

LEARNING APPROACHES – SURFACE, DEEP & STRATEGIC

1. Learning is an active process of transformation of ideas, translation of meaning and formations of attitudes, skills and values
2. There are 3 approaches of learning:
 - Surface learning
 - According to Marton (1975) surface level is
 - Try to memorize those parts of the article which they think they might be questioned on.
 - If you are interested in directly observing life below the water's surface, you would have a few options from which to choose to accomplish this objective. Snorkeling is one option. Snorkeling does not require extensive training and most people have enough basic skill to master this technique rather easily. However, your movement is restricted to the surface of the water, precluding direct contact with aquatic life beyond arm's reach. Your perceptions are limited to visual observations that may result in incomplete information about habitat, food sources or swimming patterns of aquatic life.
 - Surface learning consists mainly of comprehension and reproducing knowledge (rote learning) which is often forgotten by students shortly after the course has ended.
 - Surface learner are extrinsically motivated
 - Those students typically motivated by grades wanting only to know what to study for the next test.
 - As educator we might think of our students as either snorkeler or scuba diver. Some students are content to learn as little as they can about a subject area in order to get by (pass) and fulfill the requirements of the class. These are the

snorkelers or surface learners who are motivated by externals such as passing an examination test. The surface learners restrict the depth of their learning to the first two or three levels of taxonomy (Bloom's Taxonomy) i.e. knowledge, comprehension & application.

- It is difficult to get these students engaged in the learning process beyond these levels
- Deep learning
 - According to Marton (1975) deep level is
 - Active search for meaning
 - A greater freedom of movement is gained through the second technique – scuba diving. With this technique, you are able to gain a deeper appreciation for life underwater through exploration deep below the surface. Additional information about aquatic life is accessible to the scuba driver. Since movement is not restricted to the surface, a more complete understanding of habitat, food resources or swimming patterns can be obtained through use of this technique. However, scuba diving is more difficult to master than snorkeling.
 - It requires a greater investment of time and energy which can discourage many from learning this technique.
 - Deep learning requires higher order cognitive thinking skills such as analysis (i.e. compare, contrast) and synthesis (students are required to integrate components in to new whole, e.g. what is the relationship...)
 - Deep learners are intrinsically motivated and incorporated new ideas they are learning with existing knowledge and personal experience

- Some students appear to have an insatiable appetite (desire) for information presented in class.
 - They are self-motivated to learn additional information beyond the scope of that presented by the instructor
 - They are the scuba divers, the independent learners or deep learners who really engage in the higher levels of learning such as analysis, synthesis and evaluation (Bloom's Taxonomy)
- A good teacher guides students in the process of learning so that they have an understanding of how to approach the subject and actually learn (a deep learning approach) instead of just memorizing (surface learning).
- Factors promote deep learning:
 - Good teaching
 - Faculty are well prepared and confident
 - Openness to student
 - Faculty are friendly, flexible and helpful
 - Freedom in learning
 - Student have choice in what they study
 - Clear goals and standards
 - Assessment standards, expectation are clearly defined
 - Vocational relevance
 - Course seen as relevant to future careers
 - Social climate
 - Good relations between students (social, academic)
- Dr Knapper offered some instructional methods for promoting deep learning:
 - Encourage faculty/student interaction

- Personalize teaching.
- Develop a rapport with students so that they can begin to relate to you as their instructor, guide friend.
- Remove the barriers to free thought and creativity
- Encourage student/student interaction
 - Develop an environment that promotes a sense of community among the students.
 - Utilize cooperative learning techniques such as group projects or peer tutoring.
 - Establishing study groups early in the semester may also encourage communication among students.
- Use active and interactive teaching methods
 - Case studies are a good example of an active learning strategy that engages groups of students in solving a real life dilemma, thus learning information at the application level of Bloom's taxonomy or beyond
- Make links with what students already know to encourage a sense of structure
 - Students should build upon pre-existing knowledge in order to personally relate to the information. This helps students begin to make sense of new, potentially confusing concepts.
- Allow students input into course goals and methods
 - Students will become more engaged in a course if they feel some sense of ownership in some of the decisions. This might be as simple as

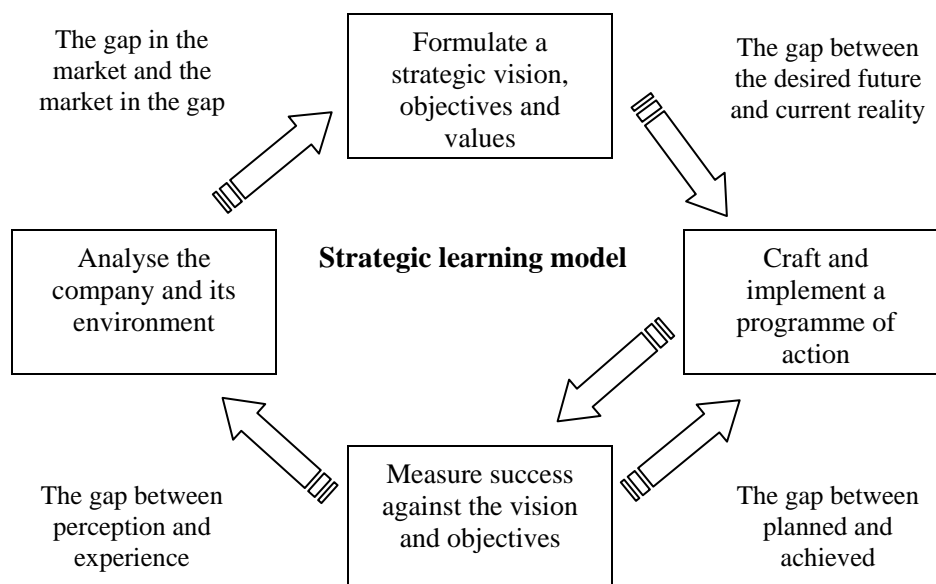
agreeing on dates for an exam or identifying a topic of common interest.

- Discuss teaching/learning skills explicitly
 - Teaching process may be as important to a student's learning as teaching the subject matter of the discipline
 - Student must be taught the process of critical thinking before they can be critical thinkers
 - As educators, we must not simply provide students with the end result but we should include the map of how to get there
- Try to link course topics to student's lives and career goals
 - This provides a necessary aspect of vocational relevance to the students
 - There is often no stronger motivator than to show how information may be relevant to a student's future goals.
- In order to encourage a classroom environment that enhances deeper learning, Dr Knapper suggested the following:
 - Cut down on lecture time and extend time for individual study and projects
 - Formal teaching rather than individual studying tends to inhibit deep learning.
 - Straight lecturing reduces faculty/student and student/student interaction and is counterproductive to encouraging deep learning
 - Weave other teaching techniques within a lecture period

- Ensure a reasonable workload, if necessary by sacrificing content coverage
 - The objective is to promote deeper understanding of the information presented rather than a superficial knowledge of a library of information.
 - Prioritize information into categories of 'need to know' and 'nice to know'. 'nice to know can be sacrificed
- Select appropriate assessment methods when teaching for deep learning
 - Define assessment goals and tasks clearly, and ensure they are congruent
 - Allow choice of assessment tasks
 - Stress tasks that allow time for information gathering depth and reflection (e.g. project vs. exam)
 - Encourage collaborative projects
 - Chose tasks that require integration of information from a range of sources
 - Give full and proactive feedback on labs, assignments and tests
- Strategic learning
 - Strategic teaching & concomitantly, strategic learning are techniques in which significant student-teacher interaction & resultant learning & thinking are at the high end of the scale
 - Strategic teaching describes instructional processes that focus directly on fostering student thinking
 - To give one information is not difficult, but to help one be able to develop the tools to both know what information is

relevant and the means to acquire it, is perhaps the most important function of any social studies teacher

- Strategic learning is learning in which students construct their own meanings, and in the process, become aware of their own thinking. The links between teaching, thinking and learning is critical. As a teacher, if you are not causing you students to think about what you are presenting, discussing, demonstrating, mediating, guiding or directing, then you are not doing an effective job. You must be more than a dispenser of information.
- As teachers, we must strive to assist our students to develop intellectual tools by which they can create knowledge. Any knowledge, once created, becomes a part of a large system that enhances learning.
- The saying “Give a man a fish, and he fed foe a day. Teach a man how to fish, and he is fed for a lifetime,” is at the heart of the thinking about strategic teaching and learning. As a teacher, you must learn “how to fish,” and so must your students.



3. “Anything not understood in more than one way (visual or auditory or reading or kinesthetic learning style) is not understood at all”
4. The more one knows, the more one can know.