

Dissemination

Community Outreach and Awareness/Kindergarten Lessons

During the 2005-2006 school year, LFDCS completed plans and received approval to open an early kindergarten program (K-1) for the 2006-2007 academic year. Integral to this project was a year-plus review of curriculum and planning to develop a two-year, full-day kindergarten program spanning the state early childhood goals for pre-school through readiness for 1st grade. Massachusetts Curriculum Framework standards were structured to phase in skills and content over a two-year period – allowing for introduction review and mastery in appropriate developmental time blocks.

Teaching staff in our current K and grade 1, along with reading specialists, special education's staff and administration, created a series of example lessons to be presented in public forum in the community as part of outreach and enrollment. Two evenings and one Saturday session at the Lawrence Public Library introduced interested parents and other community members to the goals, expected outcomes and hands-on learning activities for parents and children.

Early childhood certified staff are completing lesson plans and activities during summer 2006 and will apply to be presenters at Massachusetts and national conferences during 2006-2007.

STEMS (Science, Technology, and Engineering for Middle Schools) Content Institute

Development and implementation of STEMS as a summer content institute through the Massachusetts Department of Education was designed in response to the school's underperformance in the science tests of MCAS. Review by school staff showed a fragmentation of curriculum presentations taken from the Massachusetts Curriculum Frameworks. Although lessons were aligned to the standards, the order of standards did not support a foundation and sequential introduction of content. The standards were re-ordered to spiral back from 8th grade to 7th grade to 6th grade. This framework was used to create the STEMS content institute in partnership with the Science/Technology Department at Northern Essex Community College where the staff training was designed and course offered. The 10-day summer 2006 institute will have 2 follow-up sessions in the fall of 2006 and on-line technical assistance during the year.

Course content: The STEMS (Science, Technology and Engineering for Middle School) Content Institute will provide educators in grades 6-8 with the content and context to offer Science and Engineering/Technology courses that meet the Massachusetts Curriculum Framework standards and that provide a solid integration of key scientific and mathematical concepts applied through the engineering design process. Key academic concepts addressed in this institute include: inquiry, heat transfer, physical sciences, materials and tools, engineering design, communication technologies, manufacturing technologies and construction technologies. The content institute will be organized and delivered using technology. LFDCS credits Michael Pelletier, Head of Science and Technology at Northern Essex Community College, for development and implementation of the LFDCS curriculum frame as a content institute for improving the teaching of middle school science.