oberstock Oberzeile Oberst	3 neben nebenbei Nebensache Nebeneingang	4 Holz hölzern Holzfigur Holzeisenbahn	5 Haus Zuhause Häuserreihe Hauseingang
6 Leere leeren entleert Mülltonnenleerung	7 Post Paketpost Postbrief Postbote	8 Mutter mütterlich Mutterhaus Muttertage	9 groß größer größtenteils Größenwahn	10 Bauer Bauernhof bauernschlau bäuerlich
11 Bild bildlich Bildhauer Bildband	12 Regen regnen Regenschauer Regenrinne	13 Wind windig Windböe Windschatten	14 Sturm stürmisch Sturmwarnung Sturmflut	15 Zeit zeitlos zeitlich rechtzeitig
Markt Marktplatz Einkaufsmarkt Marktstand	Note Notenbild Notendruck Notenvergabe	Euro Europa europäisch Europaparlament	Preis preiswert hochpreisig Preistreiberei	Haus Haustier Hausgebrauch Hausmeister

Folie 1 von 125 Deutsch (Deutschland) 100%

Individual care plans

- 6 months
- Special classes at school
- Plans for working at home

3. Stage Diagnosis

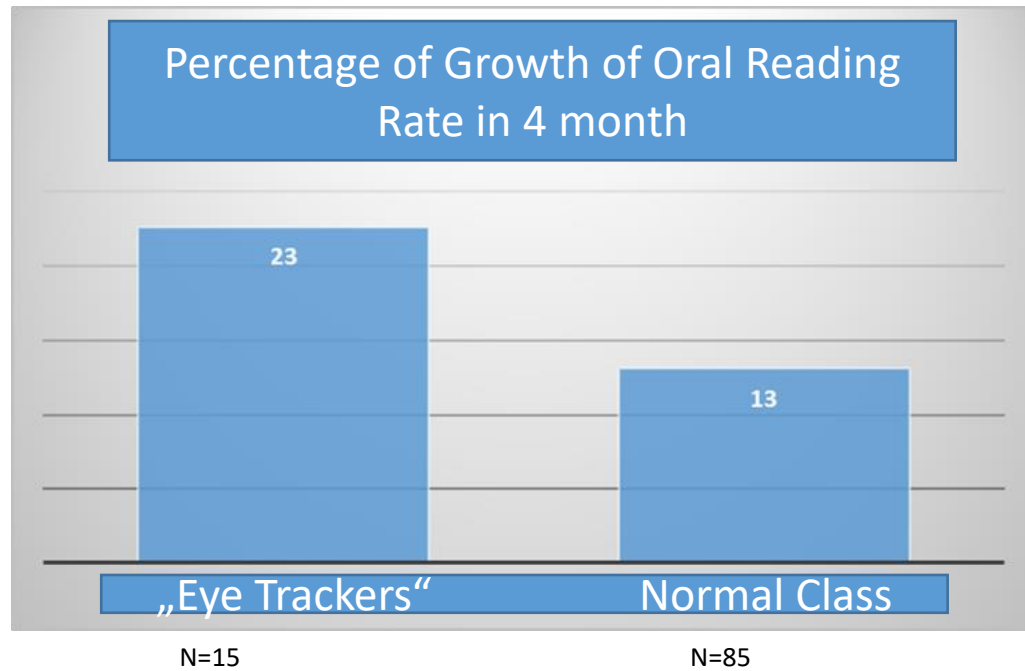


Snow is red.	✓	ⓧ
Sharks are living in the forest.	✓	X
In the forest there are many trees.	✓	X

3. Stage Diagnosis

- Screening of all 5th graders
- March
- 20 min
- 1 teacher
- SLS 2-9
- (Salzburger Lesescreening)

Results

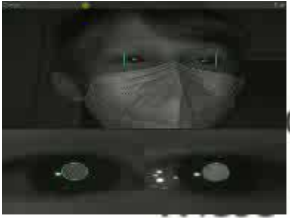


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Twins



Die kleine Nilpferd Bertha sonnte sich an einem heißen Sommertag auf der Wiese neben dem Fluss. Berthas Freund Rudi, der Otter, kam aus seinem Bau am Ufer des Flusses und stöhnte und ächzte. Dann ließ er sich neben Bertha auf den Rücken fallen und blieb liegen. „Was ist denn mit dir los?“, fragte sie und fächerte sich mit einem riesigen Palmwedel Luft zu. „Heiß! Es ist viel zu heiß!“, krächzte Rudi. „Aber ich dachte, in deinem Bau ist es immer kühl“, wunderte sich Bertha. Sie schlürfte ihre Limonade durch einen Strohhalm. „Stimmt. Aber nicht, wenn die ganze Familie zu Besuch ist. Alle sind gekommen. Tanten, Onkel, Brüder, Schwestern, Nichten und Neffen ...“, seufzte der Otter. „Nanu, warum der Besuch?“ Rudi setzte sich auf und strahlte. „Ich habe heute Geburtstag!“

Contact?



Homepage: www.lesediagnostik.de

Mail: m.boehm@imail.de

