



Government of Bermuda
Ministry of Education

BERMUDA DEPARTMENT OF EDUCATION

THE OFFICE OF CURRICULUM & ASSESSMENT

ACHIEVEMENT LEVEL DESCRIPTORS (ALDs)

PRIMARY FOUR (P4)

APRIL 2009

BERMUDA P4 ACHIEVEMENT LEVEL DESCRIPTORS (ALDs)

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BACKGROUND

The Bermuda Criterion-Referenced Test (BCRT) will be administered operationally for the first time in Spring 2009. This marks the culmination of several years of work on the part of teachers, principals and content officers. These tests will provide teachers and parent feedback on how their students perform in relationship to the Bermuda Performance Standards. To enhance this feedback, the Ministry plans to report student performance in terms of four (4) achievement levels: *Advanced, Proficient, Partially Proficient* and *Novice*.

To bring clarity to these four (4) levels, Achievement-Level Descriptors (ALDs) have been developed. The Achievement-Level Descriptors (ALDs) are critical to the success of the standard setting process. They summarise the knowledge, skills and abilities of the student who is solidly within a particular achievement level. Achievement-Level Descriptors (ALDs) will be used by the Ministry of Education to provide guidance to students, parents, educators and the public about what students in the Bermuda Public School System (BPSS) should know and be able to do in English Language Arts, Mathematics, Science and Social Studies.

ACKNOWLEDGEMENTS

In July 2008, full descriptors were written for the four (4) achievement levels for content areas previously mentioned. In collaboration with CTB McGraw-Hill personnel, principals, teachers, mentors and content officers developed these descriptors and they reflect the knowledge, skills, and abilities expected of Bermudian students (P3-S2) in each of the achievement levels in relationship to the Bermuda Performance Standards. The writing teams were comprised of diligent and devoted professionals. Appreciation is extended to these professionals for their ability to collaborate amicably and collegially in the development of the (ALDs). The members of the development teams were:

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FREQUENTLY ASKED QUESTIONS

1. What are Achievement Level Descriptors (ALDs)?

Achievement levels descriptors specify the knowledge, skills and abilities a student needs to know in order to be classified in each achievement levels.

2. What are the achievement level titles?

The four (4) achievement level titles are *Advanced*, *Proficient*, *Partially Proficient* and *Novice*. Each achievement level indicates the student can perform the majority of what is described for that level and even more of what is described for the levels below. The student may also be capable of performing some for the things described in the next higher level, but not enough to have reached that level.

Advanced: *demonstrates exemplary understanding or skill and exceeds expected level of performance*

Proficient: *demonstrates understanding or skill and meets expected level of performance*

Partially Proficient: *demonstrates an emerging or developing level of understanding and performance*

Novice: *attempt made; however, lack of understanding and performance is evident*

3. How will the Achievement Level Descriptors (ALDs) be used?

In the standard setting process, teachers will use the ALDs as a point of reference to rate each of their students in the area of English Language Arts, Mathematics, Science and Social Studies into the one of the proficiency categories.

4. What is Standard Setting?

Standard setting is a process that establishes cut-scores for students to be placed into achievement levels. This multi-step process will allow input from various stakeholders such as educators and policy makers. During the standard setting process, Bermuda educators will consider the knowledge, skills and abilities of their students. Based on teachers expectation, cut-scores will be generated using statistical data. Standard setting is currently scheduled to begin in Spring 2009.

5. What are cut-scores?

Cut-scores are the numerical values that identify the range for achievement levels.

Bermuda Public School System Performance Standards

English Language Arts (EL)

Strategic Reading (R)

Comprehension of Informational Text (I)

Comprehension of Literary Text (L)

Language Usage (U)

Writing (W)

Speaking & Listening (S)

Processing Information and Mass Media (M)

English Language Arts (EL)

Advanced Students (EL)

- identify the theme of a text
- identify non-literal meaning of some words/phrases
- identify stated and implied cause/effect relationships
- summarise
- give supporting details
- use common text features
- identify literary devices
- distinguish between fact/fiction
- explain key ideas and support with details from text
- use context clues to explain figurative language
- use commas in complex sentences and when writing dialogue
- combine sentences by using strategies, ordering ideas
- write a short story that uses plot development strategies (elaboration of details, suspense, or emotions of characters)
- demonstrate organisational structure and control of language usage and conventions

Proficient Students (EL)

- know meanings of prefixes/root words
- use strategies to determine meaning of new words
- recognise multiple meanings of words
- identify key details, author's message, simple literary elements, fact/opinion
- compare/contrast
- make/support simple inferences
- summarise text ideas
- compare author's information to own knowledge
- make connections between Bermudian culture and text
- apply understanding of steps in a process
- explain/compare characters
- determine message of a literary text
- use correct capitalisation, periods in abbreviations, commas in addresses, quotation marks in dialogue, apostrophes in possessives
- write a short story with a plot that shows change, provides closure
- provide closure

Partially Proficient Students (EL)

- make connections to real life experiences
- identify main ideas, order of events, purpose, main points/facts in text
- use layout to find details
- follow directions/instructions from a complex text
- identify author's purpose, point of view, plot, conflict/resolution, simple literary devices
- interpret simple graphic illustrations that support text
- show cause/effect
- capitalise first word in a sentence
- punctuate using periods, question marks, exclamations, apostrophes with contractions
- use commas with items in a series
- use nouns, verbs, pronouns, adjectives, adverbs, spelling patterns correctly
- use connecting words to create complex sentences
- write a short story with characters, setting, plot

Novice Students (EL)

- use double meanings of words and recognize commonly used words in relation to synonyms/antonyms
- demonstrate understanding of letter-sound relationships
- follow directions/instructions from simple text
- identify similarities/differences in stories, poems, plays
- identify use of transitional words
- determine and understand main idea of text
- identify simple literary devices (e.g. simile, alliteration, sensory words)
- locate specific details within text
- use prior knowledge to understand text
- identify simple cause/effect relationships
- write using simple subject-verb agreement
- write a short story with characters, setting, order of events

BERMUDA P4 ACHIEVEMENT LEVEL DESCRIPTORS (ALDs)

PLANNING NOTES

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Bermuda Public School System Performance Standards

Mathematics (MT)

Number and Number Operations (N)

Patterns, Functions and Algebra (A)

Geometry (G)

Measurement (M)

Data Handling (D)

Mathematics (MT)

Advanced Students (MT)

- compare/order/estimate and recognize place value of numbers up to 10,000
- identify/use $\frac{1}{2}$ (and equivalents up to $\frac{5}{10}$), $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, $\frac{1}{8}$, $\frac{1}{10}$
- add/subtract up to 1,000
- know multiplication facts for $\frac{2}{3}/5/10$
- multiply up to 2-digit numbers by $\frac{2}{3}/5$
- create/extend/analyse/interpret numeric/non-numeric/geometric patterns
- solve equations
- model/solve problems related to patterns/functions/relationships
- draw/describe/classify/create/solve problems related to 2- and 3-dimensional shapes
- identify/use appropriate tools/units to measure length/time/weight/temperature
- solve real-world problems with calendars
- collect/organise/read data using tally charts/graphs

Proficient Students (MT)

- compare/order and identify place value of numbers less than 10,000
- estimate/round numbers up to 4-digits
- apply operations to solve problems
- know multiplication facts up to 9×9
- check divisibility- $\frac{2}{5}/10$
- represent numbers/numerical situations
- use properties of 0/1
- add/subtract fractions with like denominators
- know fractions as part of whole
- solve multiplication equations
- describe patterns
- name/classify/draw plane figures
- identify attributes/find surface area of solids
- identify/describe/draw flips
- identify/create symmetry
- solve problems with geometric figures/congruency
- identify tools/units to measure length/weight
- estimate with money
- make change up to \$10
- collect/organise data
- read/interpret/create tables/graphs
- use data to solve problems

Partially Proficient Students (MT)

- estimate by rounding up to 3-digit numbers to the nearest 100
- represent equal fractions with different denominators using pictures
- add/subtract decimal fractions in the context of money
- multiply (2, 3, 4, 5, 10) times 9
- make predictions/extend numeric/geometric patterns
- represent patterns with symbolic rules or words
- identify lines using the terms horizontal and vertical
- identify angles using the terms acute and right
- identify lines of symmetry in plane figures
- identify appropriate tools/units for measuring length
- tell time to the minute using analogue/digital clocks
- count/record a collection of coins
- create/interpret tally charts/bar graphs
- use data to describe likelihood of events

Novice Students (MT)

- multiply (2, 5, 10) times 9
- identify equal fractions with different denominators (using pictures)
- identify simple numeric and geometric patterns
- model problem situations using objects
- name and draw two dimensional shapes up to 6 sides
- identify solids (sphere, cuboids and cones)
- identify congruent rectangular shapes
- identify symmetrical shapes
- identify the appropriate tools for measuring length
- tell time to the minute using digital clocks
- measure with a ruler in one-inch intervals
- read from tally charts and bar charts

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Bermuda Public School System Performance Standards

Science (SC)

Physical Science (P)

Life Science (L)

Earth and Space Science (E)

Nature of Science (N)

Science (SC)

Advanced Students (SC)

- understand that matter can change state and still be the same thing
- understand that taking away heat makes things colder
- can explain why a person's weight on Earth would be different on the moon
- can compare and contrast life cycles and understand why animals have different life cycles
- can understand and predict how the moon changes shape over a period of 28 days
- can decide when fresh observations should be made as well as identify the best materials to use when planning an investigation
- recognise that when people want to build something new, they should first look at possible effects to other people and the environment

Proficient Students (SC)

- understand different ways heat can be produced
- know heat flows from warmer to cooler objects and understand what materials conduct heat
- know weight differs where gravity is different
- can identify the main parts and explain the functions of the digestive, skeletal, muscular and respiratory systems
- can describe the life cycles of the toad, butterfly and flowering plant
- understand why shadows change over the course of a day
- understand the earth changes and waves, wind, water and ice are always acting on the earth
- can use the terms rotate, revolve, orbit and axis
- can plan an investigation, choose the best measuring procedure, identify trends in data, and make conclusions

Partially Proficient Students (SC)

- have a basic understanding of heat and know the terms melting, freezing and evaporating
- group objects based on physical properties
- have a basic understanding of life cycles, how plants/animals obtain food/energy and know that the body is a system with parts and functions
- understand Earth's rotation and the day/night cycle
- make predictions in simple investigations, create and use graphs, and draw simple conclusions
- have a basic understanding of Earth's natural resources
- know some materials are reusable and that tools of today are different from the past
- understand there are desirable or undesirable consequences of developing new products
- understand health concepts

Novice Students (SC)

- understand the basic properties of solids, liquids and gases
- understand the meaning of temperature and gravity
- can identify living and nonliving things, and know that plants and animals have features that help them live in different places
- know that living things grow, die and decay
- know that Earth orbits the sun, a star
- understand that the sun is a source of light and how shadows are formed
- can identify tools for investigations and can interpret simple graphs
- can identify natural and man-made things
- recognise some factors that can influence health, and know that vaccines and medicines protect and help people

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Bermuda Public School System Performance Standards

Social Studies (SS)

History (H)

Geography (G)

Civics (C)

Economics (E)

Social Studies (SS)

Advanced Students (SS)

- interpret tiered timelines or graphic organisers
- define and give examples of complex key vocabulary terms and concepts
- analyze the impact of media
- connect local economic changes to global ones
- describe Bermuda's industries in relationship to its location and availability of resources (e.g., wholesale, utilities, crafts, mainly from U.S. due to Bermuda's location)
- explain the function of government
- evaluate the importance of a written constitution as a contract between the government and its citizens
- describe ways in which Bermuda is interdependent with other countries based on factors of production and demand for building supplies, oil, gas, and labour

Proficient Students (SS)

- create a tiered timeline or graphic organiser
- define and give examples of moderate key vocabulary terms and concepts
- collect evidence from primary sources
- understand regional relationships
- create and interpret maps of Bermuda and the world using cardinal directions, symbols, and simple legends
- identify and locate the Caribbean, the Azores, and Great Britain on a map
- describe Bermuda's industries in relationship to its availability of resources (e.g., service industries, labour)
- describe Bermuda's government structure
- explain Bermuda's symbols
- describe how Bermuda is interdependent with other countries based on demand for goods (e.g., food, clothing, household goods)

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Partially Proficient Students (SS)

- sequence information in order of importance
- use appropriate sources to gain meaning of essential terms and understand simple relationships
- interpret maps of Bermuda and the world, using cardinal directions, symbols, and simple legends
- identify and describe major land forms in Bermuda
- describe the Azores in relation to the Portuguese
- locate continents
- describe Bermuda's industries in relationship to its location and resources
- understand the importance of citizenship traits
- describe the role of banking and savings
- describe how technology affects individuals and how the community operates

Novice Students (SS)

- use a tiered timeline and place information in order of occurrence
- define and give examples of basic key vocabulary words, terms, and concepts
- show beginning understanding of how events are connected
- identify nine major landforms and six water bodies in Bermuda
- locate Bermuda on a world map
- identify continents
- understand the function of Bermuda's government
- identify the importance of citizenship traits
- describe the role of money in everyday life
- describe United States and Bermuda coins and notes
- describe how technology affects people's lives

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PLANNING NOTES

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