



Government of Bermuda
Ministry of Education

BERMUDA DEPARTMENT OF EDUCATION

THE OFFICE OF CURRICULUM & ASSESSMENT

ACHIEVEMENT LEVEL DESCRIPTORS (ALDs)

PRIMARY FIVE (P5)

APRIL 2009

BERMUDA P5 ACHIEVEMENT LEVEL DESCRIPTORS (ALDs)

BERMUDA P5 ACHIEVEMENT LEVEL DESCRIPTORS (ALDs)

Table of Contents

BACKGROUND	5
ACKNOWLEDGEMENTS	5
FREQUENTLY ASKED QUESTIONS	6
ENGLISH LANGUAGE ARTS	7
Advanced Students (EL)	8
Proficient Students (EL)	8
Partially Proficient Students (EL)	9
Novice Students (EL)	9
MATHEMATICS	11
Advanced Students (MT)	12
Proficient Students (MT)	12
Partially Proficient Students (MT)	12
Novice Students (MT)	13
SCIENCE	15
Advanced Students (SC)	16
Proficient Students (SC)	16
Partially Proficient Students (SC)	17
Novice Students (SC)	17
SOCIAL STUDIES	19
Advanced Students (SS)	20
Proficient Students (SS)	20
Partially Proficient Students (SS)	21
Novice Students (SS)	21



BERMUDA P5 ACHIEVEMENT LEVEL DESCRIPTORS (ALDs)

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:

English Language Arts

Donna Kelley
Dr. Andrea Lightbourne
(*Education Officers*)

Denise Booth
Tamicia Darrell
Charisa Lowe
Sharilyn Shabazz
Terry Cox
Darlene Johnston
Elizabeth Scott
Gail Smith
Dr. E. Glenn Bascome
Helen Paynter
Joanne Rego
Kennita Smith
Janelle Holford
Steve Smith
Romain Khan

Mathematics

Marva Allen
(*Education Officer*)

Da'Shawn Doars
Diane Hunt
Gail Williams
Idonia Beckles
O'Shandah Lightbourne
Kristi Foggo
Angela Tota-Francis
Keisha Allen-Smith
Kelly Burgess
Stephen Coddington
Tossha DeGraff
Chardonnai DeSilva
St. Garfield Hall
Rebeka Matthews
Gina Monroe
Robert Steede

Science

Joan Blades
(*Education Officer*)

Kimberly Creighton
Beverly Monk
Rondelle Richardson
Kathy Smith
Cidalia Soares-Cann
Crystal Lucas
Winsome Place
Alika Smith
Kenneth Cobham
Kalley Baxter-Williams
Lisa Siese
Beth-Jewel Holdipp
Carol Burrows
Lisa Hyacinth-Logie
Christopher Swan

Social Studies

Leona Scott
(*Education Officer*)

Patricia Callender
Cecily Richardson
Gladstone Thompson
Marlene Warren
Carlton Johnson
Fikrte Ming
Candace Seymour
Dianne Simmons
Clarence Dill
Shequita Parson
Joseph Ratteray
Cherona Talbot
Lisa DeSilva
Nicole Grant
Jane Hall
Stephen Lister

Kalreta Conyers-Steede
(*Acting Senior Education Officer, Curriculum & Assessment*)



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)

- make predictions/inferences/draw conclusions
- make/support assertions with textual evidence
- demonstrate ability to detect bias/interpret details in/from the text
- identify characteristics of poetry (structure/word choice)
- explain how characteristics contribute to poem's meaning
- identify/explain effect of author's word choice
- use a comma in a compound sentence, identify special usage of double negatives
- combine sentences by incorporating strategies using independent/dependent clauses/sequencing of ideas
- compose a short story with well-developed characters
- use appropriate strategies to develop plot
- demonstrate strong organisational structure/control of conventions
/grammar

Proficient Students (EL)

- identify high frequency words, understand affixes/new words/words in context
- apply conventional sentence structure
- locate information in references
- identify theme, main idea, cause/effect, facts/details, steps in a process, author's position/purpose/point of view, story elements, literary devices, non-fiction/poetry characteristics
- summarise information
- make connections
- make/support inferences
- interpret details
- use apostrophes in contractions/possessives, subject-verb agreement, appropriate tenses/parts of speech/adjective forms, correct spelling
- use double negatives correctly
- identify subject/predicate in complete sentences
- develop plot
- create organisational structure
- provide closure

Partially Proficient Students (EL)

- use context clues/double meanings
- identify details, cause/effect, sequence of events
- compare author's observations
- determine author's purpose
- distinguish fact/opinion
- make connections about Bermudian culture/life
- follow directions/instructions in a complex text
- identify/explain character motivations/traits, elements of drama and their contributions to the meaning of the play
- recognise themes, literary devices (onomatopoeia/sensory details)
- capitalise proper nouns/book titles/business letter parts/ /quotations/ periods after abbreviations
- use periods/question marks/periods after abbreviations
- compose short story with character(s)/setting/plot/movement through time/change

Novice Students (EL)

- draw conclusions about characters, settings and events in context
- identify the meaning of multiple meaning words in simple texts
- recognize high frequency/transitional words
- use text structure to retrieve information
- identify the main idea or key ideas in an informational text
- complete an outline of key events in an informational text
- identify a list of sources of information on a given topic
- identify the main characteristics of fiction (e.g. movement through time, imaginative elements) present in a literary work
- punctuate using commas with items in a series
- creates a story using appropriate story elements

BERMUDA P5 ACHIEVEMENT LEVEL DESCRIPTORS (ALDs)

PLANNING NOTES

This section is a large yellow rectangular area designed for planning notes. It contains 25 horizontal lines for writing. A faint watermark of the Bermuda coat of arms is visible in the background, featuring a shield with a ship, a lion, and a unicorn, with the motto 'BERMUDA' at the bottom.

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, (up to two decimal places)
- check results/determine reasonableness of solutions
- add/subtract fractions w/unlike denominators
- multiply decimal fractions
- apply relative magnitude/relationship among whole numbers/fractions/decimals/mixed numbers
- use fractions in proportions
- show how change in a variable affects a second variable
- visualise/describe results of combining geometric solids
- reflect/translate plane figures
- convert units within a system
- determine relationship between perimeter/area of a rectangle
- solve problems using tables/charts/graphs
- propose/justify data-based conclusions
identify outcomes of probability experiments

Proficient Students (MT)

- multiply 3-digit by 2-digit number
- round to integer
- solve problems w/operations
- know/use inverse relationship (add/subtract)
- add/subtract/multiply fractions w/unlike denominators
- use decimals in proportions
- model/describe patterns
- model/solve multiplication/division equations
- model/solve problem w/objects/tables
- identify quadrilaterals/straight/obtuse angles
- describe symmetry/reflections/translations/congruency
- solve problems w/geometric figures/congruency
- draw/classify polygons
- locate/plot w/cardinal directions
- find perimeter/area (rectangle)
- tell time to the minute
- compare graphs of data set
- analyse/interpret graphs
- solve problems w/data
- list probability experiment outcomes

Partially Proficient Students (MT)

- compare/order whole numbers/identify place value up to 100,000
- multiply 2-digit by 2-digit numbers
- apply properties of 0/1
- add/subtract fractions w/like denominators
- multiply fractions
- add/subtract decimal fractions
- solve problems using multiplication
- create/extend geometric/numeric patterns
- represent numerical situations w/symbols
- solve addition/subtraction equations
- name/classify solids
- identify parallel/perpendicular lines/symmetry/congruency/translations
- plot on maps w/cardinal directions
- identify tools to measure length/perimeter/weight/time/temperature
- find perimeter
- tell time to the nearest 5-minute interval
- collect/organise data
- propose data-based conclusions

Novice Students (MT)

- identify numbers up to 5 digits
- know/apply special properties of 0/1
- round whole numbers to nearest 10/100
- know multiplication fractions up to 9×9
- multiply 1- or 2-digit numbers by a 1-digit number
- identify fractions
- add/subtract common fractions w/like denominators
- extend simple geometric/numeric patterns
- identify 2- and 3-dimensional figures
- classify shapes by attributes
- identify parallel/horizontal/vertical lines
- identify cardinal directions (N, S, E, W)
- identify appropriate tools to measure length/weight/time/temperature
- find perimeter of a rectangle
- tell time to the nearest 15-minute interval
- collect data using tallies/tables/bar graphs
- read bar graph

BERMUDA P5 ACHIEVEMENT LEVEL DESCRIPTORS (ALDs)

PLANNING NOTES

A large yellow rectangular area containing horizontal lines for writing. A faint watermark of the Bermuda coat of arms is visible in the background.

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)

- can name some elements and understand they are made of atoms
- can recognise parallel and series circuits and that electricity in circuits can produce magnetism and explain static electricity
- can explain that micro-organisms can be beneficial or harmful
- can explain the impact of weathering on Bermuda's coastline
- can explain how fossils in oceans show evidence of Earth's change over time
- can determine whether an investigation is fair or unfair
- can use facts to support conclusions and understand the importance of scale in models
- can analyse the effectiveness of solutions

Proficient Students (SC)

- understand that matter is made up of tiny parts
- know electrically charged materials attract uncharged material
- understand how magnetism works
- can complete a simple circuit
- classify organisms using charts and simple classification keys
- recognise and give functions of basic plant and animal cell parts
- know that rocks are made of minerals and know some kinds of rocks
- know that fossils are the remains of things from long ago
- know when observations should be repeated
- understand fact versus opinion
- describe cause and effect relationships, make predictions based on data, and use patterns to draw conclusions
- can explain some consequences of developing new products

Partially Proficient Students (SC)

- have a basic understanding of electricity and circuits/ how to separate some mixtures/ that magnets have north and south poles and how they react to each other
- know that living things are made of cells, compare animal and plant cells, and understand basic needs of single celled organisms
- explain natural causes of weathering of rocks
- know that there are different kinds of soils and understand why soil is important
- can match a set-up to an experiment plan
- summarise and organise data with more detail than in the P3/P4 level
- analyse evidence and make conclusions
- develop follow-up questions for an investigation
- can compare fossils to organisms that are alive today

Novice Students (SC)

- recognise attributes of materials
- know materials can be mixed together and separated
- know electricity can make things work
- know magnets can push and pull things
- recognise how living things can be sorted into groups and that they grow, die and decay and are made of cells
- know that fossils found in rocks were living long ago
- know that rocks break naturally and smaller rocks are formed
- distinguish between samples of rocks and soil, and know that limestone is the rock that Bermuda is made of
- plan an investigation and use simple models
- identify science careers and understand that scientific knowledge changes with new discoveries
- understand factors that influence health

BERMUDA P5 ACHIEVEMENT LEVEL DESCRIPTORS (ALDs)

PLANNING NOTES

This section is a large yellow rectangular area designed for planning notes. It contains 25 horizontal lines for writing. A faint watermark of the Bermuda coat of arms is visible in the background, featuring a shield with a ship, a lion, and a unicorn, with the motto 'BERMUDA' at the bottom.

Bermuda Public School System Performance Standards

Social Studies (SS)

History (H)

Geography (G)

Civics (C)

Economics (E)

Social Studies (SS)

Advanced Students (SS)

- explain the relationship between events
- analyse primary and secondary sources
- make inferences and identify relevant information regarding Bermuda's model of democracy
- explain how Bermuda's communities are linked politically
- adopt new behaviour (e.g., reduce, repair and recycle) to preserve good living standards
- describe how controversies can be resolved in Bermuda's Parliamentary democracy
- describe how political systems define and protect individual human rights
- identify major players in various economic activities
- use examples to illustrate, describe and explain global economic interdependence and competition which influences national and international policies

Proficient Students (SS)

- create, use and interpret a tiered timeline or other graphic to explain the sequence and relationship of events
- use primary and secondary sources
- distinguish between fact and opinion
- draw inferences
- compare the population, climate, vegetation and resources of Bermuda to another country
- explain economic, political and cultural issues regarding the journey of the Sea Venture and how people in Bermuda have adapted to and changed the environment over time
- describe how people can prevent future problems
- explain the purpose of government and the roles and responsibilities of the governor, premier and legislature
- explain how goods and services in Bermuda have changed over time

Partially Proficient Students (SS)

- explain the sequence and relationship of events
- use information in graphs and charts to show change over time
- recognise and understand a number of social terms
- organise key ideas about a topic
- understand the difference between fact and opinion
- interrelate each of the seven continents (e.g., people and culture)
- use cardinal and intermediate directions, latitude and longitude to locate places
- understand how resources influence economic activity
- demonstrate how people can work together to solve environmental problems
- compare and contrast a community with and without rules
- identify points of view on economic issues such as unemployment, inflation, taxation and poverty

Novice Students (SS)

- use timelines
- use a graphic organiser to explain the sequence of events relating to the journey of the Sea Venture
- identify the seven continents
- describe a community without rules
- understand how individuals and groups influence each other using different forms of technology

BERMUDA P5 ACHIEVEMENT LEVEL DESCRIPTORS (ALDs)

PLANNING NOTES

A large yellow rectangular area containing horizontal lines for writing. A faint watermark of the Bermuda coat of arms is visible in the background.

BERMUDA P5 ACHIEVEMENT LEVEL DESCRIPTORS (ALDs)



Government of Bermuda
Ministry of Education

Bermuda Department of Education
Curriculum & Assessment
P. O. Box HM 1185
Hamilton HM EX
BERMUDA

Tel: 441-292-3507

Website: <http://www.moed.bm>

April 2009