

THE EFFECTS OF COOPERATIVE LEARNING ON TURKISH STUDENTS' READING FLUENCY

Assist. Prof. Dr. Kasim YILDIRIM
Ahi Evran University
Turkey and Kent State University, U.S.A.

Prof. Dr. Timothy RASINSKI
Kent State University, U.S.A.

Prof. Dr. Hayati AKYOL
Gazi University, Turkey

ABSTRACT

A quasi-experimental design was employed to evaluate the effectiveness of cooperative learning intervention. An experimental group and two control groups participated in the study. The cooperative learning fluency instruction was used in the experimental group while the traditional fluency instruction was used in the control groups. The author analyzed the data by using a one way analysis of covariance to test the differences between the experimental and control groups on post-test scores. The analysis of the data indicated that there was a significant difference between the experimental and control groups on means of reading fluency ($F(2, 65) = 28.884, p = 000, \text{partial } \eta^2 = .47$). The findings revealed that the cooperative learning fluency intervention had positive effects on reading fluency for students in the experimental group. The implication can be drawn from these findings that cooperative learning can be effectively used in Turkish elementary classrooms to improve students' reading fluency and overall reading proficiency.

Key Words: Cooperative learning, reading, literacy, instruction, reading fluency.

INTRODUCTION

Today, more than ever, since the ability to read and comprehend what is read is crucial to become successful in global and information-driven society (Coonor et al., 2011), reading programs should make students acquire essential reading skills that enable them to learn and enjoy from printed materials (Torgesen, 2002).

Rosenblatt (1982) states that "reading is transaction, a two way process, involving a reader and a text at a particular time under particular circumstances" (p. 268). This definition stresses the contribution of both reader and text to make meaning. When a reader processes a text, the reader brings past experiences to form a response to current text. In this process, both the text and the reader contribute to the construction of meaning and each of them affects and is affected by another one (Rosenblatt, 1978; Short, 1986).

Proficiencies needed in order to become good reader, include phonemic awareness, phonics, fluency in reading, adequate vocabulary and reading comprehension. Lack of one of these skills may lead to unsuccessful reading (Chafouleas, Martens, Dobson, Weinstein, & Gardner, 2004; National Institute of Child Health and Human Development [NICHD], 2000; Therrien, 2004).

A growing body of evidence points particularly to reading fluency as an important factor in student reading success. Reading fluency is primarily defined as how fast and accurately with appropriate prosody or expression a person reads a passage (Hudson, Lane, & Pullen, 2005). In school settings, judgments about reading ability are often made on the basis of students' oral reading fluency. Thus, teachers, researchers, parents, and children alike generally agree on the importance of fluency (Rasinski, 1989; Rasinski, 2003a; Rasinski, 2004;

Rasinski & Hoffman, 2003; Rasisnki, Padak, Linek, & Sturtevant, 1994; Yildiz, Yildirim, Ates, & Cetinkaya, 2009; Yildirim, Yildiz, Ates, & Cetinkaya, 2009).

Since the publication of the National Reading Panel report (NICHD, 2000) and other recent scholarly reviews of scientific research (Chard, Vaughn, & Tyler, 2002; Kuhn & Stahl, 2000; Rasinski & Hoffman, 2003), reading fluency has taken center stage in discussions about student reading success and effective instruction in reading. Yet programs and materials addressing reading instruction and teacher training seldom tackle reading fluency. This lack of attention may be due to the fact that fluency has long been associated with oral reading, a form of reading viewed traditionally as having little importance in learning to read (Hudson et al., 2005; NICHD, 2000; Rasinski, 2004).

Researchers suggest various strategies to improve reading fluency, including reading aloud, repeated reading, fluency development lesson (FDL), independent silent reading, choral reading, readers theatre, paired reading, reading triads, reading buddies, modeling, peer tutoring, practice and assisted reading, coaching and formative feedback (Begeney & Martens, 2006; Chard et al., 2002; Devault & Joseph, 2004; Jolliffe, 2007; Mastropieri, Leinart, & Scruggs, 1999; NICHD, 2000; Opitz & Rasinski, 2008; Rasinski, 2009; Rasinski, Padak, & Fawcett, 2010; Samuels, 1979; Welsch, 2006). Unfortunately, in traditional methods, students may read aloud only once, and they may not receive sufficient feedback and support on their reading due to class time constraints. In contrast, in cooperative learning settings, students often read aloud and receive immediate feedback and support about their reading from other group members (Alhaidari, 2006). Providing feedback and support to students after they read orally can facilitate growth in reading fluency (Rasinski, 1989). Koskinen and Blum (1986) report on a model of reading fluency instruction in which paired students work together, mutually offering correction, feedback and praise.

Cooperative learning is an instructional method in which children work together to increase their own and each other's learning and accomplish shared learning goals (Johnson & Johnson, 1999; Slavin, 1983; Slavin, 1991; Slavin 1999). It has been widely used in many fields and at different grades. The common idea that lies behind cooperative learning is that children work together to learn and feel responsible for one another's learning as well as their own (Slavin, 1990a; Slavin 1990b). In cooperative learning, the teacher maintains complete control of the class, even though the children work in groups to accomplish the goal of a lesson (Tarim, 2009). The teacher monitors the process and guides students by providing materials and explanations when needed. The reasons behind the popularity of cooperative learning include its positive effects on academic achievement, peer relations, inclusion of children with special needs, self-esteem, attitude and anxiety (Johnson & Johnson, 1981; Johnson & Johnson, 1989; Sharan, 1980; Slavin, Madden, & Leavey, 1984; Slavin, Lake, Chambers, Cheung, & Davis, 2009; Tarim, 2009).

Previous studies have shown that cooperative reading in the classroom contributes to the development of students' reading skills by allowing them the opportunity to read over and over again, enabling proficient readers to help less proficient ones in heterogeneous groups, encouraging them to give continuous support and feedback on each other's reading (Fuchs, Fuchs, Mathes, & Simmons, 1997; Hoffman & Isaacs, 1991; Koskinen & Blum, 1986; Stevens & Slavin, 1995; Topping, 1989; Walczyk & Griffith-Ross, 2007).

Vaughn, Chard, Bryant, Coleman, Tyler, Linan-Thomson, and Kouzekanani (2000) examined the effectiveness of partner reading compared to a comprehension-oriented strategy for third grade students. During a paired reading session, a more proficient reader is typically paired with a less proficient peer. The proficient reader reads the material first to provide a model of fluent reading for the less proficient reader. The less proficient reader subsequently reads the text. While one student reads, the listening partner provides feedback and alerts the reader when an error has been made. In this study, proficient readers were paired with less proficient ones. The results revealed that partner reading significantly improved reading fluency. Additionally, Stevens, Madden, Slavin and Farnish (1987) examined partner reading as a component of cooperative

integrated reading and composition (CIRC). The authors found significant effects in favor of CIRC, which showed significant gains in reading compared to control groups.

Reading Instruction in Turkey

Reading is one of the learning areas covered in the Turkish language course curriculum in Turkey. Skills of good reading (e.g., phonologic awareness, word recognition, vocabulary, reading fluency, affect, and reading comprehension) are presented to children in Turkish language course (Ministry of National Education [MoNE], 2005). However, an investigation of the literature in Turkey on the teaching of Turkish language shows that there is not enough emphasis on how to teach reading fluency and related skills, and how to develop and evaluate these skills in children. At the same time, the use of traditional teaching methods by most teachers in Turkish language course deprives students of the opportunity to interact with each other during reading activities and to contribute to each other's learning. Therefore, studies are needed to fill this gap in Turkey. The present study attempts to address this need.

METHOD

Researchers frequently need to use intact groups in educational settings for their experimental research because of availability of the participants or because of probations forming artificial groups (Creswell, 2003, 2005), thus this study used a pretest and posttest control-group quasi-experimental design. In this design, groups were selected without random assignment. All groups took a pretest and a posttest. Only the experimental group received treatment. In this research, one fifth-grade class randomly assigned as the experimental group and two as the control groups.

Participants

The study was conducted on a total of 69 fifth-grade students who were attending three different classes in two public elementary schools at the middle socio-economic status in central Kirsehir, Turkey during the fall and spring semesters of the 2008–2009 school year. One classroom of 24 (13 females and 11 males) fifth-grade students made up the experimental group, while two fifth-grade classrooms with a total of 20 (7 females and 13 males) students comprised one control group and 25 (11 females and 14 males) students comprised the other control group.

Data about the development levels of public elementary schools throughout Kirsehir were obtained from the Turkish Statistics Institute. Middle socioeconomic schools participated in the study. Two schools were selected with a total of five fifth-grade classes between the two schools. Of those five classes one experimental group and two control groups were chosen randomly for this research.

The cooperative learning fluency implementation was conducted by the researchers (first author) in the experimental group. The researchers (first author) also provided reading instruction to the first control group, while the class teacher undertook this task in the second control group. The study lasted for a total of 10 weeks.

Readability of Texts for Reading Fluency

In this study, four texts were initially chosen from Turkish language course materials recommended for fifth-grade students by the Turkish Ministry of Education (<http://ttkb.meb.gov.tr/ogretmen/>; Kapulu & Karaca, 2005; Karafilik, Degirmenci, Bilkan, & Ozden, 2005). The cloze technique was used to identify the readability of these texts. They were found to be at an appropriate length for fifth grade students (between 167-258 words) (Akyol, 2005) and were read as cloze passages by 80 fifth-graders who were attending a elementary school. This sample had similar characteristics to the research groups, both the experimental and two control groups.

During this piloting stage, no words were deleted from the first and last sentences in the texts. Each sixth word was then deleted, as suggested by Ulusoy (2006, 2008). A total of 25 words were deleted from each text. After

the preparation of the texts according to the cloze technique, they were given to students every other day; ample time was provided for responses. The data obtained were used to compute the readability levels of the texts. The results are given in Table 1.

Table 1 .Readability of Texts Chosen to Identify Students' Reading Fluency Levels

Texts	<i>N</i>	<i>M</i>	<i>SD</i>	<i>KR-20</i>	Percentage of correct responses
Wrestling in Kirkpinar	80	13.75	4.27	.71	%55 (instructional level)
Environmental Pollution	80	13.76	3.99	.72	%55 (instructional level)

Table 1 shows the two texts that were selected as being appropriate for fifth-graders at the instructional level so that students both below and above average reading competence would be addressed. Of these two, "Environmental Pollution" was used as the pretest and "Wrestling in Kirkpinar" as posttest to establish students' reading fluency levels before and after the quasi-experimental study.

Measuring Fluency

Similar to many other studies, this study also measured reading fluency as the number of words read correctly in a text in one minute (word correct per minute, [WCPM]) (e.g., Hasbrouck & Tindal, 1992; NICHD, 2000; Rasinski, 1990a; Rasinski & Padak, 2005; Samuels, 1979; Tindal & Hasbrouck, 2006; Valleley & Shriver, 2003; Yovanoff, Deusbery, Alonzo, & Tindal, 2005). Another component of reading fluency, including reading prosody was not incorporated into measurement process. Like other research, reading fluency measurement referred to reading rate. That is, reading fluency was measured as WCPM for this study.

After identifying texts at the students' level with respect to readability, individual read aloud sessions were organized at the beginning of the experimental study in order to establish the reading fluency levels of both the experimental and control group students. The researcher and the student were present in each session. These sessions were held in quiet settings provided by the administrators of the participating schools, where students would not be distracted and feel comfortable and safe. Before reading, the researcher placed a copy of the text to be read in front of himself and the student. The aim of the study was explained to the student and he/she was asked to read the text for a minute when he/she felt ready. Each student read the pretest text "Environmental Pollution" for one minute. During reading, the researcher video recorded each student's reading process, and calculated the total number of words read correctly and incorrectly by each student. The same work was undertaken to reveal students' reading fluency levels after the experiment by using the text "Wrestling in Kirkpinar" as a posttest. Students had not seen or read either text prior to reading it in the test situation.

Procedure

This study was conducted starting the first week of March through the second week of May. It was conducted both in the experimental and control groups for a total of 10 weeks during the six hours per week of Turkish language course. The activities were limited to the texts given in the fifth and sixth thematic units in the fifth-grade Turkish language instruction curriculum. Activities on each text started and ended at the same time in all of the groups. Cooperative learning was used in the experimental group while the traditional instructional method was used in the control groups.

Prior to the study, voluntary participation consent forms were obtained from both experimental and control group students and their families.

In the experimental group, student gender and pretest reading fluency scores were used to form six coed groups with four individuals in each (24 students in total). The researcher ensured that proficient and weak readers were placed in these groups (two proficient readers and two weak readers in each group). Following

group formation, the roles to be played throughout the experimental study were explained to students in the group. Each student chose a role of their preference. The roles chosen in the experimental group were as follows:

Participation checker: Helps others join in group work. Ensures everyone gets a turn.

Organizer: Keeps everyone on task and watches the time.

Praiser: Praises individual' contributions and helps celebrate achievements.

Checker: Makes sure everyone has learned or completed the task. Checks for understanding and agreement.

Work undertaken in the experimental group was in line with the lesson plans prepared by the researcher. These plans covered all learning areas of the Turkish language instruction curriculum (reading, listening, speaking, writing, viewing and visually representing). As the present study focused solely on reading fluency, information is given about what was done to improve students' reading fluency in the Turkish language course.

Previous studies (e.g., Fuchs & Fuchs, 2005; Hudson et al., 2005; Jolliffe, 2007; Kagan, 1989, 1992, 1994; Kagan & Kagan, 1998; Koskinen & Blum, 1986; Mastropieri et al., 1999; NICHD, 2000; Opitz & Rasinski, 2008; Rasinski & Padak, 2001; Rasinski et al., 2010; Samuels, 1979; Slavin, 1995; Topping, 1989; Welsch, 2006) were used in undertaking cooperative reading fluency activities in the Turkish language course. A different text was worked on in the six hours of Turkish language courses every week (2 hr 3 times per week). In the experimental cooperative groups, cooperative reading techniques which encouraged students to interact with each other and the teacher, such as teacher and peer modeling, reading aloud, repeated reading, paired reading, round robin, peer tutoring, reading triads, independent silent reading, reading buddies, echo reading, choral reading, shared reading were used. To illustrate, in the teacher modeling technique, the researcher read the text aloud properly to the whole class while students followed it quietly from their books. Then the researcher asked the students to model his reading in the individual read-aloud activities to be held in their groups. In the shared reading technique, students in the groups worked in pairs. The text was shared between the two students in each pair, according to their preferences. While one student in each pair read the part of the text he/she preferred, the other student followed quietly and helped the reading partner when necessary and gave positive feedback. Then the students switched roles. Similarly, for paired reading, groups were again divided into pairs. One student in the pair read the text to his/her partner several times. The partner's task was to follow the text, provide help when needed and give positive feedback to the reader. After the first student read the text several times, the roles were switched. The partner became the reader and read the entire text several times as well.

In reading buddies, groups were divided into pairs once again. One student read the text to his/her partner twice. The partner's task was to follow the text and summarize what had been read. In reading triads, students worked in groups to read the text and help each other. In this activity, one student was the reader and the other three students were checkers. One student in the group read the text aloud to his/her group of friends. The other students followed the text. Checkers took notes about the mistakes that the reader made during reading. After reading, they corrected these mistakes and then helped the reader understand how to best read. All of these steps were repeated for all group members.

In choral reading, each group of the class took turns reading the text aloud chorally to whole class several times and then the teacher created variety by having groups read in echo styles. In round robin, the text was divided equally among the group members. Each student took turns reading aloud his/her part from the text to group members. All of these steps were repeated until each student had read every part of the text. After the readings, each student in the group was encouraged to read the entire text silently several times.

After the completion of weekly reading work in the experimental group, students' reading fluency levels were calculated for the given text (Words read correctly per minute-WCPM) and the benefits of reading practice, if any, were established.

The researcher took particular care to pair up proficient and less proficient readers within the same groups as the experimental students underwent these activities. At the same time, an effort was made to ensure effective communication between group members; to have reading materials ready for the groups; to have students participate actively in the activities; and to encourage reluctant students to participate. In addition to these, the researcher walked around the classroom to monitor whether students were meeting their individual responsibilities within the groups and whether they gave each other sufficient support.

In the control groups, where traditional methods were used, no intervention was made in the regular class order. The text was read aloud to the entire class by the researcher in control group 1 and by the teacher in control group 2, followed by silent reading by all students. As a final activity, each student was asked to read the text aloud. At the end of the implementation, the posttest assessment was administered to all students in the groups.

RESULTS

This section presents findings of this study conducted for ten weeks during the spring semester (2009) in 3 fifth-grade classes of a Turkish elementary school in Kirsehir, Turkey. Two sets of analyses were done including fluency. For the pretest analysis, the researcher used one-way analysis of variance (ANOVA) to test whether there were significant differences between the experimental and control groups on the pretests. This analysis was utilized to assess the initial equivalence of the experimental and control groups. For the posttest analysis, the researcher tested the differences between the experimental and control groups on a posttest by using one-way analysis of covariance (ANCOVA). In this analysis, the pretests served as a covariate variable where groups (experimental and control) were the independent variable, and the posttests were the dependent variable.

First, a one-way analysis of variance was conducted on the pretest scores of reading fluency for the three groups (experimental vs. control 1 vs. control 2). The ANOVA results revealed that there were no significant differences between the pretest mean scores of these groups ($F(2,66) = 2.562, p = .085$). Thus, there were no significant differences between the experimental and control groups in reading fluency pretest scores. This further implies that the reading fluency scores of the fifth-graders in the experimental and control groups, prior to the conduct of the experiment, were similar. The pretest and posttest means for all groups are presented in Table 2.

Table 2. Means and Standard Deviations of Reading Fluency Scores (WCPM) for Students by Groups

Groups	Pretest			Posttest		Estimated posttest ^a	
	N	M	SD	M	SD	M	SE
Experimental	24	69.79	22.58	84.37	28.32	90.90	2.38
Control1	20	76.50	26.24	66.60	22.35	66.89	2.56
Control2	25	83.80	16.04	76.40	17.49	69.90	2.33

Note. ^aEstimated posttests were adjusted for the pretest.

As a result of ANOVA, no significant differences were found between the mean scores of pretest scores. However, the means of the control groups were slightly higher than those of the experimental group. Due to these results, analysis of covariance was applied to determine whether or not the mean posttest scores of the groups differed significantly. Bonferroni's pairwise comparisons test was used to determine the direction of the difference.

Given the pretest and posttest means in Table 2, only the experimental group showed an improvement (experimental, pretest $M = 69.79$, posttest $M = 84.37$). The data were analyzed by using one-way analysis of covariance (ANCOVA) with the pretest as a covariate. A pairwise comparison (Bonferroni) was made between the groups (Table 3). The independent variable included the three groups: experimental, control 1 and control 2. The dependent variable was the posttest scores of the groups obtained from the WCPM sessions at the end of the treatment, and the covariate was pretest scores of the groups obtained from the WCPM sessions before the treatment.

A preliminary analysis evaluating the homogeneity-of-slopes assumption indicated that the relation between the covariate and dependent variable did not differ significantly as a function of the independent variable, $F(2,63) = 3.097, p = .052$. The analysis of the reading fluency data indicated significant overall treatment effects, controlling for the pretest, $F(2, 65) = 28.884, p = .000$, partial $\eta^2 = .47$. The strength of relationship between the group factor and the dependent variable was very strong, as assessed by a partial η^2 , with the group factor accounting for 33% of the variance of the dependent variable, holding constant the pretest means of the groups. Regarding reading fluency scores, students in the experimental group benefited significantly more than those in the control groups (mean difference between experimental group and control group 1: 24.013; $p = .000$) (mean difference between the experimental group and control group 2: 21.001; $p = .000$). However, there were no significant differences between control 1 and control 2 groups (mean difference control group 1 and control group 2: -3.012, $p = 1.000$). Based on the Bonferroni pairwise procedure, the adjusted mean for the experimental group differed significantly from that in the control groups, but adjusted means for the two control groups did not differ significantly.

Table 3. Bonferroni Pairwise Comparisons

	Mean difference	p	Direction
Experimental vs. Control 1	24.013	.000	Experimental > Control 1
Experimental vs. Control 2	21.001	.000	Experimental > Control 2
Control 1 vs. Control 2	-3.012	1.000	-

DISCUSSION

The findings obtained from this research revealed that cooperative learning fluency instruction had positive effects on reading fluency for students in the experimental group. These students practised more repeated readings, received more feedback, and received more support and modeling by peers than the students in the two control groups. This result is consistent with those of previous studies which advocate the use of partner reading, peer tutoring, shared reading, assisted reading, choral reading, and echo reading to develop reading fluency in students (Koskinen, Blum, Bisson, Phillips, Creamer, & Baker, 1999; Kuhn & Stahl, 2003; Morgan & Lyon, 1979; NICHD, 2000; Padak & Rasinski, 2004; Rasinski, 2003b; Rasinski, 2009; Stevens et al., 1987). An extensive review of the literature indicates that group practice which supports repeated oral reading with feedback and guidance leads to significant improvements in reading fluency in students (NICHD, 2000). As Faver (2009) also stated, working together in the reading process provides opportunity for students to help each other to improve reading fluency.

Throughout the experimental process, students in the cooperative learning group repeatedly read the same text more than the students in the control groups. Such repeated practice increased the reading fluency of students in the experimental group. Previous studies have also shown that repeated reading practice contributes to students' reading fluency as guided repeated oral reading and repeated reading provide students with practice that considerably improves reading fluency (Chafouleas et al., 2004; Moskal, 2006; NICHD, 2000; Nelson, Alber, & Gordy, 2004; Rasinski, 1990b; Samuels, 1979; Therrien, 2004; Therrien, Wickstrom, & Jones, 2006; Therrien &

Kubina, 2006; Valleley & Shriver, 2003; Yurick, Robinson, Cartledge, Lo, & Evans, 2006). In the present study too, students were given the opportunity of repeated read-aloud practice in their cooperative groups in which proficient and less proficient readers worked together to guide and correct each other's reading. This resulted in the development of their reading fluency skills. As Rasinski (2003) states, "Practicing short passages three to five times can help students develop greater automaticity and expression in their reading, especially if that practice is given with formative feedback" (p. 17). Rasinski et al. (1994) also noted that repeated reading helped improve the reading fluency of second graders over a six-month period.

Alhaidari (2006) investigated the effects of cooperative learning on the reading performance of fourth and fifth grade students. The findings revealed that cooperative reading practice improved students' reading fluency skills. Alhaidari commented that this finding was the result of students helping one another during reading, giving positive feedback and encouraging each other for more reading practice. He also added that students who read together in their groups had the opportunity to read the same text many times and proficient readers helped less proficient ones.

As a result, the present study provides two key insights for literacy instruction. First, this study provides evidence that cooperative learning can be used effectively in Turkish elementary classrooms. It also provides new insights into the potential impact that cooperative learning can have on Turkish students' reading performance, particularly reading fluency.

Second, this study bears great significance for the Turkish literacy context. The elementary Turkish language curriculum does not sufficiently focus on reading fluency (MoNE, 2005). In addition, very few studies exist in the country about reading fluency and its relevant variables (Yilmaz, 2008; Yildiz et al., 2009; Yildirim et al., 2009). As a natural outcome of these factors, the needs of Turkish educators in this field remain unsatisfied and many stakeholders in education (teachers, experts, university lecturers, etc.) are insufficiently informed about the concept of reading fluency, how children may be equipped with reading fluency, how these skills may be evaluated, and how problems may be diagnosed or rectified. Teacher preparation programs in Turkey need improvement in this respect. As many of the practicing teachers in the country are insufficiently equipped with the knowledge and skills needed to resolve problems in this area, these problems persist. They are exacerbated by the lack of reading specialists in Turkish schools, lack of resources on reading skills, insufficiency of school infrastructure, failure of the media to fulfill its function, and the absence of non-governmental institutions to conduct nationwide reading studies. Studies conducted particularly in the U.S. have revealed that reading fluency plays one of the key roles in turning children into proficient readers (NICHD, 2000; Rasinski, 2009). It is hoped that the present study will guide future studies in Turkey and place emphasis on the issue of equipping Turkish children with reading fluency skills. It would then contribute directly to raising Turkish generations with better literacy skills.

In conclusion, many recommendations may be made accordingly for improvement in reading fluency in Turkey. The elementary curriculum should include strategies for diagnosing and remediating reading fluency problems. Both in-service teacher workshops and pre-service teacher programs must include specific training for reading difficulties. Teachers should be instructed to explicitly teach reading skills and strategies to their students. The public and private sectors should support nationwide reading studies financially. Standardized and informal assessment tools need to be developed to evaluate students' reading fluency. Families can be included by developing booklets and offering training seminars on reading fluency. The Turkish Higher Education Council should start infrastructure studies needed for the establishment of departments to train reading specialists in teacher preparation faculties. Finally, reading fluency standards for each grade level in elementary education should be identified through nationwide studies.

BIODATA AND CONTACT ADRESSES OF AUTHORS



Kasim YILDIRIM is an assistant professor at Ahi Evran University. He received his Ph.D. in Elementary Classroom Teaching from Gazi University. His research area includes Turkish language arts, particularly reading fluency of elementary school students. He authored articles about literacy education of elementary school students.

Assist. Prof. Dr. Kasim YILDIRIM
Ahi Evran University
Department of Elementary Education
Kirsehir, TURKEY
E. Mail: kyildirim@gazi.edu.tr



Timothy RASINSKI is a professor of literacy education at Kent State University. He has written over 200 articles and has authored, co-authored or edited over 50 books or curriculum programs on reading education. He is author of the best selling book on reading fluency entitled *The Fluent Reader*, published by Scholastic, and co-author of the award winning fluency program called *Fluency First*, published by the Wright Group. His scholarly interests include reading fluency and word study, reading in the elementary and middle grades, and readers who struggle.

Prof. Dr. Timothy V. RASINSKI
402 White Hall, P.O. Box 5190,
Kent, Ohio 44242-0001
E. Mail: rasinski@kent.edu



Hayati AKYOL is a professor of elementary education at Gazi University. He has written many articles about literacy education in Turkey. His scholarly interests include questioning for reading comprehension and intertextuality.

Prof. Dr. Hayati AKYOL
Gazi University
Education Faculty
Department of Elementary Education
Ankara, Turkey
E. Mail: hakyol@gazi.edu.tr

Financial Support

This research was supported by The Scientific Research Council of Gazi University and The Turkish Higher Education Council.

REFERENCES

- Akyol, H. (2005). *Teaching emergent reading and writing in Turkish*. Ankara: Pegem A Publishing.
- Alhaidari, M. S. (2006). *The effects of using cooperative learning to promote reading comprehension, vocabulary, and fluency achievement scores of male fourth-and fifth grade students in an Saudi Arabian school* (Unpublished doctoral dissertation). Department of Educational Leadership, Pennsylvania.
- Begeny, J. C., & Martens, B. K. (2006). Assisting low-performing readers with a group based reading fluency intervention. *School Psychology Review, 35*, 91-107.
- Chafouleas, S. M., Martens, B. K., Dobson, R. L., Weinstein, K. S., & Gardner, K. B. (2004). Fluent reading as the improvement of stimulus control: Additive effects of performance-based interventions to repeated reading on students' reading and errors rates. *Journal of Behavioral Education, 13*, 67-81.
- Chard, D. J., Vaughn, S., & Tyler, B. (2002). A synthesis of research on effective interventions for building fluency with elementary students with learning disabilities. *Journal of Learning Disabilities, 35*, 386-406.
- Coonor, C. M., Morrison, F. J., Fishman, B., Giuliani, S., Luck, M., Underwood, P. S., et al. (2011). Testing the impact of child characteristics on third graders' reading comprehension by differentiating literacy instruction. *Reading Research Quarterly, 46*, 189-221.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). California: Sage Publications.
- Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (2nd ed.). New Jersey: Pearson.
- Devault, R., & Joseph, L. M. (2004). Repeated readings combined with word boxes phonics technique increases fluency levels of high school students with severe reading delays. *Preventing School Failure, 49*, 22-27.
- Faver, S. (2009). Repeated reading of poetry can enhance reading fluency. *The Reading Teacher, 62*, 350-352.
- Fuchs, D., & Fuchs, L. S. (2005). Peer-assisted learning strategies: Promoting word recognition, fluency, and reading comprehension in young children. *The Journal of Special Education, 39*, 34-44.
- Fuchs, D., Fuchs, L. S., & Simmons, D. C. (1997). Peer-assisted learning strategies: Making classrooms more responsive to diversity. *American Educational Research Journal, 34*, 174-206.
- Hasbrouck, J. E., & Tindal, G. (1992). Curriculum-based oral reading fluency norms for students in grades 2 through 5. *Teaching Exceptional Children, 24*, 41-44.
- Hoffman, J. V., & Isaacs, M. E. (1991). Developing fluency through restructuring the task of guided oral reading. *Theory into Practice, 30*, 185-194.
- Hudson, R. F., Lane H., & Pullen, P. (2005). Reading fluency assessment and instruction: What, why, and how? *The Reading Teacher, 58*, 702-714.
- Johnson, D. W., & Johnson, R. T. (1989). *Cooperation and competition* (2nd ed.). Minnesota: Interaction.

- Johnson, D.W., & Johnson, R. T. (1999). Making cooperative learning work. *Theory into Practice*, 38, 67–73.
- Johnson, D.W., & Johnson, R.T. (1981). Effects of cooperative and individualistic learning experiences on interethnic interaction. *Journal of Educational Psychology*, 73, 444-449.
- Jolliffe, W. (2007). *Cooperative learning in the classrooms*. London: Paul Chapman Publishing.
- Kagan, S. (1989). The structural approach to cooperative learning. *Educational Leadership*, 47, 12-15.
- Kagan, S. (1992). *Cooperative learning*. Paseo Espada: Resources for Teachers.
- Kagan, S. (1994). *Cooperative learning*. California: Kagan Cooperative Learning.
- Kagan, S., & Kagan, M. (1998). *Multiple intelligences: The complete MI book*. San Clemente: Kagan Publishing.
- Kapulu, A., & Karaca, A. (2005). *Fifth-grade Turkish language course teacher edition*. Ankara: Koza Publishing.
- Karafilik, F., Degirmenci, G., Bilkan, N., & Ozden, N. (2005). *Elementary school Turkish language course teacher edition*. Ankara: Harf Publishing.
- Koskinen, P. S., & Blum, I. H. (1986). Paired repeated reading: A classroom strategy for developing fluent reading. *The Reading Teacher*, 40, 70-75.
- Koskinen, P. S., Blum, I. H., Bisson, S. A., Phillips, S. M., Creamer, T. S., & Baker, T. K. (1996). Shared reading, books, and audiotapes: Supporting diverse students in school and at home. *The Reading Teacher*, 52, 430-444.
- Kuhn, M. R., & Stahl S. A. (2000). *Fluency: A review of developmental and remedial practices*. Ann Arbor, MI: Center for the Improvement of Early Reading Achievement.
- Kuhn, M. R., & Stahl, S. A. (2003). Fluency: A review of development and remedial practices. *Journal of Educational Psychology*, 95, 3-21.
- Mastropieri, M. A., Leinart, A. M., & Scruggs, T. E. (1999). Strategies to increase reading fluency. *Intervention in school & Clinic*, 34, 278-285.
- Morgan, R., & Lyon, E. (1979). Paired reading-a preliminary report on an technique for parental tuition of reading-retarded children. *Journal of Child Psychology and Psychiatry*, 20, 151-160.
- Moskal, M. K. (2006). Student self-managed repeated reading: successful fluency development for disfluent readers. *Illinois Reading Council Journal*, 34, 3-11.
- Ministry of National Education. (2005). *The elementary school Turkish class teaching program and guidance*. Ankara: Government Books Press.
- National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel: Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (NIH Publication No. 00-4769). Washington, DC: U.S. Government Printing Office.

- Nelson, J. S., Alber, S. R., & Gordy, A. (2004) Effects of systematic error correction and repeated readings on the reading accuracy and proficiency of second graders with disabilities. *Education and Treatment of Children, 27*, 186-198.
- Opitz, M. F., & Rasinski, T. V. (2008). *Good-bye round robin* (2nd ed.). Portsmouth: Heinemann.
- Padak, N. D., & Rasinski, T. V. (2004). Fast start: A promising practice for family literacy programs. *Family Literacy Forum, 3*, 3-9.
- Rasinski, T. V. (1989). Fluency for everyone: incorporating fluency instruction in the classroom. *The Reading Teacher, 42*, 690-693.
- Rasinski, T. V. (1990a). Investigating measures of reading fluency. *Educational Research Quarterly, 14*, 37-44.
- Rasinski, T. V. (1990b). Effects of repeated reading and listening-while-reading on reading fluency. *Journal of Educational Research, 83*, 147-150.
- Rasinski, T.V. (2003a). Reading first: Fluency is fundamental. *Instructor, 113*, 15-20.
- Rasinski, T. V. (2003b). *The fluent reader: oral reading strategies for building word recognition, fluency, and comprehension*. New York: Scholastic.
- Rasinski, T. V. (2004). Creating fluent readers. *Educational Leadership, 61*, 46-51.
- Rasinski, T. V. (Ed.). (2009). *Essential readings on fluency*. Newark, DE: International Reading Association.
- Rasinski, T. V., & Hoffman J. V. (2003). Oral reading in the school reading curriculum. *Reading Research Quarterly, 38*, 510-522.
- Rasinski, T. V., & Padak, N. D. (2001). *From phonics to fluency: Effective teaching of decoding and reading fluency in the elementary school*. New York: Addison Wesley Longman.
- Rasinski, T. V., & Padak, N. D. (2005). *Three-minute reading assessments: Word recognition, fluency & comprehension 5-8*. New York: Scholastic.
- Rasinski, T. V., Padak, N. D., & Fawcett, C. (2010). *Teaching children who find reading difficult* (4th ed.). Boston: Allyn & Bacon.
- Rasinski, T. V., Padak, N. D., Linek, V., & Sturtevant, E. (1994). Effects of fluency development on urban second-grade readers. *Journal of Educational Research, 87*, 158-165.
- Rosenblatt, L. M. (1978). *The reader, the text, the poem: The transactional theory of the literary work*. Carbondale, IL: Southern Illinois University Press.
- Rosenblatt, L. M. (1982). The literary transaction: Evocation and transaction. *Theory into Practice, 21*, 268-277.
- Samuels, S. J. (1979). The method of repeated readings *The Reading Teacher, 32*, 403-408.
- Sharan, S. (1980). Cooperative learning in small groups: Recent methods and effects on achievement attitudes and ethnic relations. *Review of Educational Research, 50*, 241-271.

- Short, K. G. (1986). *Liteacy as a colloborative experience* (Unpublished doctoral dissertation). Indiana University, Indiana.
- Slavin, R. E. (1983). When does cooperative learning increase student achievement? *Psychological Bulletin*, *94*, 429-445.
- Slavin, R. E. (1990a). *Cooperative learning*. Boston: Allyn & Bacon.
- Slavin, R. E. (1990b). Cooperative learning. *Review of Educational Research*, *50*, 315-342.
- Slavin, R. E. (1991). Synthesis of research on cooperative learning. *Educational Leadership*, *48*, 71-82.
- Slavin, R. E. (1995). *Cooperative Learning: Theory, research, and practice* (2nd ed.). Boston: Allyn and Bacon.
- Slavin, R. E. (1999). Comprehensive approaches to cooperative learning. *Theory into Practice*, *38*, 74-79.
- Stevens, R. J., Madden, N. A., Slavin, R. E., & Farnish, A. M. (1987). Cooperative learning integrated reading and composition: Two field experiments. *Reading Research Quarterly*, *22*, 433-454.
- Slavin, R. E., Leavey, M. B., & Madden, N. A. (1984). Combining cooperative learning and individualised instruction: Effects on student mathematics achievement, attitudes, and behaviours. *The Elementary School Journal*, *84*, 409-422.
- Slavin, R. E., Lake, C., Chambers, B., Cheung, A., & Davis, S. (2009). Effective reading programs for the elementary grades: A best-evidence synthesis. *Review Educational Research*, *79*, 1391-1466.
- Stevens, R. J., & Slavin, R. E. (1995). Effects of cooperative learning approach in reading and writing on academically handicapped and nonhandicapped students. *The Elementary School Journal*, *95*, 241-262.
- Tarim, K. (2009). The effects of cooperative learning on preschoolers' mathematics problem-solving ability. *Educ Stud Math*, *72*, 325-340.
- Therrien, W. J. (2004). Fluency and comprehension gains as a result of repeated reading: A meta-analysis. *Remedial and Special Education*, *25*, 252-261.
- Therrien, W. J., & Kubina, R. M. (2006). Developing reading fluency with repeated reading. *Intervention in School and Clinic*, *41*, 156-160.
- Therrien, W. J., Wickstrom, K., & Jones, K. (2006). Effect of a combined repeated reading and question generation intervention on reading achievement. *Learning Disabilities Research & Practice*, *21*, 89-97.
- Tindal, G. A., & Hasbrouck, J. (2006). Oral reading norms: A valuable assessment tool for reading teachers. *The Reading Teacher*, *59*, 636-644.
- Topping, K. (1989). Peer tutoring and paired reading: Combining two powerful techniques. *The Reading Teacher*, *42*, 488-494.
- Turkce dersi 1-5 siniflari ile ilgili etkinlik ornekleri* [Examples of activity used in Turkish language course from first-grade through fifth-grade]. (n.d.). Retrieved from <http://ttkb.meb.gov.tr/ogretmen/>

Ulusoy, M. (2006). *Evaluation of textbook difficulty and adaptation strategies used in Turkish elementary schools* (Unpublished doctoral dissertation). University of Missouri, Urbana-Illinois-America.

Ulusoy, M. (2008). Evaluating sixth graders' reading levels with different cloze formats. *Eurasian Journal of Educational Research*, 131, 115-133.

Valleley, R. J., & Shriver, M. D. (2003). An examination of the effects of repeated reading with secondary student. *Journal of Behavioral Education*, 12, 55-76.

Vaughn, S., Chard, D. J., Bryant, D. P., Coleman, M., Jean-Tyler, B., Linan-Thomson, S., & Kouzekanani, K. (2000). Fluency, and comprehension interventions for third-grade students. *Remedial and Special Education*, 21, 325-335.

Walczyk, J. J., & Griffith-Ross, D. A. (2007). How important is reading skill fluency for comprehension? *The Reading Teacher*, 60, 560-569.

Welsch, R. G. (2006). Increase oral reading fluency. *Intervention in School and Clinic*, 41, 180-183.

Yilmaz, M. (2008). Effects of word drill technique on reading fluency. *Journal of Educational Sciences*, 6, 323-350.

Yildiz, M., Yildirim, K., Ates, S., & Cetinkaya, C. (2009). An evaluation of the oral reading fluency of 4th graders with respect to prosodic characteristic. *International Journal of Human Sciences*, 6, 353-360.

Yildirim, K., Yildiz, M., Ates, S., & Cetinkaya, C. (2009). Effect of prosodic reading on listening comprehension. *World Applied Sciences Journal*, 7, 744-747.

Yovanoff, P., Duesbey, L., Alonzo, J., & Tindal, G. (2005). Grade-level invariance of a theoretical causal structure predicting reading comprehension with vocabulary and oral reading fluency. *Educational measurement: Issues and Practice*, 24, 4-12.

Yurick, A. L., Robinson, P. D., Cartledge, G., Lo, Y., & Evans, T. L. (2006). Using peer-mediated repeated readings as a fluency-building activity for urban learners. *Education and Treatment of Children*,