

Ranah Afektif

Pengertian

- Ranah afektif merupakan ranah atau hal-hal yang berkaitan dengan sikap (attitude) sebagai manifestasi dari minat (interest), motivasi (motivation), kecemasan (anxiety), apresiasi perasaan (emotional appreciation) , penyesuaian diri (self adjustment), bakat (aptitude), dan lain-lain.

Bell (1978) membagi tujuan afektif ke dalam:

Receiving:

1. Awareness (kesadaran)
2. Willingness to receive (kesediaan untuk menerima)
3. Controlled or selected attention (kontrol atau pemilihan perhatian)

Responding:

1. Acquiescence in responding (kesetujuan dalam jawaban)
2. Willingness to respond (kesediaan untuk menjawab)
3. Satisfaction in responding (kepuasan dalam jawaban)

Valuing :

1. Accepting a value
2. Preferring a value
3. Commitment to a value

Organization:

1. Conceptualization of a value
2. Organization of a system of value

Characterization by a value or value complex:

1. Generalized set
2. Characterization

Receiving

Objectives

Awareness

1. Student will identify the influence of science and scientist upon the development of mathematics
2. Students will identify women mathematicians and their contributions to development of mathematics

Willingness to receiving

1. Students will describe the importance of learning about complex numbers
2. Students will accept the fact that women, as well as men, should have the opportunity to become mathematicians

Measure

1. Who were some scientist who developed new ideas in mathematicians to help them in the scientist work?
 2. Name three great women mathematicians and tell what were their contributions to mathematics
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1. Why do we need complex numbers in mathematics? What are some uses of complex numbers in the science?
 2. Do you think that it is proper for women to work industry as mathematicians? Why?

Controlled or selected attentions

1. Students will express a preference for one or two methods for solving a class of problems.
2. Students will listen for the correct pronunciations of mathematical terms

1. Which method for solving systems of linear equations do you prefer-elimination or substitution?
2. How is this word pronounced-RADIAN?

Responding

Objectives

Acquiescence in responding

1. Students will hand in completed homework assignments on time.
2. Students will attempt to solve at the chalkboard.
3. Students will not talk in class when another student is speaking

Measures

1. An assignment is given and students return it to the teacher when it is due.
2. Students go to the chalkboard when asked to do so by the teacher.
3. Students speak only when recognized by the teacher

Responding (continued)

Willingness to respond

1. Students will volunteer to answer questions in class.
 2. Student will assist other students in learning skills and concepts.
 3. Students will attempt to solve problems the textbook which are not assigned by the teacher
1. When the teacher asks a question, students raise their hands.
 2. Students work together in small groups and explain ideas and procedures to each other.
 3. Students ask the teacher to check their solutions to problems that were not assigned

Responding (continued)

Satisfaction in responding

1. Students will enjoy playing mathematical games.
 2. Students will enjoy finding examples of applications of mathematics
 3. Students will enjoy using the metric system of measurement.
1. Students make up games in arithmetic and ask the teacher to permit them to play the games in class.
 2. Students voluntarily look for examples of consumer mathematics problems in magazines and bring their examples to class.
 3. Students bring labels from grocery store items, which are marked in metric units, to class and show them to each other and the teacher. Students purchase metric measuring devices

Valuing

Objectives

Acceptance of a value

1. Students will accept the value of learning arithmetic
2. Students will accept the values of organization and neatness as appropriate in solving mathematics problems.
3. Students will value respect and consideration for other people's mathematical hypothesis and argument

Measuring

1. Students attend all class sessions, ask questions in class, and attempt to complete all homework assignment.
2. Students complete homework assignments that are neat and well organized.
3. Student show respect for the conjectures and opinions of other students and do not ridicule or attempt to embarrass slower students.

Valuing (continued)

Preference for a value

1. Students will exhibit a preference for learning mathematics.
 2. Students will show consideration for slower students.
 3. Students will value the roles of people of various nationalities in the development of mathematics
1. Students elect advanced mathematics course, participate in mathematics clubs, and seek out challenge problems in mathematics.
 2. Students invite slower students to work with them on group activities in class, assist slower students in completing homework assignments, and help slower students prepare for test .
 3. Students select and read history of mathematics books and biographies of well-known mathematicians contributions of various nations.

Valuing (continued)

Commitment to a value

1. Certain students will commit themselves to study of mathematics.
 2. On the negative side, certain students will value attention from their classmates to such an extent that their efforts to gain attention may interfere with the teaching and learning in the classroom.
1. These students will enter mathematics contest, will spend much of their free time in mathematics pursuits, or will major mathematics in college.
 2. Some discipline problems and lack of interest in mathematics are due to students commitments to values which interfere with the development of more acceptable.

Organization

Objectives

Conceptualization of a value

1. Students will attempt to identify the logical structure of mathematics.
2. Students will determine the basic assumptions underlying the structure of the real number system.
3. Students will evaluate their own standards and goals through reading the biography of great mathematicians

Measures

1. Students will conduct a discussion on the nature of proof and the logical foundations of mathematics and will explain their value in the development of mathematics.
2. Students will discuss the assumptions underlying the structure of the real number system and will explain the value these assumptions.
3. Students will discuss their own goals and standards and compare them to those of a famous mathematicians

Organization (continued)

Organization of a system of value

1. Students will compare the social policies and practices regarding the role of women in mathematics throughout history to the social policies and practices regarding women in mathematics study.
 2. Students will judge the contributions to mathematics which have been made by people various national origin.
 3. Students will form judge regarding the positive and negative effects of mathematical and scientific progress upon society.
1. Success in meeting this objective can be measured through a reading assignment on the history of mathematics followed by a class discussion.
 2. Reading assignments in the history of mathematics followed by a class discussion can be used to assess success in meeting this objective.
 3. Students performance can be measured on this affective objective by asking them to write a paper discussing the effects of scientific progress upon society

Characterization by a value or value complex

Objectives

Generalized set:

1. Students will readily their judgments and behaviors when presented with new evidence about the foundations of mathematics and the nature of proof.
2. Students are willing to accept conclusions which can be drawn logically from sets of axioms and hypotheses.
3. students are confident of their ability to succeed in learning mathematics

Measured

1. Students accept axioms as a basis for mathematical system and accept and use proof by mathematical induction an proof by contradiction
2. Students revise their intuitive opinions and conjectures concerning mathematical “truths” when presented with contradictory “truths” that can be demonstrated to be valid using accepted methods of proof.
3. Students exhibit positive attitudes in mathematics classes and exert substantial effort toward knowing and comprehending mathematical concepts and principles

Characterization by a value or value complex (continued)

Characterization:

1. Students will develop a consistent philosophy of life.
 2. Students will develop the ability to consistently recognize right and wrong actions and will develop a conscience.
1. Progress toward this objective can best be measured through perceptive observations of students over a long period of time
 2. This objective is difficult to measure directly and students' progress toward developing a conscience must be observe over a considerable period of time

Daerah Psikomotor

- Berkaitan dengan “motor”, sensory motor” atau “perceptual motor”, jadi berkaitan dengan kerja otot.
- Anita Harrow mengklasifikasikan mulai dari gerakan sederhana sampai pada gerakan yang kompleks, yaitu gerakan refleks, gerakan dasar, gerakan ketrampilan, dan gerakan komunikasi.
- Gerakan tersebut tidak terpisah satu sama lain, bersamaan atau berurutan

Taksonomi Lainnya

- The National Longitudinal Study of Mathematical Ability (NLSMA) :
 1. Knowledge or facts
 2. Computation
 3. Comprehension
 4. Application
 5. Analysis
- Komputasi merupakan ketrampilan khusus yang tidak mempunyai tempat pada taksi Bloom.
- Syntesis dan evaluation hanya sedikit mempunyai peranan dalam kurikulum matematika

Contoh penilaian ketrampilan

Nama :

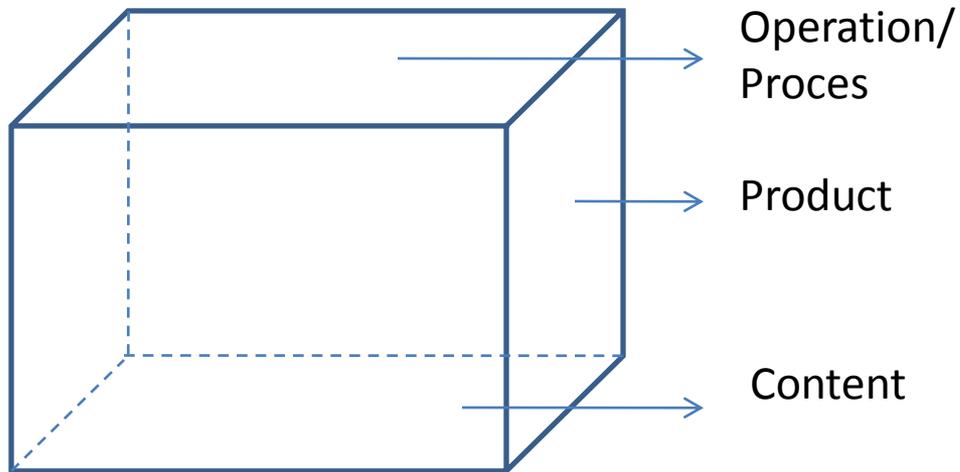
NIM/S:

Kelas :

Materi :

No	Aspek Ketrampilan	Skor				
		0	1	2	3	4
1	Cara menggunakan Jangka					
2	Cara Menggunakan mistar					
3	Sistematika Gambar					
4	Kerapihan Gambar					
Skor						
Rata-rat						

- Guilford dengan kubus intelektual



- Gagne dan Merrill mengemukakan 8 hierarki tingkah laku:
 1. Signal learning
 2. Stimulus-respond learning
 3. Chaining
 4. Verbal association
 5. Discrimination learning
 6. Concept learning
 7. Rule learning
 8. Problem Solving

- Garlach dan Sullivan beranggapan bahwa taksonomi Bloom mempunyai kegunaan yang terbatas sebagai alat untuk perencanaan dan pengembangan kurikulum. Mereka menggantinya menjadi:
 1. Identify
 2. Naming
 3. Describe
 4. Construct
 5. Order
 6. Demosntrate

- De Block : Taksonomi Bloom lebih dilhami oleh masalah evaluasi. Block mengemukakan model yang didasarkan pada tujuan mengajar:
 1. From partial to more integral learning
 2. From limited to fundamental learning
 3. From special to general learning