



Government of Bermuda
Ministry of Education

BERMUDA DEPARTMENT OF EDUCATION

THE OFFICE OF CURRICULUM & ASSESSMENT

ACHIEVEMENT LEVEL DESCRIPTORS (ALDs)

PRIMARY SIX (P6)

APRIL 2009

BERMUDA P6 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)

- use textual evidence to support/justify thinking
- summarise/synthesise important ideas
- analyse clarity of text features/content
- detect bias in informational texts
- explain key points/use supporting details to extend ideas of persuasive text
- recognise how literary devices contribute to meaning of texts
- identify/explain effect of author's word choice/purpose in literary text
- generalise about topics
- show awareness of how authors compose/use literary devices
- use commas in compound sentence, quotation marks/commas with dialogue
- combine complex sentences with independent/dependent clauses
- develop plot with elaborative details/suspense/characterisation

Proficient Students (EL)

- use multiple meaning/high frequency words
- make/support inferences
- determine cause/effect
- compare and contrast themes/characters/ideas
- identify/explain purpose and main idea
- distinguish fact from opinion
- locate information
- interpret/analyse details, character traits
- identify/support author's purpose, position, point of view
- understand literary devices/plot
- summarise events
- use subject verb agreement, forms of adjectives, parts of speech, subjects/predicates, patterns to spell unknown words
- provide closure to a short story

Partially Proficient Students (EL)

- identify important facts/details
- use organisational structure/context clues to determine meaning
- compare author's/own observations
- make connections between print/non-print text, about Bermudian culture
- identify sequence of events, theme, elements of drama, change in/basic motivation of character, literary devices (onomatopoeia/sensory details)
- determine author's purpose
- explain problems/solutions/details
- capitalise proper nouns/letter parts/first word in sentence/quotation
- use periods/question marks/exclamation marks/commas in a series/periods with an abbreviation
- understand/use verb tenses
- write a short story with characters/setting/developed plot using appropriate strategies and organized structure

Novice Students (EL)

- recognise high frequency words in below level text
- identify meaning of words with multiple meanings in simple texts
- draw conclusions about events/characters/settings
- use structure to retrieve information
- identify main idea/key ideas in an informational text
- identify sources of information on a given topic
- identify transitional words
- identify cause/effect in a simple narrative
- identify main idea, author's purpose, important facts/details
- make predictions about characters/events in a narrative
- punctuate using periods/question marks/ exclamation marks
- identify basic spelling patterns
- create a story using appropriate story elements

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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 numbers
- apply strategies/recognise when to estimate
- determine reasonableness of solutions
- order rational numbers/represent as/convert between fractions/terminating decimals
- explain how change in a variable causes change in another variable
- justify predictions about/represent patterns with symbols
- solve equations with variety of methods
- visualise/describe results of combining/subdividing geometric solids
- convert units of length
- select/use tool/unit to measure with precision
- find perimeter/area of combinations of triangles/rectangles
- compare perimeter/area of changed shape
- compare/contrast graphs of data set
- make data-based predictions/communicate reasoning

Proficient Students (MT)

- apply multiplication/division/order of operations/number theory
- analyse/solve problems with equivalent fractions
- find fractions of quantities
- compare fractions/decimals/percents
- model/describe/extend patterns
- graph ordered pairs
- model/solve problems with objects/graphs/tables
- solve equations/explain solutions
- classify/describe/solve problems with geometric figures
- identify segments/angles/parts of circles
- identify/create/describe transformations
- solve congruency/similarity problems
- construct circles
- locate/plot points
- convert units (time)
- find perimeter/area (rectangles/triangles)
- compare/order events (elapsed time)
- collect/organise/display/analyse/solve problems with data

Partially Proficient Students (MT)

- compare/order whole numbers up to 1,000,000
- identify place value up to and including 1,000,000
- know/apply the properties of 0/1
- apply addition/subtraction and relationship between them to problem solving (single step problems)
- extend numeric/geometric patterns
- use symbols to represent simple patterns
- solve simple linear equations
- identify lines of symmetry in plane figures
- recognise congruent/similar figures
- plot points on map using cardinal directions
- convert linear units within a system of measurement
- find perimeter/area of combined rectangles
- solve problems involving measurements in increments of one inch and half inch
- state the outcome of simple experiments

Novice Students (MT)

- recognise equivalent representations by composing/decomposing numbers up to 6 digits
- order decimals to the hundredths place
- identify place value up to 100,000
- extend geometric/numeric patterns
- solve equations with a missing value
- identify 2-dimensional shapes/3-dimensional objects
- make/describe attributes of 2- and 3-dimensional figures
- identify lines/angles
- recognise translations/reflections/rotations
- find a location on a map using cardinal directions
- find the perimeter/area of rectangles
- tell time to the minute using analogue and digital clocks
- collect data using tally tables
- organise data into tables/bar graphs
- read data on a table/bar graph/line graph

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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)

- explain the conditions under which matter can change from one state to another
- understand that organisms compete for space, food and shelter in a habitat which affects their ability to grow and survive
- explain why a food chain begins with a producer
- combine food chains into food webs
- explain how weather and seasons result from interactions of sunlight, water and air masses
- make reasonable predictions when the outcome is not known
- use science knowledge/data to support conclusions
- evaluate/identify strengths and weaknesses of claims/conclusions based on data/results
- understand the importance of scale in models
- identify/analyse the effectiveness of solutions

Proficient Students (SC)

- understand new materials can be made by combining two or more materials
- classify changes as reversible/irreversible
- know basic characteristics of states of matter
- give impacts of a change in a habitat
- understand the ocean influences weather and the sun provides energy for the water cycle
- explain processes in the water cycle
- explain how temperature affects precipitation type (rain/snow)
- interpret simple weather maps
- analyse evidence and make conclusions
- understand simple models
- know some resources can be renewed within a short timeframe while others can not
- understand importance of conservation
- identify repeated elements in designs, structures, sounds and events

Partially Proficient Students (SC)

- know matter has mass/volume
- create simple food chains
- understand basic roles of producers/consumers/decomposers
- match six land habitats with organisms
- identify parts of water cycle diagram
- know the atmosphere has various layers/contains water vapour
- know conditions of the atmosphere produce different kinds of weather
- plan an investigation
- understand why a test should be fair, why results of investigations are seldom exactly the same, and when observations should be repeated
- distinguish between actual observations and guesses
- make predictions based on data
- analyse data in bar graphs
- understand unlimited/limited resources
- know technologies have drawbacks/benefits

Novice Students (SC)

- know matter may not change back after it has been changed
- describe observable properties of solids/liquids/gases
- describe plant/animal features and know where they live
- identify some land habitats
- create simple food chain if given elements
- know sun's role in changing water into gas
- know Earth's surface is surrounded by air
- know what clouds, fog and wind are
- describe ocean properties
- plan an investigation
- recognise when a comparison is not fair
- choose correct measurement instruments
- identify natural/man-made things
- understand that mathematics is important to science
- identify science careers
- recognise how substances/ behaviours/vaccinations/medicines affect health

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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)

- formulate conclusions based on critical examination of relevant information
- recognise instances in which more than one interpretation of factual material is valid
- evaluate how the early governance of Bermuda influenced its development between 1612 and the present
- explain how human and natural alterations have produced positive and negative developments (the mid-Atlantic ridge, platform, plates, convection currents and erosion)
- acquire, analyse, and interpret information regarding constitutional and national issues in Bermuda
- describe and explain how commerce makes it easier to invest and compare the value of goods and services

Proficient Students (SS)

- compare retellings of historical events and demonstrate an understanding that people in different times and places view the world differently
- use various methods to communicate information
- explain how the early governance of Bermuda influenced its development between 1612 and 1619
- explain how the human and natural alterations of the physical environment have produced positive and negative consequences
- explain how human networks bring areas together
- compare a colony and an independent state
- analyse the relationship between justice and authority
- describe a competitive market
- know the factors used to determine the selling price of a product

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Partially Proficient Students (SS)

- note cause and effect relationships
- identify and define key social studies concepts
- identify tools to study the past
- explain how geographic locations are a factor in the creation of climate regions
- use physical and thematic maps to make comparisons about natural resources and vegetation
- describe the ways in which regional and ethnic cultures may influence the everyday lives of people
- explain how money makes it easier to trade, borrow and save

Novice Students (SS)

- make a sequential outline of specific events
- form a simple organisation of key ideas related to a topic
- compare the reasons various immigrant groups had for migrating to Bermuda
- describe ways in which local cultures may influence the everyday lives of people
- define and give examples of the terms “private and public goods and services” and a “market”

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