

# **Distance Education in Rural High Schools as a Solution to the Dropout Problem among Gifted Students**

*Meaghan Lister, Master of Education candidate, Memorial University of Newfoundland & Learning Manager, Holland College, Charlottetown, Prince Edward Island. mclister@hollandcollege.com*

## **The dropout problem among gifted students**

This position paper argues in favour of the need to use distance education to address the dropout problem among gifted students in rural high-schools. Gifted students may be high academic achievers (Howley, 2009) yet, they may also be characterized by underachievement and, as a result, dropout of high school (Landis & Reschly, 2013). Student engagement is characterized by academic, behavioural, cognitive and affective involvement in the educational environment yet gifted students may experience lack of engagement (Landis & Reschly, 2013). These students cite lack of challenge, irrelevant busywork, and courses that are not appropriate to their instructional needs as factors that contribute to their lack of engagement or boredom and ultimately their decision to dropout (Landis & Reschly, 2013; Hidi & Harackiewicz, 2000).

Gifted students in small rural schools may be at a disadvantage compared to their urban counterparts in terms of educational opportunities (Barbour, 2007). The disadvantage may be because, as Hannum, Irvin, Banks and Farmer (2009) found, rural schools are often geographically isolated and have limited resources, both financial and human, which influence the ability of the school to offer specialized or enrichment courses suitable for the needs of gifted students. As a result, the schools offer fewer courses with less variety (Barbour, 2007).

Small rural communities pose other challenges for gifted students including the distance to enrichment programs and services and lack of resources (Howley et al., 2009). Gifted students in rural communities often have few opportunities to interact with other high-achieving students (MacIntyre and MacDonald, 2011; Barbour, 2007; Howley et al, 2009). Lack of interaction with other gifted students may result in gifted students not receiving the “critical academic stimulation and enrichment needed to support their full cognitive, social and academic development” (Howley, Rhodes, & Beall, 2009, p. 521).

## **Distance education for gifted students**

Through the use of distance education, small rural schools have the opportunity to expand student learning opportunities and improve the variety and number of courses available to gifted students (Barker & Hall, 1994; Husu, 2006). In some small, rural schools, distance education has been the only solution that allows them to offer specialized and advanced courses (Barker and Hall, 1994; Hannum et al., 2009). Howley et al. (2009) found that “using technology such as

teleconferencing, interactive video, and e-classes to provide advanced coursework to bright students" has been effective.

Through access to more course variety using distance education, gifted students may have the opportunity to choose courses based on personal interest and academic needs (Barker and Hall, 1994; Husu, 2006). While catering to the interests of individual students is difficult to accomplish in a traditional classroom (Hidi & Harackiewicz, 2000), an online environment allows students an opportunity to choose from a wide range of courses. Allowing students to study topics of interest and providing choice can be effective in enhancing interest and motivation which strongly impacts student learning and engagement (Hidi & Harackiewicz, 2000).

Failing to obtain course credit is a "critical determinant in gifted dropouts' decision to leave high school" (Landis and Reschly, 2013, p. 232) therefore course completion rates as well as student satisfaction are important factors to consider when evaluating any intervention for gifted student dropouts. Course completion rates of online students in K-12 schools have been increasing along with student grades and satisfaction (Simonson, Schlosser & Orellana, 2011). Howley et al. (2009) and Wallace (2009) found that gifted students have had success and expressed satisfaction with advanced courses offered online.

### **Overcoming the obstacles to use of distance education for gifted students**

Barbour (2007) found that students in distance education need to be academically successful, self-disciplined and prepared for independent work. They also need to have strong study and computer skills (Irvin, Hannum, de la Varre, Farmer, & Keane, 2012). Ensuring the physical presence and support of an adult in the K-12 environment is also necessary to make distance education work well (Southwick, 2003). Students in the distance environment require guidance, motivation and support provided by a classroom teacher to develop the independence, self-discipline, and self-monitoring needed (Husu, 2006). Gifted students are, by definition, high academic achievers thus making them ideal candidates for online courses (Wallace, 2009).

Creating virtual classrooms in which students are linked with video conferencing can provide support to students (Husu, 2006). Consideration should be given to high-bandwidth connections, in addition to ensuring interaction between students and teachers (Kes, Williges, and Rosson, 1997). Baggaley and Klass (2006) found that audio-conferencing software can provide an interactive video conferencing experience for students while overcoming the requirements for broadband connections to which students may not have access.

Small schools are challenged by a lack of money, infrastructure, technology and human resources (Lovvorn, Barth, Morris, and Timmerman, 2009; Barbour, 2007;

Simonson et al, 2011; Hannum et al., 2009). Therefore, consideration should be given to designing distance education courses for gifted students in rural schools that follow the principles of universal design to ensure that schools with older technology are still able to provide access to a wide variety of courses for the gifted students within their school (Elias, 2010).

While lack of social interaction is cited as one of the greatest barriers in distance learning (Muilenburg & Berge, 2005), using a wide variety of tools, including discussion forums, synchronous and asynchronous class time, and email (Barbour, 2007), can increase this social interaction. Owens, Hardcastle and Richardson (2009) found that use of multiple communication channels was more effective in engaging students and may influence student satisfaction. “Increasing student involvement in online environments is a direct means to improving learning outcomes” (Bower, 2011, p. 64). This social interaction is necessary to help ensure gifted students remain engaged in their learning (Landis & Reschly, 2013).

## References

- Baggaley, J. & Klass, J. (2006). Technical evaluation report 56. Video-conferencing with audio software. *International Review of Research in Open and Distance Learning*, 7(1).
- Barbour, M. K. (2007). Portrait of rural virtual schooling. *Canadian Journal of Educational Administration and Policy*, 59, 1-21.
- Barker, B., & Hall, R. (1994). Distance education in rural schools: technologies and practice. *Journal of Research in Rural Education*, 10(2), 126-128.
- Bower, M. (2011). Synchronous collaboration competencies in web-conferencing environments – their impact on the learning process. *Distance Education*, 32(1), 63-83.
- Elias, T. (2010). Universal instructional design principles for Moodle. The *International Review of Research in Open and Distance Learning*, 11(2), 110-124.
- Hannum, W. H., Irvin, M. J., Banks, J. B., & Farmer, T. W. (2009). Distance education use in rural schools. *Journal of Research in Rural Education*, 24(3). Retrieved from <http://jrre.psu.edu/articles/24-3.pdf>
- Hidi, S. & Harackiewicz, J.M. (2000). Motivating the academically unmotivated: A critical issue for the 21<sup>st</sup> century. *Review of Educational Research*, 70(2), 151-179. Retrieved from <http://www.jstor.org/stable/1170660>
- Howley, A., Rhodes, M., & Beall, J. (2009). Challenges facing rural schools: Implications for gifted students. *Journal for the Education of the Gifted*, 32(4), 515-536.
- Howley, C. B. (2009). The meaning of rural difference for bright rednecks. *Journal for the Education of the Gifted*, 32(4), 537-564.

- Husu, J. (2006). Access to equal opportunities: Building of a virtual classroom within two 'conventional' schools. *Journal of Educational Media*, 24(3), 217-228. <http://dx.doi.org/10.1080/1358165000250305>
- Irvin, M. J., Hannum, W. H., de la Varre, C., Farmer, T. W., & Keane, J. (2012). Factors related to rural school administrators' satisfaction with distance education. *Distance Education*, 33(3), 331-345.
- Kies, J., Williges, R.C., & Rosson, M. B. (1997). Evaluating desktop video conferencing for distance learning. *Computers and Education*, 28(2), 79-91.
- Landis, R. N., & Reschly, A. L. (2013). Re-examining gifted underachievement and dropout through the lens of student engagement. *Journal for the Education of the Gifted*, 36(2), 220-249. DOI: 10.1177/0162353213480864
- Lovorn, A. S., Barth, M. M., Morris, R. F., & Timmerman, J. E. (2009). Lessons learned from lessons learned: The fit between online education "best practices" and small school reality. *Online Journal of Distance Learning Administration*, 12(4).
- MacIntyre, R., & MacDonald, J. (2011). 'Remote from what?' Perspectives of distance learning students in remote rural areas of Scotland. *The International Review of Research in Open and Distance Learning*, 12(4), 1-16.
- Muilenburg, L. Y., & Berge, Z. L. (2005). Student barriers to online learning: A factor analytic study. *Distance Education*, 26(1), 29-48. doi:10.1080/01587910500081269
- Owens, J., Hardcastle, L., & Richardson, B. (2009). Learning from a distance: The experience of remote students. *Journal of Distance Education*, 23(3), 53-74.
- Simonson, M., Schlosser, C., & Orellana, A. (2011). Distance education research: A review of the literature. *Journal of Computing in Higher Education*, 23(2-3), 124-142.
- Southwick, J. (2003). Distance education in the rural K-12 environment. *Computers in the Schools*, 20(3), 27-32.
- Wallace, P. (2009). Distance learning for gifted students: Outcomes for elementary, middle, and high school aged students. *Journal for the Education of the Gifted*, 32(2), 295-320.