

## Even More Challenging Reading

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This article presents correct and incorrect celeration courses from oral reading of challenging text. Thomas, a 13 year-old boy, read 3.0 years below grade level before this study. We used text that had a higher error criterion ( i.e., 20% to 30%) than typically used with challenging reading (i.e., 17% to 20%). Thomas's accomplishments demonstrated that repeated reading of challenging text combined with error correction precedures can result in improved oral reading.

General education and special education assume that students should progress academically from easy to difficult material. The "easy-to-difficult" assumption in the context of reading instruction stems back to the work of Betts (1941, 1946). Bett's believed that reading easy text would enhance the confidence of learners, whilst difficult text may lead to impaired confidence. Betts and Raybould (1984) suggest that errorful learning frustrates learners and reduces motivation to learn. Similarly, Hargis ( 1982) argues that text on which learners surpass 8% initial reading errors, should not be used for instruction. Mercer and Mercer (1981) recommend not using text that learners exceed 10% initial errors. Apparently, many educators believe that instruction for non-fluent readers should begin with easy-to-read text (i.e.,Rubin, 1975; Jorgensos, 1977; Grambrell, Wilson, & Gantt, 1981).

A number of researchers such as Powell ( 1984) and Cadenhead (1987) have questioned the effects of placing students on easy-to-read text. A review of the Precision Teaching literature indicates that placing on challenging tasks often has positive effects on both the chort-term and long-term memory ( Gerent, 1983; Johnson, 1971; B+Neufeld &Lindsley, 1980; Scott, Wolking, Stoutimore, & Harris, 1995). Scott, Wolking, Stoutimore, & Harris (1995) found that a challenging reading program, based on passages that learners read 17% to 20% of the

words incorrectly, was associated with higher celeration values than an instructional reading program based on 5% initial errors. By using challenging reading material in conjunction with effective error-reduction and fluency building instructional procedures, Scott et al. Conclude that students benefit in that they read material more suited to their age group and personal interests. Furthermore, Scott et al. Suggest that placement on more chalenging material helps to improve learner reading confidence and enthusiasm. This study extends the work of Scott et al. We based the decision to examine the effects of more challenging material in our learner's enthusiasm for a particular text . Initial assessments of diofferent texts revealed that the first two books selected resulted in errors below the 17% to 20% range suggested by Scott et al (1995). The third book to be assessed resulted in an error range of 20% to 30%. Although this was above the range suggested by Scott et al (1995), the learner expressed such a keen interest in this particular book that the authors decided to use it as challenging reading material.

### *Participant and Setting*

A 13-year-old boy, Thomas, attended a general education secondary school. Before beginning this program, an educational psychologist assessed Thomas's reading skills using the Wechsler Objective Reading Deminsions (1993) and found that Thomas had a reading age of 10 years old. The study was conducted in a sound proof room within the Psychology Department

of the University of Ulster, Coleraine. The room contained only a table and two chairs.

### *Pinpoints*

We counted the number of words read correctly and incorrectly per minute from written text and also the number of facts recalled per minute from text read. We counted words read correctly and self-corrected words as such. Each occurrence of a word mispronounced, repeated, inserted or omitted was scored as an incorrect response.

### *Recall*

After reading, Thomas recalled as many facts from the text as he could in one minute. A correct fact was defined as an information unit such as a sentence, a subject-verb-object relationship or implied subject-verb-object relationship, and dates or names relating to the text just read. Facts not related to the text, or repetitions of correct facts already stated were recorded as incorrect responses.

## **PROCEDURE**

The procedure followed the four conditions reported by Scott et al. (1995). We present the conditions in the following sections.

### *Assessment*

Our assessment for challenging reading material began by using passages suitable to the learners current level and proceeded through several texts of increasing difficulty until reaching a challenging passage. Thomas expressed particular interest in reading a challenging level book. When we assessed his correct and incorrect words read in the book selected by Thomas, we found that reading errors exceeded the 17% - 20% criterion used by Scott et al (1995) and fell between a 20%-30% range.

### *Daily Timings*

During Daily Timings, Thomas orally read a 180-200 word passage from the challenging

book for one minute. Reading errors were marked by the teacher on a copy of the passage and the last word read was also marked. At the end of the 1-minute counting time, Thomas continued reading the remaining text from the passage. We counted however, only words read during the 1-minute counting time.

### *Error Correction*

We corrected all reading errors using a two step process Target Word. The teacher firstly pointed to the word that had been read incorrectly (target word), read the word correctly and then Thomas read the target word correctly. We repeated this procedure for each target word. The teacher did not move to the next target word until the learner could read the previous word correctly.

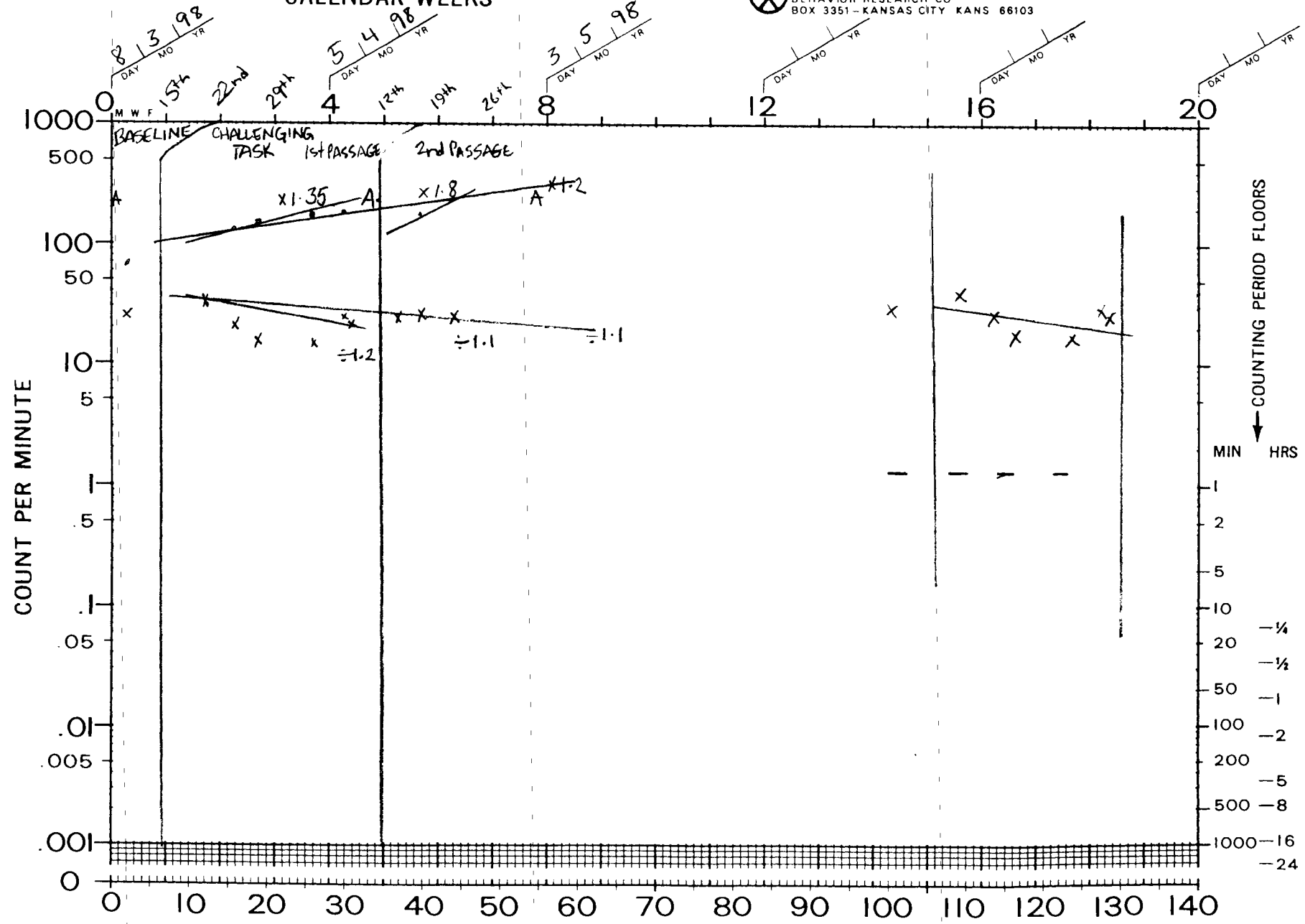
### *Word-in-context*

The teacher then read two words either side of the target word itself. Thomas then read this five-word phrase. Again, the learner did not proceed to the next phrase until the previous one was read correctly. The learner was then asked to read the passage once more in its entirety and the error correction procedure was performed on any persistent errors.

### *Repeated Reading, Rate Pacing, and Recall*

Once the error correction step of the procedure had been successfully completed, we implemented the repeated reading and rate-pacing procedures. Before each teaching session, we prepared an audio tape that contained the relevant passage but read at a rate of around 30 words per minute (wpm) faster than the learner's previous reading rate (i.e. Thomas read 120 wpm from a given passage, the authors recored 150 wpm). Thomas read from the text at the same rate as the tape. We repeated this using the audio tape until Thomas

CALENDAR WEEKS



<u>M. KELNANI</u> SUPERVISOR	<u>C. MCDOWELL</u> ADVISER	<u>B. OWEN</u> MANAGER	SUCCESSIVE CALENDAR DAYS	<u>THOMAS</u> BEHAVIOR	<u>13</u> AGE	<u>CHALLENGING</u> READING	<u>SEC/SAY</u> COUNTED
<u>B. OWEN</u> DEPOSITOR	<u>V.V.C.</u> AGENCY	<u>B. OWEN</u> TIMER	<u>OWEN &amp; MCDOWELL</u> COUNTER	<u>OWEN &amp; MCDOWELL</u> CHAPTER			

CALENDAR WEEKS

8 13 198  
DAY MO YR

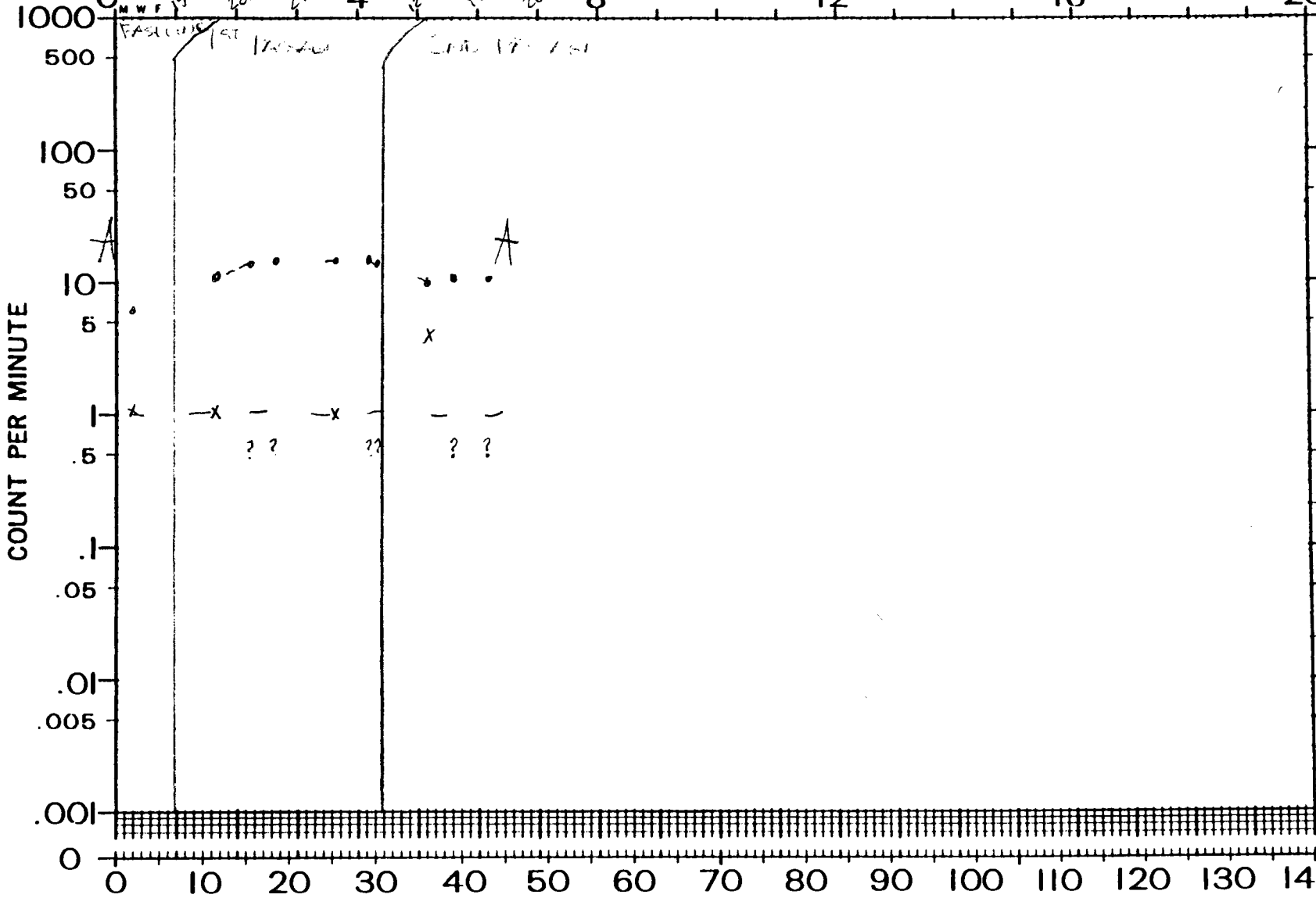
5 14 198  
DAY MO YR

3 15 198  
DAY MO YR

DAY MO YR

DAY MO YR

DAY MO YR



6

COUNTING PERIOD FLOORS

MIN HRS

M. KEENAN C. MCDOWELL B. OWEN  
SUPERVISOR ADVISER MANAGER  
B. OWEN V.V.C  
DEPOSITOR AGENCY

SUCCESSIVE CALENDAR DAYS

B. OWENS OWEN & MCDOWELL OWEN & MCDOWELL  
TIMER COUNTER CHARTER

THOMAS 13 4D RECALL THINK/SAY  
BEHAVIOR AGE LABEL COUNTED

RECALL

could read the passage without errors at the same rate as the tape. Thomas then read the passage again without the recording. We counted correct and incorrect words per minute only on the reading without the practice tape. We assessed Thomas's recall by asking him to think-say as many facts as possible about the text in 1 minute.

## RESULTS

### *Reading Fluency*

Chart 1 represents the charted data of the learner's progress under the challenging reading program. An initial reading of the passage resulted in 68 words per minute read correctly and 26 words per minute read incorrectly by Thomas. The implementation of the challenging reading program resulted in a jump up in both correct and incorrect responses per minute (103 and 33 respectively). Across subsequent sessions incorrect responses began to decelerate (spread 33-14, middle score 23) while correct responses continued to accelerate (spread 103-209, middle score 176). Thomas achieved the correct reading aim (200+wpm) on the sixth session by reading 209 correct words. Correct reading accelerated at  $\times 1.4$  and incorrect reading decelerated at  $\div 1.2$  on the first passage. On the second passage correct reading turned up with an acceleration  $\times 1.8$  and incorrect reading continued to decelerate at  $\div 1.2$ .

### *Recall*

Chart 2 presents Thomas's recall of facts from the challenging text. He recalled 6 facts correctly and 1 fact incorrectly per minute after the initial reading of the passage. With repeated practice, Thomas improved the number of facts he recalled correctly per minute spreading from 11 to 16 and the number of facts per minute recalled incorrectly spread from one occurrence to no occurrence. Thomas achieved the recall

aim of 15 to 30 recalls per minute on the third session and remained at aim for the next three sessions.

## DISCUSSION

This study supports the work of Scott et al. (1995) by demonstrating the gains in fluency readers make using challenging text. As stated previously in this article, many educators recommend placing special education students on tasks in which initial errors do not exceed 8% to 10% (Hargis, 1982; Mercer & Mercer 1981). Scott et al. (1995) compared the accelerations of learners placed on instructional level material based on an error criterion of 5%, with their accelerations when placed on challenging material based on an error criterion of 17% to 20%. Their study demonstrated that superior acceleration gains were made when learners read challenging material. This study adds to those findings by demonstrating that repeated readings of challenging reading material, combined with an error correction procedure resulting in reading fluency even with an error criterion of 20% to 30% for text selection.

One area of concern was the finding that Thomas's incorrect responses remained high, even though an error correction procedure was used. One possible explanation as to why errors remained high was that incorrect responses were primarily repetition of single words or omissions of several words at a time rather than many words being read incorrectly. The deceleration of incorrect responding was  $\div 1.2$  on both passages. This suggests that if further sessions, using repeated readings and error correction procedures, had occurred before moving on to a new passage, incorrect responses may have decelerated further to acceptably lower levels. Incorrect responding at the level reported in this study may indicate that an error criterion of 20% to 30% is perhaps approaching

a maximum difficulty level for challenging texts. Further studies are needed to ascertain if incorrect responding on the text of this level of difficulty decelerates to low levels with more repeated practice. Scott et al. (1995) state that one of the advantages in using challenging material, with challenging text, is that students can read interesting and age-appropriate material. Thomas wanted to read a particular book that had appropriate content for his age group. The interest of Thomas influenced our selection of text, and we let him read his selection. Despite the higher rate of initial reading errors, Thomas achieved our instructional aims on oral reading and recall. We believe that the effort Thomas gave to the challenging text demonstrated his motivation to read a text he considered interesting. Furthermore, the assessments of recall show that Thomas may have comprehended the material read as his recall for the first passage read was at aim for 5 consecutive sessions.

Although the acceleration values obtained in this study are not as high as the values achieved by Scott et al. (1995) error criterion of 17% to 20%, this study furthers the case for placing students on challenging material by showing that a student with reading difficulties made significant gains in fluency using reading material based in the higher error criterion of 20% to 30%. Further research however, using larger numbers learners may be needed to determine an error cut-off point after which learning does not accelerate. Nonetheless, this study proposes that material on which initial errors exceed the 17% - 20% level should not be ruled out if it is considered to be appropriate and interesting by the learner as the added motivation the reader derives from reading a book they themselves have chosen is a valuable asset to any reading program.

Selecting suitable reading material is a significant and critical element of any program concerned with the teaching of reading skills. This research combined with that of Scott et al.

(1995) yields a number of recommendations for teachers concerned with selecting appropriate reading material. Firstly, teachers should make use of the challenging reading method described here given the effects it has on improving reading skills as well as having positive effects on learner reading confidence, enthusiasm and motivation.

A further recommendation is that although the challenging reading method may take some time to initially set up, it is worthwhile investment that can be effectively integrated into everyday classroom settings at a minimal cost. Indeed the present data demonstrates that although the challenging reading method is under utilised, it may represent an appropriate consideration for many students.

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