



## **Placing Career Ready on an Equal Footing with College Ready— A Pathways Concentration Model for Graduation**

**A Proposal by  
New York State Association for Career and Technical Education**

**January 2018**

The New York State Association for Career and Technical Education (NYSACTE) is a membership organization representing over 10,000 CTE educators who provide student programs in Family and Consumer Sciences, Technology, Health Sciences, Agriculture, Business & Marketing and Trade & Technical Education. NYSACTE presents this position paper in support of changes to the New York State middle level programming and graduation requirements. These changes will provide all students with the opportunity to explore career pathways based on enhanced Middle Level Units of Study, a 15-unit Early High School Foundation and a 7-unit Commencement Concentration Pathway.

### **Proposal for a 15/7 Model**

The following proposal is offered for redesign of the high school experience in New York. NYSACTE'S suggested Early High School Foundation and Commencement Concentration Pathway is informally known as the 15/7 Model. NYSACTE believes the suggested changes will increase student engagement, involve students more deeply in career and college planning and result in increased numbers of students graduating from high school.

NYSACTE has monitored continuing discussions by members of the Legislature and the business community and actions by the Board of Regents focused on the career-ready side of the Career and College Readiness mantra. These deliberations have opened the deeper question about the role of high school in preparation for careers and how to address several attendant issues in school performance and economic development. In 2014, the Board of Regents established five assessment pathways to graduation: Humanities, STEM, CTE, LOTE and Arts, with the 4+1 model of graduation assessments. This allowed for the substitutions of alternative assessments, such as industry-based assessments for selected Regents examinations. Intervening actions have included expanding the number of approved alternative assessments, creation of the CDOS Pathway and assessments, revision of certification requirements for CTE instructors and recrafting the middle level CTE requirements to allow for expanded exposure of students to various careers.

While these actions are significant, NYSACTE believes they are insufficient to fully prepare students to be career and college ready. A program of study is required to assure success in passing a pathway alternative assessment. If there is no change in the required coursework and other experiences, high schools will continue to offer the same courses and sequences. Without a focus on student engagement and choice, it will be a continuing struggle for all students to reach commencement levels.

Completion of each pathway should require a rigorous, coherent and sequential program of study to develop academic, technical and career/life competencies and the ability to challenge the assessments successfully. Creating a concept of “pathways” introduces the notion that all students do not need identical learning experiences to demonstrate career and college readiness. Personalization of learning can enhance student and parent engagement with choices that are more relevant to student interests and talents. We must provide students with additional choice in courses and experiences as they pursue high school completion. New York State needs a serious redesign of high school to raise student engagement and graduation rates. Taking a broader, more comprehensive view to add personalization to the high school diploma requirements will demonstrate visionary leadership and be more effective than tinkering around the margins of antiquated requirements.

NYSACTE believes that *all students* should complete a base level of similar academic and career coursework that includes experiences with the Humanities, CTE, STEM, the Arts, LOTE, work-based learning and personal career and financial management. In addition, all students should be provided with the choice of a pathway concentration and pursue differing coursework and experiences to complete high school consistent with that choice.

The current CTE Approved Program process can inform this discussion and serve as a model for the development of the other four pathways. The CTE Approved Program process stimulates thoughtful reflection among multiple subject areas; engages the local community, business and higher education; and provides a commitment to accountability. This is done without establishing rigid state mandates, which are inappropriate for some school communities.

#### **DEFINITION OF CAREER AND COLLEGE READINESS**

Career and College Readiness is a set of student attributes that are not defined by but enabled through a variety of strongly supported educational programs and structures which include Career and Technical Education. The member organizations of the New York State Association for Career and Technical Education (NYSACTE) embrace the following vision for **all** students as a demonstration that they are Career and College ready for our high innovation economy.

#### **VISION STATEMENT**

*All students upon graduation from high school will have the academic ability and social emotional skills to persevere, navigate and succeed in continuing education including corporate training, the military, apprenticeships, certificate programs and credit bearing courses and programs and possess:*

*Earning power in the form of an industry approved entry-level certificate,*

*Career Ready Practices embodied in an employability profile,*

*A defined Career Pathway Plan, and*

*Earned advanced standing and/or dual credit in a postsecondary institution*

## What Are Pathways?

NYSACTE's view of pathways is grounded in its Definition of Career and College Readiness and its Vision Statement for student achievements upon graduation.

NYSACTE believes that a career pathway is a rigorous, coherent, sequential set of required and elective courses and work-based learning experiences provided to all students. Secondary school career pathways are supported by career exploration in grades K-6, assessing career interests at the middle level and continued development of foundational and commencement level academic skills, life/career abilities and technical skills in grades 9-12. A pathway structure would allow students to begin to acquire a set of stackable credentials, certificates, diplomas and degrees that can be built upon throughout their work life.

From NYSACTE's perspective, career pathways are not a set of courses or experiences designed to prepare students for a specific job, although such courses and programs of study are a tool in assisting students to become career and college ready. Rather, pathways are broad themes in the Humanities, STEM, CTE, Arts and LOTE within which programs of study may be pursued.<sup>1</sup> This is consistent with the Regents 4+1 assessment pathways.

Pathways should be framed in three ways:

### 1. Assumptions

- Pathways are for all students and begin with development of career awareness in K-6.
- Student choice of a pathway, programs of study, courses and other learning experiences to meet graduation requirements are critical to student engagement and success.
- Pathways must have a rigorous academic, technical and life/career abilities core as measured by student success on Regents examinations, approved pathway/technical assessments and locally designed employability measures.
- Pathways provide coherent sequential programs of study.
- Pathways provide the support system necessary for English language learners and students with disabilities to demonstrate career and college readiness.

### 2. Implications

- Pathway courses may be provided in a discrete, integrated or specialized manner.
- Pathways provide the opportunity for all students to master the CDOS Standards and achievement of the CDOS credential or pathway.
- Teachers in each pathway are career sensitive, having visited workplaces or had industry experience.

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<sup>1</sup> Within each pathway, programs of study can be created, for example: CTE-Automotive Technologies, Arts-Art History, STEM-Biomedical Research, Humanities-Psychology, and LOTE-Interpretation. These programs of study provide significant choice for districts in their development.

- ❑ The programs of study within pathways are aligned with local, state and national employment trends and needs, academic and industry standards and postsecondary educational opportunities provided by colleges, the military, apprenticeship programs and employers.

### **3. Outcomes**

- ❑ Students leave high school with a diploma, an industry approved entry-level certificate or passing the pathway assessment and an employability portfolio and Career Plan/Portfolio.
- ❑ School and district report cards reflect the participation levels of students in pathways and programs of study, assessment results by program of study, Regents and the pathway assessments and/or the credential or diplomas awarded:
  - ✓ CDOS credential
  - ✓ Local diploma or local diploma with a pathway endorsement
  - ✓ Regents Diploma or Regents Diploma with a technical endorsement
  - ✓ Regents Diploma with Advanced Designation and a technical endorsement

### **Proposal for a 7-12 Career Pathway Model**

Three key points in a student's secondary school experience are entry into middle school, entrance into grade 9 and entry into grades 11 and 12. NYSACTE recognizes the social, developmental and diverse needs of students that must be met at each point. The 7-12 Career Pathway Model proposed includes Middle Level Units of Study (7-8), Early High School Foundation (9-11) and Commencement Concentration Pathway (11-12). There should be an opportunity for acceleration at each level, including acquiring postsecondary dual credits in grades 9-12. A detailing of the units of study and course requirements, which continue the requirement of 22 credits for graduation, follows. NYSACTE's long-term goal is to make the Regents Diploma with Advanced Designation and a pathway technical endorsement the gold standard diploma.

NYSACTE also recognizes the importance of the CDOS credential and pathway. These have created alternative paths to graduation and school completion for students with disabilities, English language learners and others requiring extra supports for success. All students should have the assistance necessary to pursue graduation within the 15/7 model and have access to the CDOS pathway and credential as an alternative to demonstrate commencement level skills and abilities.

**Middle Level Units of Study** focuses on development of academic skills consistent with state standards; exposure to the arts, languages, careers, practical experiences with tools and technology (through CTE and other coursework); library and information skills; exposure to places of work, health, physical education and a career path/graduation plan. This is a building-block phase to prepare students to focus on a career path.

<b>Middle Level (7-8)<sup>2</sup> Units of Study Career and College Readiness for All Students</b>			
<b>Element</b>	<b>Current</b>	<b>Proposed</b>	<b>Comments</b>
ELA	2 units	Same	Curriculum crosswalked to CTE offerings
Mathematics	2 units	Same	Curriculum crosswalked to CTE offerings
Science	2 units	Same	Curriculum crosswalked to CTE offerings
Social Studies	2 units	Same	Curriculum crosswalked to CTE offerings
Career & Technical Education Technology Education	1 unit Tech	2 units of CTE <sup>3</sup>	<ul style="list-style-type: none"> <li>• One unit of Technology Education including the implications of technology and engineering on the human made world and career choices. Career guidance by a school counselor in conjunction with the CTE teacher</li> <li>• One unit of Home and Career Skills inclusive of 10 weeks of exploration of business, agriculture, health careers and the trades<sup>4</sup> and career guidance by a school counselor in conjunction with the CTE teacher</li> </ul>
Family & Consumer Sciences	3/4 unit FACS		
<b>Or</b>			
The new middle level CTE only, foundational HS or focused HS delivery models	1 and 3/4 units		<ul style="list-style-type: none"> <li>• 2 units of CTE themed modules, or</li> <li>• 1 1/2 units of CTE themed modules and ½ credit of CFM, or</li> <li>• 1 unit of themed modules and 1 credit of HS CTE</li> <li>• Modules to include exploration of all five CTE career areas and the implications of technology and engineering on the human made world and career choices</li> </ul>
Physical Education	Every other day	Same	Include ergonomics of work
Arts			
• Music	½ Unit	Same	Include exploration of music careers
• Visual Arts	½ Unit	Same	Include exploration of visual art careers
Health Education	½ Unit	Same	Include information on workplace safety and health careers
LOTE	As per 100.2(d)	Same	Include exploration of career opportunities for bilingual speakers
Library and Information Skills	1 period per week	Embed in ELA	Include career search technologies
Career Path/ Graduation Plan	Required	Required	Amended at the end of grades 7 and 8
Visits to workplaces or other WBL activities	NA	Required	Under guidance of CTE teacher or school counselor or others with the WBL extension to their certificate. Students should journal their visits or experiences

<sup>2</sup> Current regulations permit school districts to meet the instructional requirements for Middle Level CTE in grades 5-8. This flexibility would remain based upon middle level grade configurations and district preferences.

<sup>3</sup> Co-planned and/or co-taught with CTE and core academic teachers enriched by ¼ unit

<sup>4</sup> The exposure should be broad; based on local resources, employment needs and community interests; and include a student project or product and participation in a team project.

**Early High School Foundation** places emphasis on the academic skills needed to prepare for and meet college readiness levels on Regents examinations; continued exploration and development of skills in the Humanities, Arts, STEM, LOTE, and CTE, career and financial management, health and physical education; continued exposure to places of work; and review and revision of the career path/graduation plan. (15 credits)

<b>Early High School Foundation Career and College Readiness for All Students (15 Credits)</b>				
<b>Element</b>	<b>Current</b>	<b>Proposed</b>	<b>Assessment</b>	<b>Comments</b>
ELA	3 credits	Same	ELA Regents	Passing ELA Regents examination
Mathematics	2 credits	Same	As required to meet 4+1	The option for an integrated or specialized course or a course based in engineering concepts
Science	2 credits	Same	As required to meet 4+1	The option for an integrated or specialized course or a course based in engineering concepts
Social Studies	2 credits	Same	As required to meet 4+1	The option for an integrated or specialized course
CTE	0 credit	1 credit	Local Assessment	Introductory course as part of a coherent sequence in a CTE program of study or to provide a series of exploratory units which may lead to a CTE program of study and development of CDOS Foundation skills
Arts	1 credit	1 credit	Local Assessment	Introductory course as part of a coherent sequence in an Arts program of study or an exploratory course which may lead to an Arts course of study
LOTE	1 credit	1 credit	Local Assessment	Introductory course as part of a coherent sequence in a LOTE program of study or exploratory course (multiple languages and cultures) which may lead to a LOTE course of study
Physical Education	2 credits	2 credits	Local Assessment	Inclusive of ergonomics of work
Health	½ credit	½ credit	Local Assessment	Inclusive of mental and physical health related to work and health careers
Career & Financial Management (CFM)	0	½ credit	Local Assessment	To be taught by a CTE professional with a documented and/or tested skill set
Career Path/ Graduation Plan	required	Required		Amended after grades 9 and 10
Visitations to workplaces or other related work-based learning		Required		Under guidance of a work-based learning coordinator, CTE teacher or school counselor, students journal the visit(s) or experiences

**Commencement Concentration Pathways** focuses on the academic, technical and career/life skills necessary to pursue a career interest, providing choice in meeting core requirements and pathway-related coursework to form a concentration, opportunity to participate in advanced studies and earn advanced standing and/or dual credit, participation in work-based learning related to the pathway concentration, access to a pathway assessment and development of an employability profile and a postsecondary career plan. (7 credits)

<b>Commencement Concentration Pathways<sup>5</sup></b> <b>Career and College Readiness for All Students (7 Credits)</b>					
<b>Element</b>	<b>Humanities</b>	<b>CTE<sup>6</sup></b>	<b>STEM</b>	<b>Arts</b>	<b>LOTE</b>
Social Studies: discrete, integrated or specialized	2			1	1
ELA: discrete, integrated or specialized	1		1	1	1
Science: discrete, integrated or specialized	1	1		1	1
Math: discrete, integrated or specialized	1	1		1	1
Technical Writing, Speaking and Listening	Option for 4 <sup>th</sup> ELA	1	Option for 4 <sup>th</sup> ELA	Option for 4 <sup>th</sup> ELA	Option for 4 <sup>th</sup> ELA
Regents/AP/IB or college level math			2		
Regents/AP/IB or college level science			2		
<b>Concentration:</b> At least one career or college ready course: AP, IB, CTE or college level	2	4	2	3	3
<b>Work-Based Learning:</b> Integrated into the concentration or stand alone; visitations, presentations, shadowing, internship or paid work in a workplace germane to the pathway	Required	Required	Required	Required	Required
<b>Employability Profile:</b> inclusive of academic and technical skills and life/career abilities	Required	Required	Required	Required	Required
<b>Graduation, Postsecondary and Career Plan:</b> At grades 11 and 12 with a career portfolio	Required	Required	Required	Required	Required
<b>Pathway Assessment:</b> All students completing a program of study within a pathway will have access to the pathway assessment and challenge it	Required	Required	Required	Required	Required

<sup>5</sup> Districts must offer a minimum of two pathways inclusive of CTE.

<sup>6</sup> CTE and STEM pathways require a minimum of one course in or an integrated course inclusive of engineering principles, which may be met by including this course in the Early High School Foundation.

**Commencement Concentration Pathways — Required Examinations**  
**College and Career Readiness for All Students**

<b>Element</b>	<b>Humanities</b>	<b>CTE</b>	<b>STEM</b>	<b>Arts</b>	<b>LOTE</b>
Required Commencement Level Regents Examination <sup>7</sup>  <b>AND</b>  One additional Pathway Assessment to fulfill the +1 Pathway Exam Requirement	One Regents exam in each of the following: ELA, Math, Social Studies, and Science  <b>AND</b>  One additional Social Studies or ELA Regents Exam	One Regents exam in each of the following: ELA, Math, Social Studies, and Science  <b>AND</b>  One additional SED approved 3-part CTE technical assessment following successful completion of an approved CTE program	One Regents exam in each of the following: ELA, Math, Social Studies, and Science  <b>AND</b>  One additional Math or Science Regents exam	One Regents exam in each of the following: ELA, Math, Social Studies, and Science  <b>AND</b>  One additional SED approved Arts examination	One Regents exam in each of the following: ELA, Math, Social Studies, and Science  <b>AND</b>  One additional SED approved LOTE Examination.

**Recommendations for Placing Career Ready on an Equal Footing with College Ready**

1. Define *College and Career Ready*.
2. Adopt the NYSACTE proposal for Middle Level Units of Study and the Early High School Foundation and Commencement Concentration Pathways (15/7).
3. Affirm the value of converging career and academic content through CTE program expansion and enhanced curriculum resources.
4. Strengthen middle level and early high school CTE.
5. Enforce/enact policies that assist all students to develop knowledge of career options and to have a career plan with flexible career goals.

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<sup>7</sup> This is the minimum required for a Regents Diploma. High Schools must offer the opportunity to earn a Regents Diploma with advanced designation by providing instruction directly, through BOCES, in cooperation with another school/district, online or through other methods permitted by Commissioners Regulations.

6. Continue to pursue changes in the assessment system which will require students to apply concepts and understandings to real-world problems and provide more access to industry-based assessments.
7. Negotiate universal articulation and dual credit agreements with SUNY and CUNY.
8. Continue to adjust teacher certification standards to reflect a move to integrated instructional practices and emerging technologies and careers.
9. Work aggressively to secure business support for high quality pathways for all students.
10. Include data on participation in pathways, success on pathway assessments and numbers of students earning industry-based credentials, high school credentials, diplomas and diplomas with endorsements on the school report cards.
11. Continue to be a strong advocate for additional funding for CTE programs of study.

These recommendations are fully described in the document *Recommendations for Placing Career Ready on an Equal Footing with College Ready*, January 2018.