

Archdiocese Names Stem Schools, Created Criteria for Stem Certification in Latest Academic Enhancement

Dr. Barbara McGraw Edmondson, Interim Superintendent of Schools for the Archdiocese of Baltimore, announced today that the Archdiocese's Department of Catholic Schools, has developed a criteria and a process for designating STEM (Science, Technology, Engineering and Math) schools in the Archdiocese of Baltimore.

Effective the 2011-12 school year, the following schools will offer STEM programs that meet the formal criteria developed by the Archdiocese: Holy Angels Catholic School, Baltimore; Immaculate Conception School, Towson; Resurrection-St. Paul School, Ellicott City; Our Lady of Grace School, Parkton; St. Jane Frances de Chantal School, Pasadena; St. Joan of Arc School, Aberdeen; and St. John Regional School, Frederick.

The announcement represents the most recent enhanced academic program to be implemented by the Archdiocese since it announced last March that it would be investing in new academic initiatives to ensure that Catholic schools in the Archdiocese remain competitive.

"In a time when our nation and schools seek to provide our students with learning experiences which prepare leaders in a global and technologically advanced society, we are proud to recognize seven of our elementary schools which have identified the establishment of STEM instruction as a key initiative for the 2011-2012 school year," Dr. Edmondson said. "The work of these schools and their partnerships with the higher education and private industry will create a network of affiliates and begin to build a cadre of instructional mentors for our elementary school faculty and students."

The STEM instructional/curricular model originated with the 2007 report by the National Academy of Sciences, *Rising Above the Gathering Storm* and has become a widely used acronym to describe schools' increased emphasis on science and math and greater use of technology in classrooms to better prepare students for eventual careers in one of the four disciplines. To more clearly define this model in the Archdiocese of Baltimore, the Department identified several elements that must be present in a school's teaching methodology, curricular and extra-curricular activities, in order to be recognized as a Catholic STEM school in the Archdiocese of Baltimore.

Included among those elements are: continuous professional development for teachers, integrated use of computer technology and technology teaching tools, a successful advanced math track, data-driven decision-making, the presence of a science lab, and partnerships with businesses and/or universities focused on one or more STEM disciplines.

Two of the schools, St. Jane Frances de Chantal and St. Joan of Arc, have recently received federal grants to fund STEM-related professional development.

In addition to the seven elementary schools named, several Archdiocesan high schools have made advancements in the STEM disciplines, including Archbishop Spalding High School and Seton Keough High School, both of which offer the Project Lead the Way program. Because Holy Angels Catholic School is located on the same campus as Seton Keough, the pre-k to eight school will benefit from the relationship due to the high school's strong engineering and biomedical programs as well as its successful partnership with St. Agnes Hospital. Seton Keough, which also offers an Aerospace Engineering program to its students, was recently named one of two schools in the Baltimore-Washington area to participate in the National Aeronautic and Space Administration's DREAM Lunar Extreme Workshop next June.

"In addition to these seven schools, many elementary and secondary schools in the Archdiocese have placed an increased emphasis in the areas of math and science and are integrating technology in their instruction to better prepare our students for careers in these rapidly advancing fields," Dr. Edmondson added. "As a result, parents can be confident in their choice of a Catholic school to educate, form and

challenge their children as they prepare for the next phase of their academic careers.”

According to a report by the National Governors Association titled, Innovation America: Building a Science, Technology, Engineering and Math Agenda, Nobel Laureate Physicist and founder of the Illinois Math and Science Academy, Leon Lederman defines STEM literacy as “the ability to adapt to and accept changes driven by new technology work with others (often across borders), to anticipate the multilevel impacts of their actions, communicate complex ideas effectively to a variety of audiences, and perhaps most importantly find ‘measured yet creative solutions which are today unimaginable.’”

Beyond the naming of these seven STEM schools, the Archdiocese will work to encourage all Catholic schools to participate in educational methods and approaches that have been inspired by the recent national commitment to science, technology engineering and math.

January 30, 2011 – February 5, 2011 is National Catholic Schools Week. Schools in the Archdiocese of Baltimore will be hosting events, liturgical celebrations and other activities throughout the week. For a list of events or for more information about the value of Catholic schools in the Archdiocese of Baltimore, visit www.archbalt.org/aplacetogrow.

On Thursday, February 3rd, St. Joan of Arc Catholic School in Aberdeen Maryland will host a Technology Fair from 10:00 AM to 12:00 PM. Contact Dr. Jane Towery jtowery@stjoanarc.org for more information or to RSVP.