



Government of Bermuda
Ministry of Education

BERMUDA DEPARTMENT OF EDUCATION

THE OFFICE OF CURRICULUM & ASSESSMENT

ACHIEVEMENT LEVEL DESCRIPTORS (ALDs)

MIDDLE ONE (M1)

APRIL 2009

BERMUDA M1 ACHIEVEMENT LEVEL DESCRIPTORS (*ALDs*)

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BERMUDA M1 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:

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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 context clues to determine meaning
- interpret author's stance/purpose to make inferences
- compare/contrast themes, characters
- identify persuasive techniques
- examine assertions
- distinguish defining text features
- identify effect of literary devices/author's word choice in challenging texts
- determine literary elements that contribute to style
- vary sentence types for reader interest
- correctly use homonyms
- show attention to audience interest by creating plot using appropriate strategies
- describe and illustrate how common themes are found across texts from different cultures
- use underlying structures to present different kinds of information (sequence, compare/contrast, problem/solution, cause/effect)
- use language to show feelings of characters or to elicit feelings from readers
- extend ideas by providing facts/illustrations and/or state opinions to support point of view
- interpret use of figurative language in literary text and analyze literary elements (setting, plot, characters, conflict, theme and point of view)
- discuss how point of view affects reader
- organize the information to fit the purpose of the piece (persuasive, entertaining, informative)

Proficient Students (EL)

- identify main idea, key details, author's purpose/stance, sequence, cause/effect, fact/opinion, character motivation, elements of literature
- make connections between self, text and world
- organize text appropriately as narrative or informational piece
- use a variety of forms of figurative language (alliteration, hyperbole, personification)
- support ideas with facts and details and state opinions to support point of view
- provides evidence of understanding complex plots in multiple events/characters
- understand main idea and purpose implied by text
- write inferences as to character's traits, motivations and decisions
- analyze text to reveal insight into writer's craft
- specify genre and demonstrate use of genre characteristics
- use specific vocabulary to write about text
- make/support opinions about text
- compare types of characters
- summarise
- make connections between print/non-print text and to text about Bermudian life/culture
- combine sentences using dependent/independent clauses, sequencing of ideas
- distinguish complete sentences from fragments/run-ons
- use subject-verb agreement, pronoun/antecedent agreement, capitalization, tenses and parts of speech
- compose a memoir that shows reflection, change and closure

BERMUDA M1 ACHIEVEMENT LEVEL DESCRIPTORS (*ALDs*)

Partially Proficient Students (EL)

- use word parts to derive meaning
- use knowledge of prefixes, suffixes and roots to derive meanings of words
- distinguish between multiple meanings of words when reading texts
- use context of the sentence, paragraph of text to help determine precise meaning of a word
- recognize and discuss cultural/historical perspectives
- make a wide range of predictions using information as evidence from the text
- support thinking beyond the text
- identify/summarize the major events in a narrative
- draw conclusions
- form implicit questions and search for answers in text
- use multiple sources to gather information
- use structure of non-narrative with facts and information ordered in a logical way
- use structure of narrative-characters involved in a plot with events ordered by time
- communicate main points and supports with examples/illustrations
- use a variety of sentence structures and lengths
- use figurative language to make comparisons
- establish point of view
- restate/summarise
- compare and contrast
- combine sentences using coordination, subordination, sequencing of ideas
- create text showing flow of ideas with a clear message

Novice Students (EL)

- recognise high frequency words and relate them to other words in text in order to create meaning of text
- acquire new knowledge and perspectives through reading both fiction and non-fiction texts about diverse cultures, times and places
- use words in figurative ways to compare
- learn new words and meanings in context
- make connections between plays and narratives
- understand and discuss main and supporting characters
- make connections to self, text and world
- clearly communicate main points
- engage the reader using a variety of ways
- use concrete sensory details and descriptive language
- indicate the structure of text
- use a range of sentence types and write complex sentences
- use correct verb agreement
- identify all parts of speech
- write sentences in all tenses
- use paragraph structure to organize sentences
- create narrative and non-narrative texts using all the elements of story

BERMUDA M1 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)

- demonstrate an understanding that positive and negative numbers are at an equal distance from zero on a number line
- apply the concept of negative numbers
- solve percent problems
- model/solve problems set in their natural context using representations such as patterns, graphs, tables and equation
- use the properties of 2- and 3- dimensional shapes to solve mathematical and real-world problems
- identify flat patterns (nets) that represent rectangular prisms
- determine relationships amongst length, area and volume
- solve problems using measurement tools and concepts
- solve simple probability problems and demonstrate understanding of the ways probabilities can be represented

Proficient Students (MT)

- apply number theory concepts
- apply the four operations with whole numbers and fractions
- order/represent rational numbers/convert to fractions/terminating decimals
- compare fractions/decimals/percents with proportions
- graph positive ordered pairs
- apply function concepts
- use/solve problems with patterns/graphs/tables/equations
- classify/describe planes/solids
- estimate/measure/classify angles
- apply sum of angles of a triangle
- predict/describe results of reflections/rotations
- select appropriate tools/units to measure w/precision
- convert units
- calculate perimeter/area of regular polygons/volume of cuboids
- find elapsed time
- create/read/interpret data
- create/select data displays
- find probability

Partially Proficient Students (MT)

- apply number theory concepts in real life situations
- solve problems using all four operations/order of operations
- order/translate between fractions/decimals
- find percentage of a quantity
- analyse patterns to solve problems
- solve problems using tables/simple equations
- describe planes/solids according to their attributes
- classify/estimate size of angles
- describe results of a reflection on a coordinate grid
- select appropriate measuring tools/units
- convert units of length within the same measurement system
- calculate area of a rectangle/volume of a cuboid
- determine elapsed time
- interpret data from bar graphs/pie charts
- determine probability of simple experiments

Novice Students (MT)

- decompose/compose numbers
- compute/solve problem using all four operations
- order whole numbers/unit fractions/decimal to the 100s place on a number line
- identify factors/multiples/odd numbers
- extend numeric/geometric patterns
- solve/explain solutions of equations
- estimate angle size compared with benchmark angles
- identify lines/angles/polygons
- reflect/rotate/translate shapes
- plot points on a map
- accurately use a straight angle ruler
- find perimeter/area of rectangles/squares
- determine elapsed time using quarter intervals
- read/collect/organise data
- state outcome of simple experiments

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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 basis for classifying substances as elements/compounds/mixtures
- understand frictional force
- explain difference of weight on Earth/moon
- use more complex classification keys
- explain effects of adaptations on an organism's survival
- interpret complex food webs
- use/explain model of moon phases
- explain sun-planet orbit-distance relationship
- recognise when additional observations are needed
- use a range of apparatus with increasing precision
- support conclusions with experimental evidence
- suggest further investigations
- recognise contributions made to the advancement of science by technology/mathematics/different people in different cultures at different times

Proficient Students (SC)

- understand concepts of density/gravitational force/mass and weight/energy conversions
- explain force and motion relationship
- perform calculations when given formula
- explain why moon/planets stay in orbit
- use simple classification keys
- explain importance of classifying living things
- name endemic/introduced/invasive organisms
- explain interdependence of organisms
- interpret simple food webs
- compare/contrast renewable and non-renewable resources
- plan investigations
- predict outcomes
- explain patterns
- read/create/interpret bar/line/circle graphs
- recognise/analyse risks of undesirable consequences
- explain significance of discoveries of micro-organisms/bacteria/viruses to humans

Partially Proficient Students (SC)

- understand concepts of mixtures/weight/friction/micro-organisms/ conservation of matter/energy
- name elements/compounds/forms of energy/six kingdoms
- understand decomposition/recycling of material/digestion/competition/basic roles of producer/consumer/decomposer
- recognise importance of artificial satellites
- know planets/moon are seen by reflected light
- order moon phases
- recognise impact of human decisions on Earth's land/oceans/atmosphere, of which Bermuda is especially unique and vulnerable
- read analogue/digital meters
- know science helps health technologies
- identify desirable/undesirable consequences of development of new products/systems

Novice Students (SC)

- know states of matter/phase changes
- understand force and motion
- know cells are building blocks of organisms
- classify organisms into animal/plant kingdoms
- know how Bermuda organisms reached here
- know plant/animal needs for survival
- draw/interpret food chains/simple food webs including local examples
- have a basic understanding of the solar system/galaxies/space technology
- know effects of ocean activity on Bermuda
- have a limited understanding of investigative techniques (selection of question/steps/tools, need for fair test, record data, draw conclusions)
- recognise patterns in data
- recognise natural/artificial things
- explain how behaviours/substances influence 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)

- analyse primary data sources (artefacts) to formulate solutions for cultures in conflict
- show how the behaviours of explorers have impacted on global systems
- analyse how physical features influence cultural patterns
- evaluate the influence of the origins of laws on modern laws
- recognise the impact early civilisations had on modern economies

Proficient Students (SS)

- create timelines to show development of civilisations and relationships
- explain how early humans lived
- demonstrate and identify patterns of change
- explain how physical features affect cultural patterns
- understand the relationships between the location of resources, population, and commercial distribution patterns
- identify and examine the justification and use of governmental powers in major civilizations
- examine the similarities and differences between early civilisations' economies and modern economies

Partially Proficient Students (SS)

- identify key sources to find information on ancient civilisations
- compare and contrast the practices and beliefs of two different civilisations
- demonstrate knowledge of relative location
- distinguish between a mental map and a scaled map
- demonstrate how to use a map scale
- identify and examine the various methods used to acquire governmental power
- identify types of economic exchange used in early civilisations

Novice Students (SS)

- distinguish between fact and fiction of early civilisations
- define and use key terms about ancient civilisations
- apply growth and development concepts to Bermuda
- describe various beliefs about human origins
- locate and distinguish various landforms and geographic features using maps and photographs
- explain the origins of Bermuda and its fluctuation in size
- understand the origins of laws
- understand the term economic exchange and why it takes

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April 2009