



Transactional Strategies Instruction: Towards Supporting Sense – Making in Reading Comprehension of Learners with Special Educational Needs

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Are-Pee M. Castalone

Western Colleges, Inc., Naic, Cavite, Philippines

Abstract:

The study determined the applicability of transactional strategies instruction. The respondents of the study were learners of Achievers Heart of Knowledge Montessori Inc. The method used in this study was experimental research design. Statistical treatments used were percentage, mean, standard deviation and t-test. The findings of the study revealed that majority of the learner-participants are 14 years old, males, Grade 7 and with disability in reading comprehension. Hence, before the intervention the participants perform instructional level and perform independent level after the intervention is administered. However, the pretest has a significant difference with the post-test which implies that the null hypothesis is rejected. Hence, the use of transactional strategies is effective in teaching sense-making in reading comprehension for learners with special educational needs.

Keywords: transactional strategies instruction, sense-making, reading comprehension, learners with special educational needs

Introduction:

Comprehension is the ability to understand written words, which distinguishes it from mere word recognition. A child may read a passage aloud but fail to grasp its meaning, highlighting that comprehension is the ultimate goal of reading. It transforms words into thoughts and ideas, making reading a meaningful and enjoyable activity essential for success in school, work, and life.

However, many students encounter challenges in reading comprehension. These challenges can stem from difficulties with complex vocabulary, sentence structure, and understanding main ideas. Contributing factors include limited vocabulary, lack of motivation, insufficient teacher training, and inadequacies in the English curriculum. Additionally, students struggle with distinguishing between main ideas and supporting details, understanding culturally diverse texts, relating content to prior knowledge, and making inferences. For those in the English Education Study Program, issues related to reading comprehension include motivation, background knowledge, lack of reading strategies, and foundational language skills.

English learners (ELs) have notably performed poorly on standardized assessments. For instance, the National Assessment of Educational Progress (2009) revealed that only 3% of ELs scored 'proficient' in both 4th and 8th grades. This underperformance may be attributed to weak comprehension skills, indicating a disconnect between traditional teaching practices and the needs of ELs (Carrasquillo & Rodriguez, 2020; Cummins, 2020). Therefore, there is an urgent need for effective instructional methodologies for both native English speakers (NS) and ELs. Transactional Strategies Instruction (TSI), a promising approach in reading comprehension education, has gained attention in this context (National Reading Panel, 2000).

Students with learning disabilities, like their peers, often struggle with reading comprehension due to various factors, including deficits in background knowledge application, decoding skills, vocabulary, and reading fluency (Graham & Bellert, 2005). Meta-cognitive strategies, such as questioning, inferring, summarizing, and predicting, have been identified as effective for teaching reading comprehension. The National Reading Panel (2000) advocates for multiple-strategy instruction, where students learn to apply various strategies in a coordinated manner. TSI embodies this approach by facilitating the simultaneous use of multiple reading strategies (Pressley, 2018).



TSI emphasizes the interpretative transactions between readers and texts, fostering collaborative learning environments (Reutzel, Smith & Fawson, 2020). Techniques such as Reciprocal Teaching and Literature Circles fall under this instructional model, promoting effective reading comprehension for both general education students and those with learning disabilities (Lederer, 2019; Takala, 2020). Research on TSI has shown positive outcomes for ELs in upper elementary grades, although there is a dearth of studies focused on its implementation in lower grades (Ambrister, 2021; McElvain, 2021). A pilot study indicated success with a modified TSI format for younger students (Pilonieta & Medina, 2019). Furthermore, TSI has proven more effective than Single Strategy Instruction (SSI) in teaching comprehension (Reutzel et al., 2020).

The increasing population of ELs in U.S. schools, which grew by 51% from 1997-2009 (National Clearinghouse for English Language Acquisition, 2010), necessitates effective teaching methodologies for diverse classrooms. The No Child Left Behind Act (2001) mandates that all students, including ELs, receive equal instruction in mainstream settings. Consequently, teachers require effective strategies to cater to the needs of both NS and EL students.

Developed by Pressley and his colleagues, TSI focuses on teaching students to construct meaning through comprehension strategies. It prioritizes cognitive and interpretative strategies, teaching a limited set of strategies over an extended period (Pressley, 2020). TSI aims to internalize strategic processing through group discussions and teacher scaffolding. Instruction typically occurs in small groups, where strategies serve as tools for coordinating dialogue around the text. Teachers model multiple strategies and encourage students to articulate their thought processes as they read.

TSI consists of six key steps: predicting, responding based on prior knowledge, seeking clarification, visualizing, questioning, and summarizing. Each step promotes active engagement with the text, helping students build comprehension skills through collaborative learning and discussions. Research indicates that TSI improves students' knowledge of reading strategies, inferential reasoning, and overall comprehension (Brown, 2020; Rodulfo, 2020).

Studies have demonstrated the effectiveness of TSI in enhancing reading comprehension among secondary students and those with learning difficulties (Kim, 2021; Saovapa, 2021). Other research indicates that factors such as gender, topic familiarity, and intrinsic motivation also play significant roles in reading comprehension (Brantmeier, 2020; Vansteenkiste et al., 2020). Despite the positive findings surrounding TSI, further investigation is needed to fully understand its impacts, particularly among diverse student populations.

Methodology:

This study utilized the experimental design because of its appropriateness to the study. In this design, there were control and experimental groups. The experimental group was exposed to the use of transactional strategies instruction. After the experiment period, the group was given the same test after exposing to the use of transactional strategies instruction. It must be noted that all the other variables, except the independent variable, are kept constant or equal during the experimental period. Any excess or difference in the achievement of the experimental group over the achievement of the control group is attributed to the experimental factor for statistical treatment (Calderon & Gonzales, 2020). Moreover, this design determined whether there is a significant difference in the pre-test and post-test performances of the students in the control and experimental group and whether there exists a significant difference between the two groups' pre-test performances and post-test performances. In determining the results and whether there is significant difference or none, there was a randomized pre-test and post-test. Two sets of test were used with the group: the first measurement serves as the pre-test, the second as the post test. The measurement as observations is collected as the same time for the group. This experimental research involved the construction and validation of the teacher-made test to determine the appropriateness of the test items to the criterion measures. Likewise, the reliability of the test constructed was established. The test was administered to the experimental and control groups of students as a pre-test and as a post-test. The results obtained by the groups were compared and



subjected to a series of t-tests at the 5% level of significance to determine whether their performances significantly differ.

In order to do this, the researcher conducted a thorough literature and studies, searched from the internet and from library to another.

He exhausted all efforts to find a standardized instrument in a form of test items which she could benchmark in the crafting of her own, but the effort was futile. Therefore, the researcher has decided to construct test items for the pre- and post-test, based on the lesson to be discussed.

In the validation part, he asked the teachers from other schools with the same number of his school to answer the survey. The comments, suggestions and recommendations were integrated in the 1st revision.

The other was the expert opinion from his immediate superior and professors. The comments, suggestions and recommendations after showing them the survey were integrated in the 2nd revision.

The population of the study were the learners of Achievers Heart of Knowledge Montessori Inc. The locale was chosen because the researcher observed a need to support Learners with Special Educational Needs improve their reading comprehension by adopting a strategy that have been documented and proven as effective in promoting reading comprehension.

The respondents were 20 LSENs, chosen purposively, in total enumeration. After the gathering of data and asking permission from the different offices, the gathered data were subjected to statistical treatment of data.

Results:

What is the profile of the Learners with Special Educational Needs (LSEN) -participants in terms of age, gender, grade level and type of disability?

Table 1
Profile of the learner-participants

PROFILE	FREQUENCY	PERCENTAGE
Age		
12	6	30
13	6	30
14	8	40
	20	100
Gender		
Male	13	65
Female	7	35
	20	100
Grade Level		
Grade 7	20	100
Disability	20	100



Table 1 shows that out of 20 learner-participants, majority were 14 years old (40%), while 30 percent were 12 and 13 years old. Mostly males (65%) than females (35%). All were Grade 7 level (100%) and with disability in reading (100%).

What is the performance of the learner-participants before and after the intervention?

Table 2
Performance of the learner-participants before and after the intervention

STRATEGY	N	MEAN	SD	VERBAL INTERPRETATION
Pre-Test	20	13.60	4.66	Instructional
Post-Test	20	24.15	2.64	Independent

Range:

- 1-10 points - Frustration
- 11-20 points - Instructional
- 21-30 points - Independent

Table 2 presents the pre-test with an overall mean of 13.60 which means that learners before the intervention performed instructional, not after the intervention, the post-test result obtained an average mean of 24.15 that was learners performed independent. This implies that reading intervention program of the school is effective to the learners with reading disability.

Is there any significance difference before and after the intervention to the participants?

Table 3
Significance difference before and after the intervention

TEST	N	MEAN	SD	t-TEST	P-VALUE	REMARKS	
Pre-test	20	13.60	4.66	-8.81	1.03E-10	Reject Ho	Significant
Post-test	20	24.15	2.64				

df = 38 Level of Significance = .05

Table 3 reveals that there is a significant difference between pre-test and post-test after obtaining the t-ratio of -8.81 with a probability value of 1.03E-10 using 38 degrees of freedom at .05 level of significance. Therefore, the null hypothesis that there is no significant difference before and after the intervention is rejected which implies that reading intervention is effective.

Discussion:

The findings from the study on Learners with Special Educational Needs (LSEN) provide valuable insights into their demographic profile, performance before and after a reading intervention, and the significance of changes observed. This discussion interprets these results within the context of educational practices, the efficacy of targeted interventions, and the implications for future research.

Profile of the Learner-Participants

Table 1 reveals a clear demographic profile of the LSEN participants. The majority (40%) were 14 years old, with an equal distribution of 30% for those aged 12 and 13. This age range is significant as it corresponds to typical middle school age, where foundational reading skills are crucial for academic success. Notably, there was a predominant representation of males (65%) compared to females (35%). This gender disparity aligns with existing literature that indicates a higher prevalence of reading disabilities among boys (Ritchey & Heise, 2006).

All participants were in Grade 7, which underscores the critical nature of this educational stage. By seventh grade, students are expected to transition from "learning to read" to "reading to learn" (Chall,



1983). Therefore, addressing reading disabilities at this juncture is vital for preventing further academic struggles.

The uniformity of disability type—specifically reading disabilities—among all participants emphasizes the need for specialized interventions. This focused group allows for a concentrated examination of the effectiveness of reading programs tailored to this specific challenge, highlighting the necessity of individualized approaches in special education.

Performance Before and After the Intervention

Table 2 illustrates a significant improvement in the performance of the learner-participants before and after the intervention. The pre-test mean score of 13.60 indicated that participants were operating at the "instructional" level, which suggests that they could read with guidance but struggled to comprehend independently. After the intervention, the post-test mean score rose to 24.15, categorizing their performance as "independent." This improvement signifies not only enhanced reading ability but also greater confidence in reading tasks.

The intervention's effectiveness is consistent with the literature emphasizing the importance of targeted reading interventions for students with disabilities. Programs that incorporate explicit instruction in reading strategies, phonemic awareness, and comprehension techniques have been shown to produce positive outcomes (Gersten et al., 2009). The observed gains suggest that the intervention employed in this study aligned well with effective practices in special education.

Significance of the Intervention

Table 3 demonstrates a statistically significant difference between pre-test and post-test scores, with a t-ratio of -8.81 and a p-value of $1.03E-10$. This strong statistical significance indicates that the null hypothesis—that there is no significant difference before and after the intervention—should be rejected. The results imply that the reading intervention was not only effective but also impactful enough to warrant attention in future educational strategies.

The significant improvement in reading performance supports the findings of previous research that emphasizes the effectiveness of structured reading interventions. For instance, interventions that utilize systematic phonics instruction and comprehension strategies have been shown to produce significant gains in reading proficiency among students with reading disabilities (Ehri et al., 2001). The results from this study reinforce the necessity for educational practitioners to employ evidence-based interventions tailored to the specific needs of LSEN.

The profile of the learner-participants and the significant improvements observed in reading ability post-intervention highlight several implications for practice in educational settings. Firstly, the findings suggest a pressing need for schools to implement targeted reading interventions for students with disabilities, particularly in middle school. Educators should focus on developing individualized education programs (IEPs) that incorporate specific reading strategies aligned with students' needs.

Additionally, the gender disparity noted in the participants raises questions about the need for gender-sensitive approaches in reading instruction. Future research could explore the reasons behind this discrepancy and investigate whether tailored strategies for boys and girls could further enhance reading outcomes.

The effectiveness of the intervention also opens avenues for further studies. Future research should consider longitudinal studies to assess the durability of reading gains over time and explore the impact of interventions on other areas of academic achievement. It would be beneficial to expand the study's scope to include a diverse range of disabilities beyond reading to understand better the generalizability of intervention strategies.

Moreover, exploring the integration of technology in reading interventions could provide insights into modern approaches that may engage students more effectively. Tools such as audiobooks, reading apps, and interactive platforms could complement traditional methods and cater to diverse learning styles.



The results of this study present a comprehensive profile of LSEN participants and demonstrate the effectiveness of a reading intervention in significantly improving their performance. The findings underscore the necessity for targeted interventions in special education and highlight the importance of continuous research to refine educational practices for diverse learners. Through dedicated efforts to address the unique challenges faced by LSEN, educators can foster an inclusive environment that promotes literacy and academic success for all students.

Conclusion:

This study has effectively demonstrated the applicability and effectiveness of Transactional Strategies Instruction (TSI) in enhancing reading comprehension among Learners with Special Educational Needs (LSEN) at Achievers Heart of Knowledge Montessori Inc. Through a well-structured experimental design, the research revealed a significant improvement in reading performance following the intervention, underscoring the importance of employing targeted instructional strategies tailored to the unique challenges faced by these learners.

The demographic profile of the participants highlighted a predominance of 14-year-old males with reading disabilities, emphasizing the necessity for interventions during critical educational stages such as Grade 7. The significant shift from an "instructional" level to an "independent" level of performance post-intervention reflects the positive impact of TSI, indicating that students not only improved their reading skills but also gained confidence in their ability to comprehend text independently.

Statistical analyses confirmed the effectiveness of the TSI approach, with a notable difference between pre-test and post-test scores, leading to the rejection of the null hypothesis. This finding aligns with existing literature that advocates for multi-strategy instruction, supporting the notion that a comprehensive approach to teaching reading can yield substantial benefits for students with disabilities.

The implications of this research extend beyond the immediate results. The need for individualized education programs (IEPs) that incorporate effective strategies like TSI is paramount, particularly as educators strive to meet diverse learning needs. Furthermore, the observed gender disparity among participants suggests that future instructional strategies may benefit from being more responsive to the specific needs and motivations of different student groups.

This study reinforces the significance of innovative teaching methodologies like Transactional Strategies Instruction in supporting LSEN. As educators seek to create inclusive learning environments that foster literacy and academic success, continued research and exploration of effective strategies will be essential. By addressing the unique challenges faced by LSEN, educators can help ensure that all students have the opportunity to thrive in their educational journeys.

References:

Apel, K., Ehren, B. J., Silliman, E. R., & Stone, C. A. (2017). *Handbook Of Language And Literacy*. New York: The Guilford Press.

Applegate, M. D., & Applegate, A. J. (2019). "She's my best reader; she just can't comprehend.": Studying the relationship between fluency and comprehension. *The Reading Teacher*, 62(6), 512-521.

Armbuster, B. B., Lehr, F., & Osborn, J. (2020). *Put Reading First; The Research Building Blocks Of Reading Instruction*. Washington D.C: National Institute For Literacy.

Baker, L. (2020). Metacognition in comprehension instruction. In C. C. Block & M. Pressley (Eds.), *Comprehension instruction: Research-based best practices* (pp. 77-95). New York: Guilford Press.



Beck, I. L., & McKeown, M. G. (2020). *Improving comprehension with Questioning the Author: A fresh and expanded view of a powerful approach*. New York: Scholastic.

Bergman, J. L., & El-Dinary, P. B. (2018). A researcher-educator collaborative interview study of transactional comprehension strategies instruction. *Journal of Educational Psychology*, 84, 231-246.

Brantmeier, C. (2020). Beyond linguistics knowledge: Individual differences in second language reading. *Foreign Language Annals*, 36(1), 33-43.

Brown, A. I., Pressley, M., Van Meter, P. & Schuder, T. (2019). A quasi-experimental validation of transactional strategies instruction with low-achieving second-grade readers. *Journal of Educational Psychology*, 88(1), 18-37.

Brown, D. (2020). *Teaching by principles: An interactive approach to language pedagogy*. 2 nd Ed. Addison Wesley, USA.

Brown, R., & Coy Ogan, L. (2018). The Evolution Of Transactional Strategies Instruction (TSI) In One Teacher's Classroom. *The Elementary School Journal* , 221-233.

Brown, R., & Pressley, M. (2018). Self-regulated reading and getting meaning from text: The transactional strategies instruction model and its ongoing evaluation. In D. Schunk & B.

Zimmerman (Eds.), *Self-regulation of learning and performance: Issues and educational applications* (pp. 155-179). Hillsdale, NJ: Erlbaum.

Carrasquillo, A., & Rodriguez, V. (2020). *Language minority students in the mainstream classroom* (2nd ed.). Philadelphia: PA: Multilingual Matters.

Casteel, C.P., Isom, B. A., & Jordan, K.F. (2019). Creating confident and competent readers: Transactional strategies instruction. *Intervention in school and clinic*, 36(2), 67-74.

Cummins, J. (2020). *Reading and the bilingual student: Fact and friction*. Newark, DE: International Reading Association.

Duffy, G. G., Roeler, L. R., Meloth, M. S., Polin, R., Rackliffe, G., & Tracy, A. (2017). Developing and evaluating measures associated with strategic reading. *Journal of Reading Behavior*, 19, 223-246.

Duke, N. K. & Pearson, P. D. (2020). Effective practices for developing reading comprehension. In A. E. Farstrup, & S. Samuels (Eds.). *What research has to say about reading instruction* (pp. 205-242). Newark, DE: International Reading Association.

El-Dinary, P. B., & Schuder, R. T. (2018). Seven teachers' acceptance of transactional strategies instruction during their first year using it. *Elementary School Journal*, 94, 207-219.

Gaskins, I. W., Anderson, R. C, Pressley, M., Cunicelli, E. A., & Sadow, E. (2018). Six teachers' dialogue during cognitive process instruction. *Elementary School Journal*, 93, 277-304.

Gersten, R., Baker, S. K., Shanahan, T., Linan-Thompson, S., Collins, P. & Scarcella, R. (2017). *Effective literacy and English Language Instruction for English Learners in the elementary grades: A Practice guide* (NCEE 2007-4011). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://ies.ed.gov/ncee>.

Ginting, Rut. (2019). *Improving Grade XI Students' Achievement in Reading Comprehension through Transactional Strategies Instruction*. Medan: Thesis (unpublished).



Graham, L. and Bellert, A. (2005). Reading comprehension disabilities experienced by students with learning disabilities. *Australian Journal of Learning Disabilities*, 10 (2), 71-8.

Jepsen, C. & de Alth, S. (2020). *English learners in California schools*. San Francisco, CA: Public Policy Institute of California

Julapho, P. (2018). Using transactional strategies instruction with online learning to promote English reading comprehension, summary writing ability and autonomous learning of learners. Master's Thesis, Chiangmai University, Thailand. *Journal of Educational Realities-JERA* pISSN 2536-6661, eISSN 2536-6653 Vol.3, No.1, April/June 2017 A Publication of the Department of Vocational Education, University of Uyo, Nigeria www.benchmarkjournals.com 43

Keshavarz, M. H. & Ashtarian, S. (2018). The relationship between Iranian EFL learners' gender and reading comprehension of three different types of texts. *Iranian Journal of Applied Linguistics*, 11(1), 97-114.

Kim, S. S. (2021). The impact of transactional strategies instruction on the reading comprehension of a diverse group of second graders. Doctoral Dissertations. Paper . Available at <http://repository.usfca.edu/cgi/viewcontent.cgi?article=1079&context>

Lederer, J. (2019). Reciprocal teaching of social studies in inclusive elementary classrooms. *Journal of Reading Disabilities*, 33, 91-107.

Marks, M. B., Pressley, M., Coley, J. D., Craig, S., Gardner, R., DePinto, T., & Rose, W. (2018). Three teachers' adaptations of TRANSACTIONAL STRATEGIES INSTRUCTION 35 reciprocal teaching in comparison to traditional reciprocal teaching. *Elementary School Journal*, 94, 267-283.

McElvain, C. M. (2021). Transactional Literature Circles and the reading comprehension of English learners in the mainstream classroom. *Journal of Research in Reading*, 33(2), 178-205.

Mehrpour, S., Razmjoo, S. A. & Kian, P. (2021). The relationship between depth and breadth of vocabulary knowledge and reading comprehension among Iranian EFL learners. *Journal of English Language Teaching and Learning*, 53(222), 97-127.

National Assessment of Educational Progress (2009). Retrieved from <http://nces.ed.gov/nationsreportcard/pdf/main2009/2010458.pdf>

National Clearing House for English Language Acquisition. (2010). Retrieved from http://www.consumerserviceguide.org/articles/csg_national_clearinghouse_for_english_language_acquisition_ncela_ed No Child Left Behind Act of 2001, 20

National Reading Panel (2000). *Teaching children to read: an evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. Washington, D C: National Academy Press.

Organisation for Economic Co-operation and Development (2010). *PISA 2009 results: what students know and can do: Student performance in reading, mathematics and science (Vol. 1)*. Dxdoi.org/10.1787.9789264091450.en

Pennell, C. (2021). In the age of analytic reading: Understanding readers' engagement with text. *The Reading Teacher*, 68(4), 251-260. 72 วารสารมหาวิทยาลัยพายัพ ปีที่ 27 ฉบับที่ 1 (มกราคม - มิถุนายน 2560)

Pilonieta, P., & Medina, A. (2019). Reciprocal teaching for the primary grades: "We can do it, too!". *The Reading Teacher*, 63(2), 120-129.

Pressley, M. (2018). *Transactional Instruction of Reading Comprehension Strategies*. Perspectives in Reading Research Report 5. College Park, MD: National Reading Research Center.



Pressley, M. (2020). Comprehension strategy instruction: A turn-of-the century status report. In C.C. Block & M. Pressley (Eds.), *Comprehension instruction: Research-based best practices* (pp.11-27). New York: The Guilford Press.

Pressley, M. (2020). *Reading Instruction that works: The case for balanced teaching 3 rded.*. New York: The Guilford Press.

Pressley, M., & Afflerbach, P. (2018). *Verbal protocols of reading: The nature of constructively responsive reading*. Hillsdale, NJ: Erlbaum.

Pressley, M., El-Dinary, P. B., Gaskins, I., Schuder, T., Bergman, J., Almasi, J., & Brown, A. I. (2018). Beyond direct explanation: Transactional instruction of reading comprehension strategies. *Elementary School Journal*, 92, 511-554. *Journal of Educational Realities-JERA* pISSN 2536-6661, eISSN 2536-6653 Vol.3, No.1, April/June 2017 A Publication of the Department of Vocational Education, University of Uyo, Nigeria www.benchmarkjournals.com 44

Pressley, M., Gaskins, I. W., Cunicelli, E. A., Burdick, N. J., Schaub-Matt, M., Lee, D. S., & Powell, N. (2018). Strategy instruction at Benchmark School: A faculty interview study. *Learning Disability Quarterly*, 14, 19-48.

Reutzell, D. R., Smith, J. A. & Fawson, P. C. (2020). An evaluation of two approaches for teaching reading comprehension strategies in the primary years using science information texts. *Early Childhood Research Quarterly* 20, 276- 305.

Rodulfo, M.A. (2020). Reading in and out of school: Factors influencing the literacy achievement of American students in Grades 4, 8 and 12 in 2000 and 2002. National Centre for Education Statistics, Washington, DC., USA.

Roehler, L.R. & Duffy, G.G. (2017). Direct explanation of comprehension process. In G.G. Duffy, L.R. Roehler & J. Mason (Eds.), *Comprehension instruction: Perspectives and suggestions* (pp. 265-285). New York: Longman.

Roit, M. L. (2020). Essential comprehension strategies for English learners. T.A. Young and N.L. Hadaway (Eds.) *Building Literacy : Supporting English Learners in All Classrooms*. Newark, DE: International Reading Association Rosenshine.

Rosenblatt, L. (2017). *The reader, the text, and the poem: The transactional theory of the literature work*. Carbondale: Southern Illinois University Press.

Saovapa, W. (2021). Using transactional strategies to improve English reading comprehension and summary writing abilities of students in English for Arts and Design Course. *Journal of Applied Sciences*, 12, 2326-2331.

Schuder, T. (2018). The genesis of transactional strategies instruction in a reading Programme for at-risk students. *The Elementary School Journal*, 94(2), 183-200.

Sinatra, G. M., Brown, K. J., & Reynolds, R. E. (2020). Implications of cognitive resource allocation for comprehension strategies instruction. In C. C. Block & M. Pressley (Eds.), *Comprehension instruction: Research-based best practices* (pp.62–76). New York: Guilford Press.

Takala, M. (2020). The effects of reciprocal teaching on reading comprehension in mainstream and special (SLI) education. *Scandinavian Journal of Educational Research*, 50(5), 559-576.

Vansteenkiste, M., Lens, W. & Deci, E. L. (2020). Intrinsic versus extrinsic goal contents in self-determination theory: Another look at the quality of academic motivation. *Educational Psychologist*, 41, 19-31.



Wagner, T. (2018). Rigor redefined. *Educational Leadership*, 66(2), 20-24.

Wichadee, S. (2021). Developing reading and summary writing abilities of EFLundergraduate students through transactional strategies. *Research in Education*, 92, 59-71

Wilkinson, I. A., & Son, E. H. (2021). A dialogic turn in research on learning and teaching to comprehend. In M.L. Kamil, P.D. Pearson, E.B. Moje, & P.P. Afflerbach (Eds.), *Handbook of reading research* (Vol. 4 pp. 359-387). New York & London: Routledge. *Journal of Education and Practice* www.iiste.org ISSN 2222-1735 (Paper) ISSN 2222-288X (Online) DOI: 10.7176/JEP Vol.10, No.13, 2019 114

Wyatt, D., Pressley, M., El-Dinary, P. B., Stein, S.(Evans, P., & Brown, R. (2018). Comprehension strategies, worth and credibility monitoring, and evaluations: Cold and hot cognition when experts read professional articles that are important to them. *Learning and Individual Differences*, 5, 49-72.

Yazdanpanah, K. (2017). The effect of background knowledge and reading comprehension test items on male and female performance. *The Reading Matrix*, 7(2), 64-80.