

C. Special Populations

Group Members

Tammy J. Graham (co-chair), *The Citadel*

Alicia Wenzel (co-chair), *Western Oregon University*

Roberta Linder, *Wittenberg University*

Mary Rice, *University of Kansas*

Definition of Research Area and Terms

For this literature review, the term special populations was defined as middle grades students with exceptionalities, including those who are considered gifted and talented. While some definitions of special populations include English Language Learners and students who are economically disadvantaged, communication with the Cultural Responsiveness workgroup revealed that they were including these two groups of students in their literature review.

Literature Review Process

The workgroup on special populations began communicating via email in June 2015. In August 2015, members began to discuss possible topics for inclusion in the literature review. Initial conversations led to fourteen topics being identified for review; however, the list was later reduced to include a more realistic number of five topics that are often discussed when considering students with exceptionalities.

The workgroup decided to complete research summaries in a uniform manner. Group member Mary Rice recommended the following format, which the remaining members agreed to use: (a) definition of topic; (b) connection of topic to middle grades education; (b) summary of findings from recent studies; (d) proposed research questions: one main and two to three sub questions; and (e) references.

The majority of the research conducted was within the span of the last five years (2011-2015); however, due to limited research related to some of the topics, the span was increased to

10 years for those topics. Journal articles, theses, and dissertations were reviewed through library catalogs and data bases including EBSCOhost, Education Full Text, ERIC, Academic Search Complete, Google Scholar, ProQuest, and Web of Science. Keyword searches used combinations of related terms for each topic. For the topic of *gifted/talented*, searches included the following keywords: middle learning + gifted and talented, middle learning + GATE, and middle school + gifted and talented; however, combining gifted programs + middle school provided the most success. For *response to intervention*, keywords included response to intervention + middle school and interventions + middle school + reading. For *inclusion*, keyword searches included inclusion + middle school and inclusion + middle grades, and these keyword combinations yielded numerous results. The search was more focused when utilizing keyword combinations such as, co-teaching + middle grades/middle school and inclusive classrooms + middle grades/middle school. For *technology*, keywords included early adolescence, middle grades, middle level, + technology, technologically enhanced learning, and/or technology use + disability, special education, diversity, and/or special population. For *Universal Design for Learning (UDL)*, keyword searches included UDL + middle grades, UDL + middle school, Universal Design for Learning + middle grades, and Universal Design for Learning + middle school.

Research Questions

Gifted and Talented

1. How are students with advanced abilities successfully being identified and supported in middle grades classrooms?
 - a. What practices in identification and teacher preparation are being used to correct the underrepresentation of children who are limited English proficient, disabled, or from low-income backgrounds?

- b. What are the perceptions of and assumptions about the prevalence and characteristics of low income, high-ability children held by middle grades teachers, school psychologists, and administrators?
- c. How are views about the prevalence and characteristics of low income, high-ability children formed?
- d. How can productive views of low income, high ability learners be cultivated?
- e. What are the components of successful middle school-based or outside-of-school program/intervention models designed to support middle grades low-income, high ability learners?
- f. How are the national standards being adopted for advanced and gifted middle grades students?
- g. How are middle schools nurturing the social and emotional development of gifted children?

Inclusion

- 2. How is inclusion defined and implemented in the middle grades?
 - a. What are the roles of general education and special education teachers who participate in inclusion models in the middle grades?
 - i. How are teacher preparation programs preparing general education and special education teacher candidates to work in inclusion models in the middle grades?
 - ii. What support is provided to general education teachers and special education teachers who participate in inclusion models in the middle grades?
 - b. How is the effectiveness of inclusion models assessed in the middle grades?

Response to Intervention (RTI)

- 3. How can the RTI model be effectively implemented in middle grades settings?
 - a. How can middle school content area teachers provide greater support and differentiation in their instruction for all students (Tier 1)?
 - b. What interventions have the greatest impact on the reading achievement of struggling middle grades readers (Tiers 2 and above)?
 - c. What assessments provide the best information for screening (i.e., identification for intervention) and progress-monitoring (meeting students' individual needs in interventions)?

Technology

- 4. How do teachers of special populations support inquiry with technology in classrooms under conditions of varying or limited resources?
- 5. How does access to technologies for learning interface with the developmental trajectories of early/mid-adolescents, particularly those with disabilities?
 - a. How does technology use influence or make visible cognitive, social, physical, and/or linguistic changes in middle grades settings?
 - b. How can teachers support developmentally appropriate self-regulatory behaviors in special population students?
 - c. How do special populations take up new interactions and social roles in the presence of technologies?
- 6. How does the use of classroom technologies influence the relational aspects of teaching middle grades learners from special populations?
 - a. How do teachers use technologies to build relationships with students from diverse backgrounds?
 - b. How do students and parents from diverse backgrounds use

- technologies to build relationships with teachers?
7. How is appropriate access to technology determined and maintained for special population students?
 - a. How can educators help students from special populations move from accessing technology for entertainment to using technology to learn?
 - b. What roles and responsibilities do parents assert in determining technology use both in and out of school for their children from special populations?
 - c. What are the costs (e.g., financial, social, physical, emotional) of unequal access to technologies for middle grades learners from special populations?

Universal Design for Learning (UDL)

8. How do middle grades teachers perceive the importance and usefulness of UDL?
 - a. In what ways are teacher education programs preparing teacher candidates to implement UDL in the middle grades?
 - b. In what ways have middle grades teachers' teaching methods changed since implementing UDL?
 - c. In what ways is the effectiveness of UDL assessed in the middle grades?

Influential Readings

- Ahn, J. (2011). The effect of social network sites on adolescents' social and academic development: Current theories and controversies. *Journal of the American Society for Information Science and Technology*, 62(8), 1435-1445.
- Buckingham, D. (Ed.). (2008). *Youth, identity, and digital media* (pp. 119-142). Cambridge, MA: MIT Press.
- Callahan, V. C. M., Moon, T. R., & Oh, S. (2013). *Status of middle school gifted programs 2013*. Charlottesville, VA: National Research Center on the Gifted and

Talented. Retrieved from <http://www.nagc.org/sites/default/files/key%20reports/MIDDLE%20school%20GT%20Survey%20Report.pdf>

- Faggella-Luby, M., & Wardwell, M. (2011). RTI in a middle school: Findings and practical implications of a tier 2 reading comprehension study. *Learning Disability Quarterly*, 34(1), 35-49.
- Graves, A. W., Brandon, R., Duesbery, L., McIntosh, A., & Pyle, N. B. (2011). The effects of tier 2 literacy instruction in sixth grade: Toward the development of a response-to intervention model in middle school. *Learning Disability Quarterly*, 34(1), 73-86.
- Kahn, S., & Lewis, A. R. (2014). Survey on teaching science to K-12 students with disabilities: Teacher preparedness and attitudes. *Journal of Science Teacher Education*, 25(8), 885-910.
- King-Sears, M. E., Swanson, C., & Mainzer, L. (2011). TECHnology and literacy for adolescents with disabilities. *Journal of Adolescent & Adult Literacy*, 54(8), 569-578.
- Miller, L. M., Schweingruber, H., & Brandenburg, C. L. (2001). Middle school students' technology practices and preferences: Re-examining gender differences. *Journal of Educational Multimedia and Hypermedia*, 10(2), 125-140.
- National Association for Gifted Children. (2011). *Redefining giftedness for a new century: Shifting the paradigm* [Position Paper]. Washington, DC: Author. Retrieved from <http://www.nagc.org/sites/default/files/Position%20Statement/Redefining%20Giftedness%20for%20a%20New%20Century.pdf>
- Pearson, M. (2015). Modeling universal design for learning techniques to support multicultural education for pre-service secondary educators. *Multicultural Education*, 22(3), 27-34.

- Roberts, G., Vaughn, S., Fletcher, J., Steubing, K., & Barth, A. (2013). Effects of a response based, tiered framework for intervening with struggling readers in middle school. *Reading Research Quarterly, 48*(3), 237-254. doi: 10.1002/rrq.47
- Royster, O., Reglin, G.L., & Losike-Sedimo, N. (2014). Inclusion professional development model and regular middle school educators. *Journal of At-Risk Issues, 18*(1), 1-10.
- Sokal, L., & Katz, J. (2015). Effects of the three-block model of universal design for learning on early and late middle school students' engagement. *Middle Grades Research Journal, 10*(2), 65-82.
- Strieker, T., Gilis, B., & Guichun, Z. (2013). Improving pre-service middle school teachers' confidence, competence, and commitment to co-teaching in inclusive classrooms. *Teacher Education Quarterly, 40*(4), 159-180.
- Vaughn, S., Wexler, J., Leroux, A., Roberts, G., Denton, C., Barth, A., & Fletcher, J. (2012). Effects of intensive reading intervention for eighth-grade students with persistently inadequate response to intervention. *Journal of Learning Disabilities, 45*(6), 515-525. doi: 10.1177/0022219411402692