# Education Preparation Program

The Delaware State Board of Education strongly believes that in order to increase the number of students ready for college, career, and citizenship; it is imperative that we focus on the level of literacy necessary to ensure success. In order to compete in a global economy and prepare our community for prosperity, we must make sure that our future workforce is equipped with the literacy skills necessary to compete.

In 2013, Delaware's 4th grades were at only 38% proficient or Advanced in Reading on the National Assessment of Educational Progress (NAEP) and 42% Proficient or Advanced in Mathematics[1], while these are above the national average and showed improvement from previous years, there is a significant improvement that is still needed.

Students need an early literacy education that is rich not only in reading instruction but also vocabulary development, written and oral communication skills. The need to improve the preparation of teachers in this area has been addressed in several research studies, most recently in the 2013 National Council of Teacher Quality's report it found that many teacher preparation programs do not utilize methods of reading instruction aligned to the recommendations of the National Reading Panel or Literacy components within current college and career ready standards.[2] According to the US Department of Education's Institute of Educational Sciences report in 2010 on the Study of Teacher Preparation in Early Reading Instruction, pre-service teachers were twice as likely to report that their field experience offered a stronger focus on the essential components of reading than their coursework. They also reported at the same rate that their programmatic focus was more strongly focused on alphabetics and fluency than on meaning. In this same study pre-service teachers only correctly answered 57% of the items on a Knowledge Assessment that included items on fluency, meaning, and alphabetics.[3]

Much research has also been done on the impact of the appropriate development of mathematics skills in the early years of education.[4] Research has shown that not only is acquisition of early mathematics knowledge a predictor of greater success in school but it is also a strong predictor of later reading achievement.[5] Doing more mathematics in the early years has the ability to enhance

the literacy skills of oral language which include enhanced vocabulary acquisition, inference, independence, and grammatical complexity.[6]

Action to address these issues was taken in June 2012 with the passage and signage into law of Senate Bill 51, an act to strengthen teacher preparation and initial licensing. This act requires all teacher preparation programs to prepare prospective elementary school teachers in age-appropriate literacy and mathematics instruction. The details of these education program components will be further specified in Department of Education regulation 290, due to be revised by June 2014.

**The State Board of Education is strongly advocating for those teacher preparation program components to align with the research studies calling for:**

- **Research based program components that effectively address reading instruction and enhance literacy components of oral language and vocabulary acquisition.[7]**
- **Mathematics instruction must align with college and career readiness standards that focus on the deep content knowledge taught in early education and elementary grades as well as have strength in pedagogy.**
- **Integrate with Council of Accreditation of Educator Preparation (CAEP) Standards for Program accreditation**
- **Exit Assessments in these areas must align with the program components and criteria for Delaware's Initial Licensure and Elementary Teacher Certification.**

ENDNOTES


1) Delaware NAEP Report, 2013, http://www.doe.k12.de.us/news/2013/1107.shtml

2) J. Greenberg, A. McKee, and K. Walsh, "Teacher Prep Review 2013 Report," 2013, http://www.nctq.org/dmsStage/Teacher_Prep_Review_2013_Report

3) T. Salinger, L. Mueller, M. Song, Y. Jin, C. Zmach, M. Triplitz, M. Partridge, and A. Bickford, "Study of Teacher Preparation in Early Reading Instruction," 2010, http://ies.ed.gov/ncee/pubs/20104036/pdf/20104037.pdf

4) Education Commission of the States, "Math in the Early Years, "The Progress of Education Reform, October 2013, http://www.ecs.org/clearinghouse/01/09/46/10946.pdf

5) G.J. Duncan, C.J. Dowsett, A. Claessens, K. Magnuson, A.C. Huston, P. Klebanov, and C. Japel, "School Readiness and Later Achievement," Developmental Psychology, 43(6), 1428–1446, 2007; D.C. Farran, C. Aydogan, S.J. Kang, M. Lipsey, Preschool Classroom Environments and the Quantity and Quality of Children's Literacy and Language Behaviors, 2005; M.K. Lerkkanen, H. Rasku-Puttonen, K. Aunola, and J.E. Nurmi, "Mathematical Performance Predicts Progress in Reading Comprehension Among 7-year-olds," European Journal of Psychology of Education, 20(2), 121-137, 2005.

6) J. Sarama, A. Lange, D.H. Clements, and C.B. Wolfe, "The Impacts of an Early Mathematics Curriculum on Oral language and literacy," Early Childhood Research Quarterly, 27, 489-502, 2012, doi: 10.1016/j.ecresq.2011.12.002.

7) K. Christie and S. Rose, Education Commission of the States, "A Problem Still In Search of A Solution: A State Policy Roadmap for Improvinf Early Reading Proficiency," 2012, http://www.ecs.org/clearinghouse/01/04/41/10441.pdf