FTCE Competency Report ~ All 2009-2010 Completers, TBIO (288) Majors only

Best Attempt Data

**Test=Biology 6-12 (2)**

| **Percent Correct** | **No. of Items** | **Competency Area** | **No. of Students** |
| --- | --- | --- | --- |
| 70.99% | 18 | 01 Knowledge of the investigative processes of science | 9 |
| 83.33% | 6 | 02 Knowledge of the interaction of science, technology, and society, including ethical, legal, and social issues | 9 |
| 68.99% | 14 | 03 Knowledge of the chemical processes of living things | 9 |
| 71.30% | 12 | 04 Knowledge of the interaction of cell structure and function | 9 |
| 61.54% | 15 | 05 Knowledge of genetic principles, processes, and applications | 9 |
| 64.81% | 6 | 06 Knowledge of the structural and functional diversity of viruses and prokaryotic organisms | 9 |
| 65.71% | 12 | 07 Knowledge of the structural and functional diversity of protists, fungi, and plants | 9 |
| 58.82% | 13 | 08 Knowledge of the structural and functional diversity of animals | 9 |
| 55.56% | 14 | 09 Knowledge of ecological principles and processes | 9 |
| 58.06% | 10 | 10 Knowledge of evolutionary mechanisms | 9 |

**Test=Chemistry 6-12 (3)**

| **Percent Correct** | **No. of Items** | **Competency Area** | **No. of Students** |
| --- | --- | --- | --- |
| 70.00% | 10 | 01 Knowledge of the nature of matter | 1 |
| 64.29% | 14 | 02 Knowledge of energy and its interaction with matter | 1 |
| 61.11% | 18 | 03 Knowledge of bonding and molecular structure | 1 |
| 71.43% | 21 | 04 Knowledge of chemical reactions and stoichiometry | 1 |
| 58.33% | 12 | 05 Knowledge of atomic theory and structure | 1 |
| 80.00% | 10 | 06 Knowledge of the nature of science | 1 |
| 40.00% | 10 | 07 Knowledge of measurement | 1 |
| 60.00% | 5 | 08 Knowledge of appropriate laboratory use and procedures | 1 |

**Test=Earth-Space Science 6-12 (8)**

| **Percent Correct** | **No. of Items** | **Competency Area** | **No. of Students** |
| --- | --- | --- | --- |
| 79.49% | 20 | 01 Knowledge of the nature of science | 2 |
| 72.73% | 11 | 02 Knowledge of the composition, characteristics, and structure of the Earth | 2 |
| 63.64% | 11 | 03 Knowledge of the dynamics of the Earth's lithosphere and asthenosphere | 2 |
| 65.00% | 10 | 04 Knowledge of the Earth's surface processes | 2 |
| 44.44% | 5 | 05 Knowledge of the interpretation of maps and imagery | 2 |
| 63.64% | 6 | 06 Knowledge of geologic history | 2 |
| 68.75% | 9 | 07 Knowledge of the Earth's resources | 2 |
| 57.14% | 7 | 08 Knowledge of the chemistry, physics, and biology of the ocean | 2 |
| 46.15% | 7 | 09 Knowledge of the coastal ocean | 2 |
| 50.00% | 10 | 10 Knowledge of the composition and dynamics of the atmosphere | 2 |
| 62.50% | 9 | 11 Knowledge of the Earth's climatic and weather patterns | 2 |
| 30.77% | 7 | 12 Knowledge of meteorological observations | 2 |
| 25.00% | 4 | 13 Knowledge of the meteorology and climatology of Florida | 2 |
| 53.85% | 13 | 14 Knowledge of astronomical objects and processes | 2 |
| 71.43% | 7 | 15 Knowledge of space exploration | 2 |

**Test=GK Subtest 2: English Language Skills (ELS) (822)**

| **Percent Correct** | **No. of Items** | **Competency Area** | **No. of Students** |
| --- | --- | --- | --- |
| 87.50% | 4 | 01 Conceptual and organizational skills | 6 |
| 97.22% | 6 | 02 Word choice skills | 6 |
| 91.67% | 6 | 03 Sentence structure skills | 6 |
| 82.52% | 24 | 04 Grammar, spelling, capitalization, and punctuation skills | 6 |

**Test=GK Subtest 3: Reading (823)**

| **Percent Correct** | **No. of Items** | **Competency Area** | **No. of Students** |
| --- | --- | --- | --- |
| 74.60% | 11 | 01 Knowledge of literal comprehension | 6 |
| 71.75% | 30 | 02 Knowledge of inferential comprehension | 6 |

**Test=GK Subtest 4: Mathematics (824)**

| **Percent Correct** | **No. of Items** | **Competency Area** | **No. of Students** |
| --- | --- | --- | --- |
| 87.50% | 8 | 01 Knowledge of number sense, concepts, and operations | 6 |
| 70.00% | 10 | 02 Knowledge of measurement (using customary or metric units) | 6 |
| 72.22% | 9 | 03 Knowledge of geometry and spatial sense | 6 |
| 88.89% | 9 | 04 Knowledge of algebraic thinking | 6 |
| 74.07% | 9 | 05 Knowledge of data analysis and probability | 6 |

**Test=Mathematics 6-12 (26)**

| **Percent Correct** | **No. of Items** | **Competency Area** | **No. of Students** |
| --- | --- | --- | --- |
| 53.85% | 13 | 01 Knowledge of algebra | 1 |
| 33.33% | 6 | 02 Knowledge of functions | 1 |
| 70.00% | 10 | 03 Knowledge of geometry from a synthetic perspective | 1 |
| 60.00% | 5 | 04 Knowledge of geometry from an algebraic perspective | 1 |
| 40.00% | 5 | 05 Knowledge of trigonometry | 1 |
| 60.00% | 5 | 06 Knowledge of statistics | 1 |
| 20.00% | 5 | 07 Knowledge of probability | 1 |
| 50.00% | 4 | 08 Knowledge of discrete mathematics | 1 |
| 100.0% | 5 | 09 Knowledge of calculus | 1 |
| 0.00% | 4 | 10 Knowledge of number sense and mathematical structure | 1 |
| 50.00% | 2 | 11 Knowledge of mathematics as communication | 1 |
| 33.33% | 3 | 12 Knowledge of mathematics as reasoning | 1 |
| 0.00% | 2 | 13 Knowledge of mathematical connections | 1 |
| 40.00% | 5 | 14 Knowledge of instruction | 1 |
| 60.00% | 5 | 15 Knowledge of assessment | 1 |

**Test=Middle Grades Integrated Curriculum English (62)**

| **Percent Correct** | **No. of Items** | **Competency Area** | **No. of Students** |
| --- | --- | --- | --- |
| 70.00% | 10 | 01 Knowledge of written and oral language | 1 |
| 100.0% | 12 | 02 Knowledge of reading | 1 |
| 33.33% | 6 | 03 Knowledge of literature | 1 |
| 50.00% | 2 | 04 Knowledge of teaching middle grades English | 1 |

**Test=Middle Grades Integrated Curriculum General Science (62)**

| **Percent Correct** | **No. of Items** | **Competency Area** | **No. of Students** |
| --- | --- | --- | --- |
| 33.33% | 6 | 05 Knowledge of the nature of science | 1 |
| 85.71% | 7 | 06 Knowledge of living things and their environment | 1 |
| 71.43% | 7 | 07 Knowledge of the forces of Earth and space | 1 |
| 50.00% | 6 | 08 Knowledge of matter and energy | 1 |
| 66.67% | 3 | 09 Knowledge of teaching middle grades general science | 1 |

**Test=Middle Grades Integrated Curriculum Mathematics (62)**

| **Percent Correct** | **No. of Items** | **Competency Area** | **No. of Students** |
| --- | --- | --- | --- |
| 83.33% | 6 | 10 Knowledge of number sense, concepts, and operations | 1 |
| 40.00% | 5 | 11 Knowledge of data analysis and probability | 1 |
| 57.14% | 7 | 12 Knowledge of algebra | 1 |
| 80.00% | 5 | 13 Knowledge of geometry | 1 |
| 60.00% | 5 | 14 Knowledge of measurement | 1 |
| 100.0% | 2 | 15 Knowledge of teaching middle grades mathematics | 1 |

**Test=Middle Grades Integrated Curriculum Social Science (62)**

| **Percent Correct** | **No. of Items** | **Competency Area** | **No. of Students** |
| --- | --- | --- | --- |
| 80.00% | 10 | 16 Knowledge of history | 1 |
| 50.00% | 8 | 17 Knowledge of geography | 1 |
| 90.00% | 10 | 18 Knowledge of government, economics, and other social sciences | 1 |
| 100.0% | 2 | 19 Knowledge of teaching middle grades social science | 1 |

**Test=Professional Education (PED) (83)**

| **Percent Correct** | **No. of Items** | **Competency Area** | **No. of Students** |
| --- | --- | --- | --- |
| 75.24% | 10 | 01 Knowledge of various types of assessment strategies that can be used to determine student levels and needs (Assessment) | 10 |
| 79.65% | 11 | 02 Knowledge of effective communication with students, parents, faculty, other professionals, and the public, including those whose home language is not English (Communications) | 10 |
| 71.67% | 6 | 03 Knowledge of strategies for continuous improvement in professional practices for self and school (Continuous Improvement) | 10 |
| 78.38% | 11 | 04 Knowledge of strategies, materials, and technologies that will promote and enhance critical and creative thinking skills (Critical Thinking) | 10 |
| 78.75% | 8 | 05 Knowledge of cultural, linguistic, and learning style differences and how these differences affect classroom practice and student learning (Diversity) | 10 |
| 89.47% | 6 | 06 Knowledge of the Code of Ethics and Principles of Professional Conduct of the Education Profession in Florida (Ethics) | 10 |
| 76.42% | 11 | 07 Knowledge of how to apply human development and learning theories that support the intellectual, personal, and social development of all students (Human Development and Learning) | 10 |
| 72.31% | 7 | 08 Knowledge of effective reading strategies that can be applied across the curriculum to increase learning (Subject Matter) | 10 |
| 85.98% | 11 | 09 Knowledge of strategies to create and sustain a safe, efficient, supportive learning environment (Learning Environment) | 10 |
| 83.64% | 11 | 10 Knowledge of how to plan and conduct lessons in a variety of learning environments that lead to student outcomes consistent with state and district standards (Planning) | 10 |
| 68.35% | 8 | 11 Knowledge of collaborative strategies for working with various education professionals, parents, and other appropriate participants in the continual improvement of educational experiences of students (Role of the Teacher) | 10 |
| 73.68% | 6 | 12 Knowledge of strategies for the implementation of technology in the teaching and learning process (Technology) | 10 |
| 79.31% | 6 | 13 Knowledge of the history of education and its philosophical and sociological foundations (Foundations of Education) | 10 |
| 69.62% | 8 | 14 Knowledge of specific approaches, methods, and strategies appropriate for students with limited English proficiency (ESOL) | 10 |