Appendix B

Pennsylvania’s Diagnostic Assessment Tool

A. Assessment Specifications

1. The diagnostic assessment tool will be used in grades 6 and up as both (a) a diagnosis of prerequisite skills for each GCA and (b) a monitoring tool of achievement for students currently enrolled in a GCA content course. The diagnostic assessment tool will consist of an in-depth item bank and the assessment system for constructing and administering assessments generated from the item bank. There will be an item bank for the following GCA content areas Language Arts, Mathematics, Science and Social Studies that will provide feedback to students and teachers regarding the achievement of prerequisite skills for the GCAs: Algebra I, Algebra II, Geometry, Biology, Chemistry, Literature, U.S. History, World History, and Civics & Government in grades 6-12. PDE expects the Offeror to develop and make available to teachers electronically sample prompts and rubrics designed to enhance student’s English Composition performance as part of the response to this section. Teachers will score these student responses, but they will not be reported or collected.

2. The diagnostic assessments are intended to be easily administered online and provide immediate feedback of students’ strengths and weaknesses. They will be modular in format, similar to the GCAs. PDE will consider a computer-adaptive test approach in order to assess the students’ strengths and weaknesses within each module. Offerors are invited to propose a computer-adaptive solution in addition to one that does not incorporate a computer adaptive testing approach.

3. The diagnostics assessment tool is intended to be used throughout the school year.

B. Assessment Content (standards and competencies)

1. The assessment content of the diagnostic assessment tool will mirror the assessment content of the GCAs. However, in addition to the GCA content, the diagnostic assessment tool will cover prerequisite skills needed for success in each GCA content area. The items must be aligned to the PA Standards/Anchors/Competencies.

Revised 8-20-08
C. Timeline for GCA Diagnostic Development

1. All work, including trainings; for full diagnostic assessment tool development must be performed so full implementation would begin in September 2009.

D. Item Development

1. For each content area, the contractor will provide sufficient items according to assessment modules and/or other item sets to produce multiple assessments each year. Offerors shall specify the total number of items to be provided by content area.

2. Only multiple-choice items will be developed and included in the diagnostic assessment tool.

3. All items are to be written according to Webb’s Depth of Knowledge levels 1, 2 and 3.

4. Universal Design principles will be followed in the development of all of the above items.

5. All multiple choice items will have four options with one correct answer. “All of the above” and “None of the above” are not acceptable options.

6. Test items must be reviewed for content alignment, rigor level alignment, technical design, and universal design. Appropriate field test or other item data must be provided to PDE for review.

E. Assessment Construction

1. All Diagnostic assessments will be online. The Offeror will provide methodologies and algorithms proposed for this system. PDE and the Offeror will finalize all assessment construction rules.

2. The PDE offers accommodations for all statewide assessments. Test forms should be constructed to allow for the use of these same accommodations for the GCAs. Accommodations are available for students with an IEP or 504 Plan, English Language Learners and All Students. For available accommodations for students with an IEP or 504 Plan see the 2008 PSSA Accommodations Guidelines. For information about the accommodations for English Language Learners, see the 2007 PSSA Fact Sheet: Accommodations for English Language Learners and for information about accommodations for All Students see the 2007 PSSA Fact Sheet: Accommodations for All Students.

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3. The Diagnostic Assessments must be available for students who are visually impaired in forms such as audio recordings. The Offeror is encouraged to describe how it would create accommodations that could be integrated and used in the online diagnostic system.

F. Scoring

1. All scoring will be done within the online system and reports will be generated for immediate feedback.

G. Reporting and Data Files

1. The Offeror will produce online and printable reports for individual student performance. In addition to student identifying information such as name, school and district, reports should be displayed graphically and with explanatory text to inform students/parents of, at a minimum, the student’s performance level on each subject; standard error of measurement; raw score by module on each subject; and provide guidance concerning module definition and for an explanation of module achievement. The Pennsylvania Department of Education requests sample copies of the Offeror’s proposed reports.

2. The Offeror will produce, via a secure report delivery site, printable online school and district summary reports to provide, at a minimum, the percentage of students achieving each performance level for each content area. The report should: display, in both graphic and narrative forms, the school’s performance compared to the district’s performance and the state’s performance; give an average of the school’s raw score by content area; and, where at least eight items are included, by assessment anchor. Pennsylvania requests sample copies of the Offeror’s proposed reports.

3. The Offeror will produce a secure interactive data querying and reporting tool that will allow schools/districts, at a minimum, to dynamically query based on the user’s selection of various demographics and categories and produce reports for each content area and by module within content area, without the user having to perform complicated statistical functions. The tool will include search capabilities determined by scoring parameters. The tool will include a training packet that local education agencies (LEAs) may use to train LEA staff. A printable user guide should be available. This tool must have the ability to allow the user to suppress certain fields/information that should not be privy to everyone who uses the tool. The tool will include current year and previous year data. Reports must be printable.

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4. The Offeror will produce, via a secure report delivery site, a student data file to include an LEA’s/school’s enrolled population with demographic information and assessment results.

H. Technical Documentation

1. A draft annual Technical Report for each GCA cycle is provided by the Offeror for review and approval by PDE. The Technical Report for the NCLB statewide assessment can be found on the PDE website at the link above. (For detail, see IV-XII.C.)