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Study of the CASAS Relationship to GED 2002

CASAS, in cooperation with the CASAS National Consortium Policy Council, conducted a study to provide guidance to program and instructional staff regarding student readiness to take the GED Tests. The study looked at the relationship of CASAS reading and math scores to official 2002 GED test results from five states — California, Hawaii, Iowa, Kansas, and Oregon. The more than 6,700 individuals in the study took the appropriate CASAS test form within six months of taking the GED Tests. The study found a clear positive relationship between CASAS reading scores and GED reading scores as well as between CASAS math scores and GED math scores.

In addition, the study also showed a clear positive relationship between CASAS reading scores and overall GED results averaged across the five test content areas of reading, writing, science, social studies, and mathematics.

This study looked at the relationship of CASAS tests to the official 2002 GED Tests using paired test data from California (n=3,113), Hawaii (n=51), Iowa (n=1,602), Kansas (n=561), and Oregon (n=1,442).

As part of this study, the skills assessed by the GED in both language arts/reading and mathematics were examined in relation to the competencies assessed by the CASAS Level C and D reading and math forms. Generally, there is a high degree of correspondence between the two instruments in both reading and

math (Performance on CASAS related to GED, June 2003). Based on these results, recommendations regarding the administration of GED 2002 are included in the next section (see Tables 1 and 2).

Exhibits 1 and 2 provide additional reference information including CASAS reading and math skill level descriptors for CASAS Levels D and E and CASAS scoring ranges compared to NRS levels.

▶ Recommendations

As learners move up from CASAS Level C to D to E, the data show a significant increase in GED pass rates at each level. Table 1 shows the corresponding GED 2002 subsection pass rates for learners at Level D and Level E. Table 2 shows the overall GED 2002 pass rates for learners.

To have the highest probability to pass the GED 2002, CASAS recommends that students score at the CASAS Level E before they take the individual GED subsections. **Note:** Passing the GED Tests requires a minimum of 410 in each content area and an average of at least 450 across the five content areas.

In some cases a student functioning at CASAS Level D may be sufficiently prepared to take the GED 2002 exams. An instructor, considering additional factors and methods to determine a student's readiness to take the GED, may determine that a student functioning at this level is ready to attempt the exam.

Table 1 CASAS to GED Test Pass Rate

		Student Scores 236-245 On CASAS Test (CASAS Level D)	Student Scores 246+ On CASAS Test (CASAS Level E)
Student Takes CASAS Test C or D	Student Takes GED Test	% Passed GED Subsection*	% Passed GED Subsection*
Reading	Language Arts, Reading	75%	89%
Reading	Language Arts, Writing	70%	85%
Reading	Science	84%	97%
Reading	Social Studies	84%	96%
Math	Math	90%	97%

^{*} Passed is a score of 450 or greater.

Table 2 CASAS to GED Total Pass Rate

		CASAS Level D Student Scores 236-245 On CASAS Test	CASAS Level E Student Scores 246+ On CASAS Test
Student Takes CASAS Test	Student Takes GED Test	% Passed GED*	% Passed GED*
Reading	All Subsections	78%	94%
Math	All Subsections	93%	99%

^{*} Passed is an average score of 450 or greater across all subsections and no lower than 410 in any one subsection.

Exhibit 1CASAS Reading and Mathematics Skill Level Descriptions

Level	Reading	Math
Level D CASAS Scale Score 236-245	Individuals at this level generally can perform tasks that involve written instructions in both familiar and unfamiliar situations. Other skills may include: reading and following multi-step directions; reading and interpreting manuals and legal forms; interpreting literary materials such as poetry and literature; creating and using tables and graphs; integrating information from multiple texts, charts, and graphs; evaluating and organizing information. They can also organize information and perform tasks that involve workplace communication skills.	Individuals at this level generally can add, subtract, multiply, and divide whole numbers, fractions, and decimals. Other skills may include using mathematics in the workplace, such as calculating discounts; comparing prices to determine the best buys for goods and services; creating and using tables and graphs; computing standard measurement for length, width, perimeter, and area. They generally can organize, implement and perform multi-level calculations.
Level E CASAS Scale Score 246+	Individuals functioning at the skill level E are able to read most written material encountered in the workplace, including forms, work procedures, and personnel manuals. They can interpret technical information, training materials, and some technical manuals. They can interpret computergenerated materials in the form of databases and spreadsheets. They can read articles on unfamiliar topics written in more complex language.	Individuals functioning at skill level E are able to apply multi-step operations involving percents; apply proportion and ratio; use decimal time; apply formulas to determine volume; devise formulas. They can apply these skills to: compare quantities such as changes in sales and production totals; compare relative quantities of material resources used; interpret and record time in decimal format (e.g. 1.4 hours); calculate volume of material required or used in manufacturing or construction; devise algebraic formulas to facilitate calculations.

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Exhibit 2
CASAS Scoring Ranges and NRS Levels*

CASAS Scale Score Range	NRS ABE Levels	NRS ESL Levels	
<180	ABE Beginning Literacy	ESL Beginning Literacy	
181-200	ABE Beginning Literacy	ESL Beginning	
201-210	ABE Beginning Basic Education	ESL Intermediate Low	
211-220	ABE Intermediate Low	ESL Intermediate High	
221-235	ABE Intermediate High	ESL Low Advanced	
236-245	ASE Low	ESL High Advanced	
246+	ASE High	_	

*Learners scoring in the 236-245 and 246+ scoring ranges (NRS Levels ASE Low, ASE High, and ESL High Advanced) are those who are analyzed in Tables 1 and 2 of this study.

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