

To: All NYSTEA members and friends of Technology Education
From: Alta Jo Longware, President NYSTEA 2004-05
Thomas A. Frawley, President-elect
Dave Arnone, Vice President
Re: Action on Middle-level Reform Proposals
Date: September 22, 2004



On September 9, 2004, The Office of the Elementary, Secondary, Middle and Continuing Education (EMSC) agreed to vote on the proposed “Strategy to Implement the Regents Policy Statement on Middle-Level Education” dated August 26, 2004, at their November meeting. In response to the committee’s request for public input, the NYSTEA executive committee prepared a response in the form of an evaluation document.

Though NYSTEA advocates for “Model A-All the Way”, it would have been negligent not to review all three models and provide suggestions for each in an effort to ensure that all middle-level students have the opportunity to experience Technology Education.

The recommendations to identify Technology Education as a core subject with a State assessment was not without debate. It took careful review of the design principles of each model and consultation with experts in the field, who agree; if Technology Education is taken out of the “exploratory” mindset and into core course status, with a State assessment, schools will most likely opt to maintain current programs.

NYSTEA encourages you to do three things: get informed on the issues, inform other in your district, and contact SED with your concerns. You should review the proposed Strategy for Implementation and NYSTEA’s response. You can locate the strategy document and complete the Middle-Level Survey on-line at <http://www.emsc.nysed.gov/deputy/mle/mlehome.html>. Although the deadline for comments is October 18th, 2004, the sooner SED receives comments, and suggestions, the sooner they can act on them.

The survey consists of three questions that require a narrative, and a space for comments. Some key ideas to consider in your responses are; the uncertainty of the success in the deregulation in educational programs, the lack of accountability for alternative programs, and the negative impact that inconsistency in educational programs throughout the state could have on overall student achievement. One major concern is that Model C provides too much flexibility, that could encourage districts to make decisions on educational programs based on funding issues rather than what is best for children, which could result in the elimination of programs. Your comments should personalize your message; highlight student success stories. Remember that our mission is to ensure that all students have the opportunity to study Technology.

Please feel free to contact your District Vice President or one of us with any questions or comments concerning the middle-level proposals or the NYSTEA response below.

**The New York State Technology Education Association’s Response to
“Strategy to Implement the Regents Policy Statement on Middle-Level Education”**

The New York State Technology Education Association (NYSTEA), on behalf of the 3000 Technology Education teachers that it represents, recognizes the Education Department’s commitment to improve the quality of education programs and services across the State.

NYSTEA supports the Regents Policy Statement and the Essential Elements of Standards-Focused Middle-Level Schools and Programs as documents that capture the attributes of high performing middle-level schools.

NYSTEA supports all twenty-eight New York State Learning Standards as the content standards and performance standards that reflect the knowledge and skills that will enable students to succeed in a dynamic world.

NYSTEA supports SED efforts to provide additional support for high need, low performing, and schools in crisis so they can close the gap, thereby assuring that all students will meet or exceed the standards at all levels.

NYSTEA believes that the proposed “Strategy to Implement the Regents Policy Statement on Middle-Level Education” dated August 26, 2004 does not reflect a child-centered rationale for such a drastic shift in philosophy from general State regulation to local flexibility.

The proposal has the potential in many schools, to eliminate programs that reflect contemporary technological and societal changes: programs that are engaging to students and enable them to put into context important academic knowledge and skills.

The proposal does not address the root problem of low performing schools, which is the lack of attention to barriers to learning; and does not advocate for funding for educational programs including professional development and academic assistance, as well as parent outreach and student support programs

NYSTEA has serious concerns with the design principles for Models B and C, as presented in the “Strategy to Implement the Regents Policy Statement on Middle-Level Education” document, and the potential for negative impacts that deregulation will have on thousands of students in the State. These concerns include the following:

1. Research-based data has not been provided that supports a shift from regulated to total flexibility in educational programming.

If in fact 70% of the middle schools in NYS are considered successful under current regulations (as stated at the September 9th meeting), then to provide options to the regulations for 100% of the schools to address the needs of 30% appears to be a significant relaxation of expectations and regulations. The approach diminishes the importance of all curriculum and learning standards for middle school students.

2. Guidelines have not been established that would provide consistency in integrated programs.

In model options providing regulatory relief, it is suggested that all courses could potentially be integrated with other courses. This raises a number of questions.

Will the time requirements be maintained if new content is integrated into existing courses? Will teachers who teach integrated courses be required to hold certification in all areas for which they will be responsible as is required in the current set of Commissioner's Regulations, 100.4 (b) (2) i and ii? How will districts ensure that all students have equal opportunity for exposure to all courses or course content in order to meet standards?

It is instructive to note, that prior to the establishment of the National Curriculum in England, a study was done that determined that integration of content into other subjects resulted in a lack of curriculum coherence. In the U.K Design and Technology program, for example, integration resulted in history teachers teaching about Roman arches and English teachers using Kurt Vonnegut's writings to portray technology only in a disturbing light. The British rejected the integrated approach and identified Design and Technology as a foundation subject in the National Curriculum. For students to be adequately prepared to be productive and technologically literate citizens, a comprehensive curriculum with a focus on technological knowledge and skill development, taught by expert teachers, was desired.

3. There appears to be a lack of a requirement for State approval for selective program refinements (other than the Big Five School Districts), which target areas without mandated state assessments.

Under Model C, districts proposing selective program refinements which target specific standards areas not measured by mandated State assessments would only be required to submit applications to the District Superintendent, not the State. There is no indication in the proposal that there will be local or State accountability for assessment of student achievement in alternative programs.

NYSTEAs supports Model A (Comply with Existing Regulations): Retain the current regulatory structure, making full use of the existing flexibility provisions in the regulations, with the educational program (curriculum) as prescribed in Sections 100.3 and 100.4 of Commissioner's regulations.

NYSTEAs recommends that the set of design principles that applies to each of the proposed Models A, B and C include the following elements:

1. Recognize the equal importance of the State learning standards and identify Technology Education as a core subject of study for all students.

The State has identified Learning Standards as content standards; all content standards should be considered core content areas of study. The term "exploratory" no longer accurately describes any area of study that has defined content standards, such as MST Standard 5- Technology.

NYSTEAs recognizes that Technology Education is in evolution and proposes that the New York State Board of Regents and the SED encourage the transition to include an engineering-based study of technology that can be used to support, revisit, and contextualize mathematics, science, and language. This approach has been successfully implemented by the National Science Foundation-funded MSTP Project: Mathematics across the Middle School Curriculum, which is providing students in the lowest performing middle schools with opportunities to learn standards-and assessment-based

mathematics in contexts that are meaningful to them in Science and Technology Education classes.

2. Require the use of State assessments in all content areas to determine both student achievement and school accountability in meeting higher standards.

The State has established State assessments as a measure of student achievement; all content areas should have State assessments. Statewide testing for all content areas should be required to ensure that student achievement is accurately measured, monitored, and reported, regardless of the model of the program. This becomes critically important in cases where subject matter is integrated and taught by non-specialist teachers. Students should be held to a consistently high standard of competence in all disciplines.

3. Support the use of an AIS/Technology Education program as an option to traditional or stand-alone AIS programs.

Under the current proposal, not all students will be guaranteed an equal opportunity to meet all State standards. Students in need of AIS are often those who do not have the opportunity to feel successful in school and who benefit most from Technology Education because the program is mind-on, hands-on and offers students high-interest, real-life applications of math, science and literacy skills.

NYSTEA recommends that the statement under Model A: Specifics, bullet four, be deleted.

The statement, which addresses the integration of State learning standards, misquotes the Commissioner's Regulations 100.4 b (2). The words "in accordance with the following criteria:" and the restrictions (i) – (iv) that follow it were deleted. As written, the statement misrepresents the intent and restrictions of the regulation.

NYSTEA recommends that the State provide a specific definition of integration.

Curriculum integration takes on many forms that reflect different levels or degrees of implementation, and which may be defined differently depending on the source of the information. For example, Robin Fogarty offers ten views of integration as increasing levels of design options; fragmented, connected, nested, sequenced, shared, webbed, threaded, integrated, immersed and networked, each with a set of pros and cons for application and effectiveness.

The State needs to adopt and provide one set of terms and design options, which accurately and specifically describe the various levels of curriculum integration to allow for effective and efficient communication between and among teachers, disciplines, and institutions.

NYSTEA encourages a highly conservative approach for approval of any Model C Schools/Program and recommends that the design principles for the model articulate the following:

1. Limit the number of approved Model C Schools/Programs.
2. Establish clear guidelines for the selection of Model C Schools/Programs.
3. Require SED to review and approve all applications for all programs seeking regulatory relief.

4. Involve teacher consultant teams from all content areas in the evaluation of programs seeking relief from Commissioner's Regulations 100.3 and 100.4, regardless of educational or integration program.
5. Require the use of State assessments in all State standards/content areas regardless of educational or integration program.

NYSTEA will continue to be a proactive partner in middle-level reform and commits to:

1. Participate on SED committees/teams for evaluation, approval and assessment of applications for Model C programs or programs seeking regulatory relief.
2. Collaborate with AIS and other teachers to create high interest material for study in Technology education that addresses both AIS needs and meets the requirements for Technology Education instruction.
3. Provide quality professional development opportunities to improve Technology Education teaching practices and programs.
4. Recruit new teachers into the field of Technology education.
5. Participate in the evaluation of Technology teacher certification tests.
6. Revise and update curriculum to better align with State standards and to include newer technologies such as biotech and nanotech topics and activities.

NYSTEA offers the following documents as evidence in support of our recommendations, and commitment to middle-level reform.

Attachments

1. Gallup poll results that indicate the necessity of Technology Education for all students.
2. North Country Area Development Survey that indicates the necessity of Technology Education for middle-level students.
3. Letters from Special Education teachers and administrators that indicate the importance of Technology Education for students with special academic needs.
4. Samples of various types of integration that exemplify the need for a common State definition for the term(s) and design options associated with integration.

Additional References and Citations

1. International Technology Education Association (ITEA), Technology for All Americans Project (TFAAP) which states, "With the growing importance of technology to our society, it is vital that students receive an education that emphasizes technological literacy."
2. National Science Foundation (NSF) sponsored New York State Professional Development Collaborative (NYSPDC), which provides professional development for teachers in MST using the informed design model.
3. NSF-sponsored MSTP State Project that focuses on improving middle level mathematics skills by improving mathematics pedagogy and contextualizing mathematics learning in Science and Technology Education classes.
4. Benefits of Technology Survey, 2004, which indicates that middle school students put a high degree of importance on Technology education.
5. NYSTEA Position Statement on Technology Education, 1998
6. How to Integrate Curricula by Robin Fogarty
7. SECTION 100.4 of the Regulations of the Commissioner of Education
8. EMSC Strategic Plan
9. New York State Learning Standards