

THE STATE EDUCATION DEPARTMENT / THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234

| TO: | P-12 Education Committee |
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| FROM: | John B. King, Jr. |
| SUBJECT: | Proposed addition of section 100.5(d)(10) of the Regulations of the Commissioner of Education, relating to Awarding Units of Credit for Online and Blended Courses |
| DATE: | December 6, 2010 |
| STRATEGIC GOAL: | Goals 1, 3 and 5 |

AUTHORIZATION(S):

SUMMARY

Issue for Discussion

Should the Board of Regents add a new section 100.5(d)(10) of the Commissioner's Regulations to prescribe requirements for awarding units of credit for student completion of online and blended courses?

Reason(s) for Consideration

Implementation of Policy.

Proposed Handling

This question will come before the P-12 Education Committee for discussion in December 2010.

Procedural History

In recent months, the Regents have considered changes to Commissioner's Regulations that allow students to participate in online learning under certain circumstances, including:

- 1. participation in a district-approved independent study course (maximum of 3 elective credits) (8 NYCRR §100.5[d][9]); and
- 2. making up course credit (8 NYCRR §100.5[d][8]).

The current recommendation provides opportunities for students who may benefit from participation in online and blended learning opportunities outside these specific circumstances.

Background Information

Digital and Internet-connected technologies have increased access to a rich variety of educational opportunities, in the form of online content and instruction, for schools and students across New York State. These educational opportunities have resulted in a number of questions from school districts and educational organizations, and a need for the New York State Education Department (NYSED) to provide alternative pathways for school districts to provide students with opportunities to earn course credit through online instruction and content.

A policy for awarding units of credit to students for their completion of online and blended courses is intended to provide guidance to public school districts and Boards of Cooperative Educational Services (BOCES) interested in offering new learning opportunities for students through online instruction. NYSED recognizes that concepts such as *virtual learning, distance learning, online instruction, online courses,* and *online learning* may have multiple meanings, which may evolve and change with the development of new technologies. This policy serves as an initial foundation for school districts and BOCES to develop, implement, and evaluate online and blended courses as alternative pathways for student completion of general education and diploma requirements.

A. Terminology

In an effort to minimize confusion, the following definitions to common terms are offered.

<u>**Online instruction**</u> generally describes substantive interactions among students and teachers that occur through online or digital media. Within any specific unit of study, this instruction may range from fully online, to a combination of online and face-to-face or classroom-based interactions.

<u>Online content</u> is instructional content (information relevant to study in a specified standard area) delivered through digital and/or Internet-connected media. This would be the equivalent of subject matter knowledge and information that might be conveyed or obtained from traditional print-based sources such as textbooks and handouts, or through classroom-presented audio and visual methods. Examples include:

- Digital media video clips which re-teach or reinforce a particular concept.
- Web-based interactive activities to reinforce skills and concepts.

When instruction within a specific unit of study (or course) includes teacher-tostudent, student-to-student, and student-to-content interactions that occur solely through online or digital media, the course would be considered an <u>online course</u>. Examples include:

- A school district uses its own local technology infrastructure and instructional personnel to create and house the online course, and district teachers, appropriately certified in the specific subject area, to deliver the instruction to enrolled students.
- A school district or BOCES teacher offers a course to students in different locations through distance learning technology.

When instruction within a specific unit of study (or course) includes teacher-tostudent, student-to-student, and student-to-content interactions through any combination of classroom-based and online media, the course would be considered a <u>blended course</u>. For example:

 Administrators in a local district, in consultation with their district curriculum review committee, determine that it would take 108 hours of instruction per year for students to earn a unit of credit for a particular course. In addition, the district determines that providing students enrolled in the course the opportunity to receive 90 minutes of instruction per week through face-toface/classroom time and 90 minutes per week of teacher-to-student, studentto-student, and student-to-content interactions through digital or Internetconnected technology (online) would best meet the needs of its students. This course opportunity would be considered a blended course.

B. Examples of Online Instruction in New York State

Several BOCES and school districts in New York State have developed or purchased online courses to supplement local classroom instruction.

One example of an in-state developed online program is AccelerateU, launched by the Wayne-Finger Lakes BOCES to provide courses for students, and professional development and instructional support for teachers (www.accelerateu.org). The New York City Department of Education recently launched iLearn NYC (http://www.ilearnnyc.net), a pilot project of Advanced Placement, credit recovery, and blended learning courses offered in over 40 schools district-wide. Oneida-Madison-Herkimer BOCES, using teachers from its component districts, has built an online physics program complete with labs in an effort to ensure a high level of rigor for students who engage in the course. Lastly, the Greater Southern Tier BOCES has purchased programs through Advanced Academics and has trained a cadre of teachers to deliver and supervise the course offerings, specifically in foreign languages.

As encouraging as these efforts are, these online programs are disconnected from each other, without a supportive policy framework and aligned funding stream to enable their statewide growth and reach. As a result, our proposal for online learning seeks to establish a framework that allows such programs to enable students to satisfy general education and diploma requirements.

C. Results of a New York State Online Learning Needs Assessment (June 2010)

NYSED and the BOCES, in partnership with the International Association for K-12 Online Learning (iNACOL), conducted a statewide online learning needs assessment in spring 2010. The target survey audience was district level leaders and high school based staff throughout New York State's public schools. Nearly 800 responses were recorded. According to the survey results, 59 percent of respondents stated that online learning options are currently used as a strategy for academic improvement initiatives. Thirty-six percent stated that online learning options are a *very* important part of their overall student academic success plan, with another 33 percent stating that online learning options are *moderately* important.

The four most common reasons stated for how online learning can be used for school improvement initiatives are to:

- Offer remediation or credit recovery courses.
- Provide expanded curriculum offerings to students.
- Address the needs of homebound instruction.
- Increase graduation rates.

Fifty percent of respondents stated that online learning is currently used in their district or schools for making up course credit, test preparation, first-time course credit, content remediation, or test preparation. Online courses for making up course credit were the most commonly identified type of online learning being used.

The reasons that students enroll in online courses are quite diverse:

- For content remediation.
- Because they were unsuccessful in traditional classroom environments.
- To take courses not offered at their local school.
- To earn college credit in Advanced Placement (AP®) courses.
- Due to course scheduling conflicts.

Conversely, there are many reasons why students have not participated in online learning to date, including:

- State regulations do not address online courses.
- Students are unaware that online learning options exist.
- A lack of funding to cover the cost of online learning.

The most common student groups identified as being in need of online learning options are:

- Students in need of remediation.
- Students who are not succeeding in a traditional classroom environment.
- Students who receive homebound instruction.
- Students who want to enroll in courses not offered at their local school.

The need for online high-stakes exam preparation was consistent across all categories, with online Regents exam preparation receiving the highest number of top votes, followed by Scholastic Aptitude Test (SAT®) exam preparation. The need for online end-of-course test preparation was also identified as a high need by a large number of the respondents. Eighty-seven percent of respondents stated the online test prep opportunities would benefit students.

Specific AP® courses were identified as needed for online course delivery, including AP® Biology, AP® Calculus, AP® Chemistry, AP® U.S. History, AP® Physics, and AP® Language and Composition.

Numerous core courses in each of the New York State Learning Standards were needed, including in Languages Other Than English (specifically in Mandarin Chinese and Spanish); Mathematics, Science, and Technology (Integrated Algebra, Algebra 2/Trigonometry, Living Environment, Web Design, Digital Media, and Introduction to Computer Engineering); Social Studies (Economics, U.S. History and Government); and Health.

Additional courses that were commonly identified as being in need for online delivery included literacy and writing, General Educational Development (GED) preparation, personal finance, sign language, and parenting skills.

Courses for online remediation and making up course credit most needed were Algebra I, science courses, and social studies courses.

Online tutoring options were received with great interest with tutoring in the subjects of math and science rating the highest.

The type of professional support needed to support online learning was varied. Approximately 45 percent of respondents stated that they would seek to train teachers to serve as online course facilitators. Approximately 33 percent stated that they would train teachers to develop their own online course. Seventy-four percent of respondents were interested in blended learning options.

D. Broadband Capacity and Access

Online and blended courses depend on a reliable and affordable infrastructure within school buildings and for students in the community and at home. In February 2010 and March 2010, the EMSC Committee discussed the status of broadband Internet access in school buildings statewide. A bandwidth of 100 megabits per second (100 mbps) is a recognized minimum standard by the Regional Information Centers (RICs) and the State Educational Technology Directors Association (SETDA). The RICs collected data on which school buildings meet this standard by region, along with reasons why a particular building does not meet the standard. Approximately 86 percent of school buildings at the time met this minimum standard. The remaining schools did not have this capacity primarily due to geographic location (e.g., mountainous or rural areas) and the expense of a large initial capital investment to build broadband infrastructure to the surrounding community. The costs to fully connect a school building

at 100 mbps can range from as little as a few hundreds dollars to almost \$5,000 per month, depending in part on location and current infrastructure.

During this time, the New York State Broadband Development and Deployment Council, created by Governor David A. Paterson under Executive Order 22 and first convened in December 2009, established a primary goal of providing strategic direction to ensure all New Yorkers have access to high-speed Internet networks and are able to participate fully in today's digital age. Council members include former Regent Joseph Bowman, and NYSED's Chief Information Officer and Assistant Commissioner for Libraries, who also co-chair a technical committee for Digital Literacy and Adoption to address affordability, computer ownership and adoption, digital literacy and training, and consumer education. The Committee identified three initiatives that would achieve its purpose: 1) Development and adoption of statewide Digital Literacy Standards, 2) Consumer education and outreach on the benefits of broadband access; and 3) development of regulatory or legislative proposals that foster greater access to broadband.

E. Standards for Online Courses

Internationally-recognized benchmarks and standards from iNACOL were used in the development of proposed required criteria (Attachment A) and proposed required components (Attachment B) for online and blended courses that can be used in New York State. According to their mission statement, iNACOL "is the leading international K-12 non-profit organization representing the interests of administrators, practitioners, businesses and students involved in online learning. iNACOL's mission is to increase access to educational opportunities and enhance learning by providing collegial expertise and leadership in K-12 online teaching and learning. iNACOL facilitates collaboration, advocacy and research to expand the availability and enhance the quality of K-12 online learning. iNACOL provides support services to new and existing online programs in an effort to promote and assist with accountability and quality implementation of online learning."

Updated in August 2010, iNACOL's *National Standards of Quality for Online Courses* are based on standards originally developed in 2006 by the Southern Regional Education Board (SREB). National standards were developed in the areas of:

- Content
- Instructional Design
- Student Assessment
- Technology
- Course Evaluation and Management
- 21st Century Skills

iNACOL (2009, pp. 18-19) recommends the following guidance for states in developing "next generation legislation" that supports online instruction and programs.

- 1. Define online schools and programs in a way that clarifies which are covered.
- 2. Provide adequate and sustainable funding that entails the following elements:

- a. Fund a state-led, supplemental program that will benefit from economies of scale in offering online courses to districts across the state.
- b. Fund full-time schools at the same operational cost level, not including capital costs, as other schools in the state.
- c. Allow students to choose an online school that meets their needs, and allow funding to follow the student.
- 3. Provide standards and monitoring expectations for online programs and/or program authorizers.
- 4. Create reporting requirements for online schools.
 - Curriculum and assessment
 - Supervising, evaluating, and training teachers
 - Attendance and activity tracking in a course
 - Communication and teacher response times
 - Student support
 - Awarding credit
 - Funding
 - Participation in state assessments
 - Accessibility and provision of special education services

F. NYSED Recommendations for Teaching and Learning Online

Before a school district or BOCES offers online and/or blended courses, NYSED would recommend that they take specific steps to ensure readiness in providing opportunities to offer online and/or blended courses. A school district or BOCES should demonstrate evidence of careful planning and research in preparing online and/or blended courses that allow students to satisfy general education and diploma requirements. Such evidence will include the ability of the school district or BOCES to:

- Form a district-level committee, including administrators, teachers, parents and other community stakeholders, to examine online learning policies and practices in a comprehensive manner. Be sure to also consider any access and equity issues involving technology hardware and software in your district.
- Ensure that courses adhere to standard principles of universal design and accessibility for all learners (see http://www.udlcenter.org/), including (but not limited to) students with disabilities, English Language Learners, hospitalized students, incarcerated youth, homebound students, etc.
- Assess student needs and interests for online and blended course opportunities. Take into consideration the social, emotional, and academic needs, benefits, and consequences associated with the online experiences.
- Assess online program availability as compared to student needs.

- Create and adopt local district policy for online and blended courses, including criteria for determining online course equivalency.
- Provide initial and sustained professional development opportunities through the district's Professional Development Plan in the pedagogy of digital learning and online study so that teachers may more effectively use online tools for instruction.
- Develop a district process to evaluate online content available from vendors as it relates to New York State Learning Standards, and district curriculum goals and outcomes.
- Use common evaluation standards, such as those available from the International Association of K-12 Online Learning (iNACOL) and the International Society for Technology in Education (ISTE).

These standards are available at:

iNACOL: <u>http://www.inacol.org/</u> ISTE: <u>http://www.iste.org/AM/Template.cfm?Section=NETS</u>

- Communicate with parents on measures and standards of online learning and its equivalence to classroom-based instruction.
- Evaluate district-created and vendor-purchased online content and online courses on an annual basis.

Recommendation

It is recommended that the Board of Regents direct staff to develop regulations for awarding credit for student completion of online and blended courses.

Timetable for Implementation

A Notice of Proposed Rule Making would be published in the State Register no later than March 2, 2011. A sample of the proposed rule is attached (Attachment C). Department staff would present the draft regulations to the Board of Regents at their March 2011 meeting.

It is anticipated that the proposed amendment will be submitted to the Board of Regents for approval in May 2011, with an effective date of June 8, 2011, and an implementation date of July 1, 2011.

Attachment A: NYSED Proposed Required Criteria for Online and Blended Courses Attachment B: NYSED Proposed Required Components for Online and Blended Courses Attachment C: Proposed addition of section 100.5(d)(10) of the Regulations of the

Commissioner of Education, relating to Awarding Units of Credit for Online and Blended Courses

NYSED Proposed Required Criteria for Online and Blended Courses

- 1. <u>Completeness</u>: the course includes the specific content to be taught, a scope and sequence of units, formative and summative assessment tools and techniques, and high quality, detailed instructional strategies.
- 2. <u>Delivery</u>: the course is delivered online or through other electronic means, and has the potential for ease of adoption by a local education agency (LEA).
- 3. <u>Support</u>: the course includes regular and substantive interaction between students and the instructor(s), which shall include New York State certified teacher(s) certified in the course's subject area.
- 4. <u>Standards</u>: the course is aligned with the relevant New York State Learning Standards and curriculum frameworks at the commencement level.
- 5. <u>Rigor</u>: the course is academically rigorous, is comparable to or exceeds coursework offered in a traditional classroom setting, and provides a demonstrated record of or potential for effectiveness in improving student academic achievement.
- <u>Accessibility</u>: the course adheres to standard principles of universal design and accessibility for all learners, including (but not limited to) students with disabilities, English Language Learners, hospitalized students, incarcerated youth, home bound students, etc.
- 7. <u>Cost</u>: the course has practical costs for adoption by LEAs, and its use can reasonably be sustained over time.
- 8. <u>Time</u>: the course meets the equivalent of 180 minutes of instruction per week throughout the school year for a full credit (a minimum of 108 hours). For more information, please see Part 100.1(a) Commissioner's Regulations, available at <u>http://www.emsc.nysed.gov/part100/pages/1001.html</u>.
- 9. <u>Assessment</u>: the course results in measurable outcomes of student achievement which documents each student's course progression and completion.
- 10. <u>Professional Development Plan:</u> the course submission includes provisions for substantive and ongoing professional development for teachers. Courses must include instruction and continuous support on how to teach and implement a course in an online environment prior to starting the course.

NYSED Proposed Required Components for Online and Blended Courses

Required Course Components

I. Introduction

- A. Course **title** and **abstract** addressing students served, grade levels, content, prerequisites, completion time, etc.
- B. **Needs/placement assessment** that describes how each student's knowledge nd skill will be determined prior to course admission.

II. Course Description

- A. Scope and sequence of units with time allocations
- B. **Crosswalk** of major learning outcomes and relationships to New York State learning standards and performance indicators.
- C. Main **instructional strategies** with associated units and major learner outcomes addressed.
- D. **Unique** instructional requirements for example, science laboratories, group/team tasks, field trips, etc.

III. Assessments/Evaluation

- A. **Formative** assessments frequency and use in guiding instruction. At least quarterly assessments must be provided and documented.
- B. **Summative** assessments final examination for course and steps for assuring students are prepared to take the Regents Examination, or an approved alternative. A list of *Department-Approved Alternative Examinations Acceptable for Meeting Requirements for a Local or Regents Diploma* can be found at http://www.p12.nysed.gov/osa/hsgen/archive/list.pdf.
- C. Other evaluative tools and techniques, such as projects, papers, presentations.
- D. Student **identification** and **assurance** process procedures for assuring each enrolled student is completing all required course components and assessments.

IV. Course Delivery and Revision

- A. Components for addressing **universal design** and **accessibility** for students with disabilities, English language learners, incarcerated youth, homebound children.
- B. Provisions for initial and ongoing **professional development** for local teachers.
- C. **Cost** to local school districts.
- D. Process for critical review and improvement.

In addition, the following assurances are made about the course components:

- The unit of analysis would be one (1) unit of credit toward the high school diploma, with course completion preparing a student to take and pass the corresponding Regents examination (or an approved alternative) where appropriate.
- The principles of universal design and accessibility are met for (but not limited to) students with disabilities, English language learners, incarcerated youth, hospitalized students, home bound students, etc.
- There is an optional provision to offer courses in the languages in which Regents examinations may be taken (Chinese, English, Haitian Creole, Korean, Russian, and Spanish).
- Science courses address how students will fulfill the 1200 minutes of hands-on (not simulated) laboratory experience with satisfactory, documented laboratory reports. Course providers can also offer virtual laboratory experiences.

Proposed addition of section 100.5(d)(10) of the Regulations of the Commissioner of Education, relating to Awarding Units of Credit for Online and Blended Courses

AMENDMENT TO THE REGULATIONS OF THE COMMISSIONER OF EDUCATION

Pursuant to sections 101, 207, 208, 209, 305, 308, 309 and 3204 of the Education Law.

Paragraph (10) of subdivision (d) of section 100.5 of the Regulations of the Commissioner of Education is added, effective June 8, 2011, as follows:

(10) Awarding Credit for Online and Blended Courses. Students enrolled in a school district, a charter school or a registered nonpublic school may earn units of credit towards a Regents diploma through online and blended course study, pursuant to the following:

(i) To receive credit, the student shall successfully complete a unit of study and demonstrate mastery of the learning outcomes for the subject, including passing the Regents examination in the subject or other assessment required for graduation, if applicable.

(ii) The school district, charter school or registered nonpublic school shall ensure that:

(a) courses are aligned with the applicable New York State Learning Standards for the subject area;

(b) courses provide for documentation of student mastery of the learning outcomes for such subjects, including passing the Regents examination in the subject or other assessment required for graduation, if applicable;

(c) instruction is delivered by and/or under the direction/ supervision of: (1) a school district teacher who holds a New York State teaching certificate in the

subject area ("certified teacher"); or (2) a certified teacher from a BOCES that contracts with the school district to provide instruction in the subject area pursuant to Education Law §1950; or (3) a certified teacher from a school district who provides instruction under a shared service agreement; or (4) a teacher of the subject area in a registered nonpublic school or charter school;

(d) includes regular and substantive interaction between the student and the teacher providing direction and/or supervision pursuant to clause (c) of subparagraph(ii) of this paragraph; and

(e) instruction satisfies the unit of study and unit of credit requirements in sections 100.1(a) and (b) of the Regulations of the Commissioner of Education.