CONNECTICUT STATE BOARD OF EDUCATION
Hartford

TO: State Board of Education

FROM: Mark K. McQuillan, Commissioner of Education

SUBJECT: Recommendation of Excellence Scores for Subject Area Assessments in Designated Shortage Areas

PURPOSE OF REPORT

In response to Section 10-145f of the Connecticut General Statutes, as amended by Public Act 09-01, Section 10, this report recommends excellence scores for those subject area assessments that are currently required for certification in designated subject shortage areas.

Shortage areas are annually reviewed and designated by the Commissioner of Education and approved by the State Board in accordance with Section 10-8b of the Connecticut General Statutes. The shortage areas are determined based on a fall hiring survey of school districts and may change slightly year to year based on school hiring and vacancy data.

Public Act 09-01, Section 10, states:

> *On and after July 1, 2010, the State Board of Education shall allow an applicant for certification to teach in a subject shortage area pursuant to section 10-8b of the general statutes, or a certified employee seeking to teach in such a subject shortage area to substitute achievement of an excellent score, as determined by the State Board of Education, on any appropriate State Board of Education approved subject area assessment for the subject area requirements for certification pursuant to section 10-145f of the general statutes, as amended by this act.*

CONTEXT/BACKGROUND INFORMATION

Commencing July 1, 2010, with the Board's adoption of the recommendations in this report, candidates for certification in designated shortage areas will be allowed to substitute the achievement of an excellence score on any State Board of Education approved subject area assessment appropriate to the certification endorsement sought, in lieu of a subject area major or subject area coursework required in statute, or in the Regulations of State Agencies Concerning State Educator Certificates, Permits and Authorizations. It should be noted that the excellence scores may not be substituted for pedagogical coursework required in regulations.

In addition, an excellence score may also be used by the Department in lieu of content area coursework required for issuing a cross-endorsement.

Further, Public Act 09-01, Section 2, provides educator preparation institutions and alternate route programs the option to use an excellence score in lieu of a subject area major or minimum subject area coursework requirement; however, use of this option is at the discretion of each preparation institution or program.

Analysis of Praxis Test Data

To assist the Department in establishing excellence scores for Praxis II tests, a data analysis was conducted by Educational Testing Service (ETS) for Praxis II tests in subject areas that have historically been shortage areas. Praxis test results were analyzed for the identified subject areas and for the following three comparison groups:

Comparison Group #1 (Population size = 795)

Examinees who passed the required Praxis II exam(s) and were later employed in a Connecticut school between 2004 and 2008;

Comparison Group #2 (Population size = 1,950)

Examinees who were enrolled in a teacher preparation program between 2001-2008 at a Connecticut institution, but not subsequently employed in Connecticut; and

Comparison Group #3 (Population size = 93,969)

Examinees from all other states tested between 2001-2008 on the same Praxis II tests adopted by Connecticut.

An analysis was first performed comparing Groups 1, 2 and 3 to determine the percentage of examinees who met or exceeded the Praxis II test minimum passing standards in the shortage areas identified. The data indicated that across all the subject areas except Chemistry (Content Essays test #0242), there was a higher percentage of Group 1 teachers – those who were hired to teach in a Connecticut school – who passed the tests than in the other two comparison groups. Overall, Group 1 test score averages were also higher.

Because Connecticut teachers hired by school districts had achieved scores that were typically one standard deviation above the minimum passing standard, the Department proposes setting the requirement for an excellence score that is two standard deviations above the current minimum passing standard. This calculation also aligns with ETS's standard for designation of "Recognition of Excellence" scores used nationally in six subject areas addressed in this report.

See Attachment A for detailed data regarding this analysis.

ACTFL Tests

For certification in any world language area, the Board adopted subject area assessments administered by the American Council on the Teaching of Foreign Languages (ACTFL) in June 2002 and set a minimum passing standard of *Intermediate-High*. The possible levels and sub-levels of performance on any ACTFL tests are:

- Levels: Superior, Advanced, Intermediate and Novice; and
- Sub-levels: High, Mid and Low.

On March 28, 2000, the Department instituted a policy accepting the ACTFL passing score at an *Advanced-Mid* level to ensure world language fluency, particularly for native speakers, and in lieu of 24 semester hours of credit in the world language.

Therefore, at this time, we are recommending continuation of such policy for acceptance of an excellence score on all applicable ACTFL tests at the *Advanced-Mid* level of performance.

Special Note and Caveat

Connecticut is one of 39 states that require a major be attained in order to become certified to teach a secondary subject, and one of 21 states that require a major to become certified in elementary education. (*Key State Education Policies on PK-12 Education*, CCSSO, 2004)

While the Department supports the goal of providing flexibility to prospective teachers in designated shortage areas who may not have a full subject area major or coursework, we caution that the Praxis II exams are not designed to test the full breadth or depth of content that a teacher will be expected to teach. Further, we do not suggest that achieving the recommended excellence score is the *equivalent* to a subject area major and coursework which is a core component of the bachelor's degree.

Additionally, in a policy paper entitled "Proper use of the Praxis Series and Related Assessments," (http://www.ets.org/Media/Tests/PRAXIS/pdf/guidelines.pdf), ETS specifically states that "test scores may not be used for licensure by itself; assessment scores are used to inform licensure decisions."

RECOMMENDATIONS

Beginning July 1, 2010, and per Public Act 09-01, Section 10, I recommend that the State Board approve the excellence scores in Attachment B for those subject area tests that have historically been designated subject shortage areas by the State Board of Education. Note that in some certification areas passing more than one examination is required.

Due to fluctuations in hiring and vacancy data, shortage areas may be added or removed from the list. For example, for the 2009-10 school year, science is designated as a shortage area; however,

as approved by the Board in April 2010, designated shortage areas for 2010-11 do not include science.

Also note that if additional shortage areas are identified over time or if different tests are required, additional excellence scores would be determined using the same formula as applied to the subject areas assessments outlined in this report.

Therefore, in Attachment B, we are recommending to the Board a list of subject area assessment excellence scores based on those teaching areas which have typically been on the list of designated shortage areas. In alignment with the statute, the Department will allow candidates to use excellence scores in lieu of a subject area major or coursework only if the area is designated as a shortage area under Section 10-8b for any given year.

FOLLOW-UP ACTIVITIES PLANNED

All higher education institutions and other teacher preparation programs, including alternative route programs, will be notified following Board approval. The Department will also notify institutions of any future updates in excellence scores should any new subject area assessments be adopted hereinafter.

Prepared by: Gail Tomala

Gail Tomala, Ph.D., Education Consultant
Bureau of Educator Standards and Certification

Georgette Nemr

Georgette Nemr, Education Consultant
Bureau of Educator Standards and Certification

Reviewed by: Nancy L. Pugliese

Nancy L. Pugliese, J.D., Chief
Bureau of Educator Standards and Certification

Approved by: Marion H. Martinez

Marion H. Martinez, Ed.D., Associate Commissioner
Division of Teaching, Learning and Instructional Leadership

June 2, 2010

Praxis Data Analysis and Proposed Excellence Score Calculations

	% Achieving Current Passing Standard (PS)			Current Connecticut Praxis II Passing Standard	Proposed Excellence Score	% Group 1 Passing at the Excellence Score	
	Column A	**Column B**	**Column C**	**Column D**	**Column E**	**Column F**	**Column G**
Test Title	Group 1 CT Teachers Total N=795	Group 2 CT Candidates Total N=1950	Group 3 National Examinees Total N=93969	**PS**	**PS + 2 Standard Deviations***		**ETS ROE Score****
English Language, Literature & Composition: Content Knowledge (0041)	93.5	80.8	62.4	172	190	24	192
English Language, Literature & Composition: Essays (0042)	60.9	49.5	35.0	160	175	4	
Middle School English Language Arts (0049)	97.0	89.3	72.5	164	183	32	
Mathematics: Content Knowledge (0061)	91.4	81.2	67.0	137	165	14	165
Middle School Mathematics (0069)	96.1	75.8	59.4	158	182	23	
Music: Concepts & Processes (0111)	85.3	78.7	64.9	150	173	14	
Music: Content Knowledge (0113)	95.6	94.9	85.4	153	175	30	
Biology: Content Knowledge (0235)	94.1	85.9	72.7	152	177	21	179
Chemistry: Content Essays (0242)	73.6	77.3	74.7	140	170	8	
Chemistry: Content Knowledge (0245)	90.2	82.2	75.9	151	182	15	184
Physics: Content Essays (0262)	92.0	92.6	88.4	135	168	33	
Physics: Content Knowledge (0265)	88.2	85.3	70.7	141	176	20	177
General Science: Content Essays (0433)	58.6	52.9	34.2	145	175	5	
General Science: Content Knowledge (0435)	89.2	83.1	69.1	157	185	21	185
Middle School Science (0439)	91.6	69.7	39.6	162	183	15	
Earth and Space Sciences: Content Knowledge (0571)	93.9	84.0	67.5	157	184	21	

* SD – Standard deviations were calculated based on the Group 1 test score averages.
** Recognition of excellence scores as determined for national use by ETS.

Report Date 4-20-2010

Subject Area Assessment Excellence Scores
June 2, 2010

Subject Area Assessments Adopted by the State Board of Education	Minimum Passing Score	Proposed Excellence Score
ENGLISH		
Praxis II English Language, Literature and Composition:		
- Content Knowledge (#10041)	172	190
- Essays (#20042)	160	175
Praxis II Middle School English & Language Arts (#10049)	164	183
MATHEMATICS		
Praxis II Mathematics Content Knowledge (#10061)	137	165
Praxis II Middle School Mathematics (#20069)	158	182
MUSIC		
Praxis II Music: Content Knowledge (#10113)	153	175
Praxis II Music: Concepts & Processes (#30111)	150	173
SCIENCE		
Praxis II Biology: Content Knowledge (#20235)	152	177
Praxis II Chemistry: Content Knowledge (#20245)	151	182
Praxis II Chemistry: Content Essays (#30242)	140	170
Praxis II Earth Science: Content Knowledge (#20571)	157	184
Praxis II General Science: Content Knowledge (#10435)	157	185
Praxis II General Science: Content Essays (#30433)	145	175
Praxis II Physics: Content Knowledge (#10265)	141	176
Praxis II Physics: Content Essays (#30262)	135	168
Praxis II Middle School Science (#10439)	162	183
WORLD LANGUAGES		
ACTFL Oral Proficiency Interview (OPI)	Intermediate High	Advanced-Mid
ACTFL Writing Proficiency Test (WPT)	Intermediate High	Advanced-Mid