A Survey of Response to Intervention (RTI) Instructional Strategies

Khaled Alqahtani

Abstract— This article provides a survey of various RTI instructional strategies that practitioners may use when dealing with students with specific needs. Practitioners need to facilitate learning to students with special needs as much as possible and RTI instructional strategies provide a very good alternative. Research has shown their effectiveness and positive impact on students. Looking the the different tiers, this article tries to present a simple and comprehensive of these RTI strategies.

Index Terms— RTI, Response to Intervention, students with special needs, special education, instructional strategies, individuals with disabilities.

1 Introduction

The Individuals with Disabilities Education improvement Act of 2004 encouraged schools to use up to 15% of their special education money on regular education interventions (Johnston, 2010). In the eyes of the law, response to intervention (RTI) is described in two ways: (1) a strategy for identifying students with special needs, i.e. learning disabilities (LD), and (2) a strategy to reduce the number of students who end up identified with disabilities. When RTI is framed as a strategy to prevent learning disabilities, it becomes concerned with instructional issues emphasizing responsive teaching and contextual assessment (Johnston, 2010).

Fear of misidentifying students as disabled when they only need different or more intensive instruction to address their individual needs is a daunting matter to educators (Fisher & Frey, 2013). Therefore, different RTI instructional strategies have emerged to tackle this issue. RTI itself is a multilevel system of prevention that is designed to assist in identifying students at risk for low learning outcomes, closely monitor their progress, implement research-based interventions that suit students' responsiveness, and ultimately identify students with LD. In order to achieve all that, RTI operates in three different tiers, (1) primary prevention that focuses on improving the teaching methods inside conventional classrooms, (2) secondary prevention that highlights additional assistance for students in need, and (3) tertiary prevention that calls for one-on-one type of programs for the 5% of students who did not respond to tier one and two (Vaughn & Fletcher, 2012).

RTI INSTRUCTIONAL STRATEGIES

When researching for instructional strategies, I came to find out that it is only with combined strategies that an effective lesson can be created. A single strategy does not seem to suffice it. There is always some flaws to very given strategy. Therefore, this paper will shed light on how a good lesson can be designed in each tier of the RTI.

First, tier one teaching strategies seem to share one characteristic in common. They all make use of structured instruction that is well-planned and research-based (Green et al.,

2012). Every strategy, also, tends to be subject-specific, especially in the case of mathematics and language arts. For instance, the following strategy assists students in learning nouns. The teacher will follow these guidelines:

- 1. State the objective explicitly: "The goal for our class today is ..."
- 2. Give direct and clear instructions: "A noun can either be a name of a person, a place, and animal, or a thing."
- 3. Use hands-on, non-linguistic representations so that students will be able to associate words with their meanings; such as drawings.
- Make use of pair work and small groups. Ask the students to check their partner's drawings and try to identify it.
- Utilize feedback from and to the students.
 See whether the students were able to identify what was on that drawing. Give your feedback as well.
- 6. Remind the students of the objective of the lesson.

It is the task of the teacher to keep the class moving by implementing different strategies that highlight students' engagement and provides the students with the needed wait time (Basham et al., 2010). Using a timer is also a good idea to keep things rolling. Another sign of a good lesson is that it accounts for individual learning differences and takes into consideration different types of learners, i.e. auditory, visual, and kinesthetic. One last important thing is that pair and group wok is a valuable tool because it allows the students to socialize and that adds to the engagement aspect of education (Kirkpatrick, 2015).

Tier two is concerned with those students who did not respond to the strategies in tier one. Therefore, these students are put into small groups for instruction (Fisher & Frey, 2013). This tier highlights more intentional instructional strategies to target the exact students' needs. Teaching strategies in this tier are designed primarily based on these specific needs

for students. Additionally, tier two instructional strategies are geared towards each subject separately (Green et al., 2012). These strategies mainly utilize the use of direct instruction in order to break information into smaller parts so that the students will be able to apprehend them easily. Plenty of practice should follow direct instruction as well. Another thing to mention about tier two strategies is that direct instruction should be done with a slow pace so that students are given enough time to comprehend the information and practice it (Kirkpatrick, 2015). In a nutshell, teaching, re-teaching, practice, and interactive progress monitoring should be followed to build a sound basis. Apparently, this process takes longer than what it would usually take in a normal classroom. However, these types of sessions would usually take place three or four times a week, depending on the school's policy. The main focus here is on small group rather than larger group or the whole class.

Moving to tier three, this part of the RTI framework looks at those students who did not respond to instruction in tier two. Unlike tier two where the focus was on the small group, tier three's emphasis is put into the individual level. Instructional strategies are designed to suit the different learning styles and individual differences (Green et al., 2012). Although students can be taught in very small groups, most of the time it is a one-on-one type of instruction. The priority here is given to identifying the individual student's needs and work on providing them. Speaking about time, interventions for tier three usually take double the time for that of tier two due to the learning difficulties that the students have (Kirkpatrick).

Basically, tier three instructional strategies are designed in a way to teach the students how to approach and process information (Johnston, 2010). For example, the teacher might ask the student to think out lout. This way the teacher would provide the student with tips of how to think and organize one's thoughts. Moreover, as tier three is geared towards learning disabilities in a certain subject, it highlights instructional strategies for that given subject. Therefore, the teacher's task is to help the student go through the learning process and provide as much feedback as possible so that they develop their memory skills and be able to reflect on their learning experience. Finally, if tier three instruction was successful with the student, they are moved back to tier two; otherwise they get screened for special education status (Kirkpatrick, 2015).

4 Conclusion

According to all these instructional strategies, teachers who work with students with special needs need to work diligently in order to make the difference. The proposed instructional strategies have been reviewed by the literature and research findings revealed hghly positive, encouraging results. Personally, the RTI framework constitutes a remarkable finding in the world of special education.

ACKNOWLEDGMENT

The authors wish to thank his father, mother, siblings, and wife for all their support and encouragement.

REFERENCES

- J.S. Bridle, "Probabilistic Interpretation of Feedforward Classification Network Outputs, with Relationships to Statistical Pattern Recognition," Neurocomputing – Algorithms, Architectures and Applications, F. Fogelman-Soulie and J. Herault, eds., NATO ASI Series F68, Berlin: Springer-Verlag, pp. 227-236, 1989. (Book style with paper title and editor)
- [2] W.-K. Chen, *Linear Networks and Systems*. Belmont, Calif.: Wadsworth, pp. 123-135, 1993. (Book style)
- [3] H. Poor, "A Hypertext History of Multiuser Dimensions," MUD History, http://www.ccs.neu.edu/home/pb/mud-history.html. 1986. (URL link *include year)
- [4] K. Elissa, "An Overview of Decision Theory," unpublished. (Unplublished manuscript)
- [5] R. Nicole, "The Last Word on Decision Theory," *J. Computer Vision*, submitted for publication. (Pending publication)
- [6] C. J. Kaufman, Rocky Mountain Research Laboratories, Boulder, Colo., personal communication, 1992. (Personal communication)
- [7] D.S. Coming and O.G. Staadt, "Velocity-Aligned Discrete Oriented Polytopes for Dynamic Collision Detection," *IEEE Trans. Visualization* and Computer Graphics, vol. 14, no. 1, pp. 1-12, Jan/Feb 2008, doi:10.1109/TVCG.2007.70405. (IEEE Transactions)
- [8] S.P. Bingulac, "On the Compatibility of Adaptive Controllers," Proc. Fourth Ann. Allerton Conf. Circuits and Systems Theory, pp. 8-16, 1994. (Conference proceedings)
- [9] H. Goto, Y. Hasegawa, and M. Tanaka, "Efficient Scheduling Focusing on the Duality of MPL Representation," *Proc. IEEE Symp. Computational Intelligence in Scheduling (SCIS '07)*, pp. 57-64, Apr. 2007, doi:10.1109/SCIS.2007.367670. (Conference proceedings)
- [10] J. Williams, "Narrow-Band Analyzer," PhD dissertation, Dept. of Electrical Eng., Harvard Univ., Cambridge, Mass., 1993. (Thesis or dissertation)
- [11] E.E. Reber, R.L. Michell, and C.J. Carter, "Oxygen Absorption in the Earth's Atmosphere," Technical Report TR-0200 (420-46)-3, Aerospace Corp., Los Angeles, Calif., Nov. 1988. (Technical report with report number)
- [12] L. Hubert and P. Arabie, "Comparing Partitions," J. Classification, vol. 2, no. 4, pp. 193-218, Apr. 1985. (Journal or magazine citation)
- [13] R.J. Vidmar, "On the Use of Atmospheric Plasmas as Electromagnetic Reflectors," *IEEE Trans. Plasma Science*, vol. 21, no. 3, pp. 876-880, available at http://www.halcyon.com/pub/journals/21ps03-vidmar, Aug. 1992. (URL for Transaction, journal, or magzine)
- [14] J.M.P. Martinez, R.B. Llavori, M.J.A. Cabo, and T.B. Pedersen, "Integrating Data Warehouses with Web Data: A Survey," *IEEE Trans. Knowledge and Data Eng.*, preprint, 21 Dec. 2007, doi:10.1109/TKDE.2007.190746.(PrePrint)