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Deep and Surface Approaches to Learning

You Control Your Approach to Learning

Approaches to learning describe what you do when you are learning and why you should do it. The basic distinction is between a *Deep* approach to learning, where you are aiming towards understanding that allows you to use and reuse the information in a variety of situations, and a *Surface* approach to learning, where you are primarily memorizing material for the tests and exams. Deep and Surface approaches are not attributes of individual learners. You may use both approaches at different times, although you may have a preference for one or the other in some circumstances.
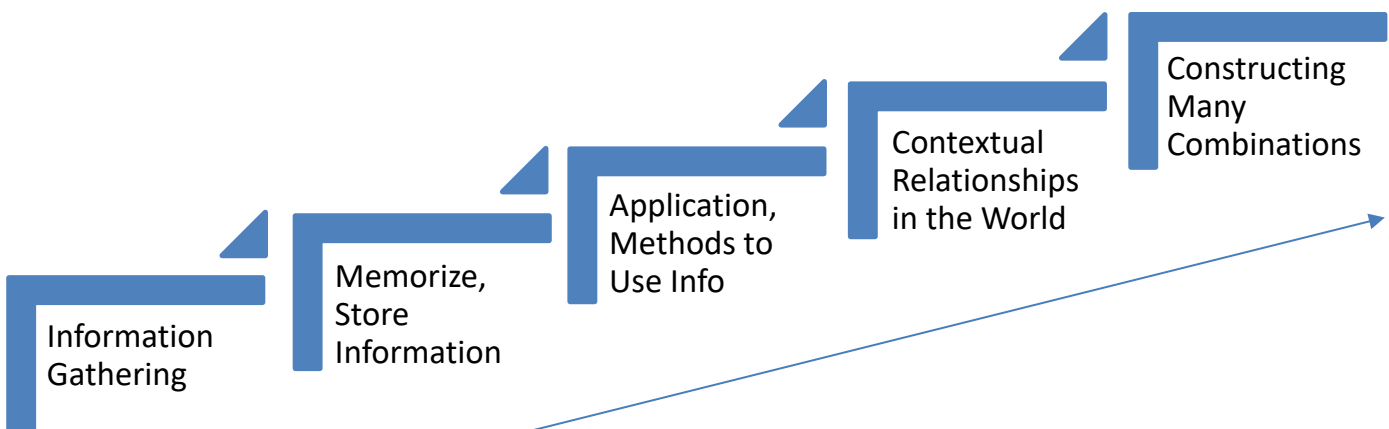
These terms do correlate fairly closely with your motivation: deep with intrinsic (self) motivation and surface with extrinsic (external) motivation, but are not necessarily the same thing. Either approach can be used by a person with either type of motivation.

A surface approach is useful when you are in the early stages of learning a subject as there will always be vocabulary to be acquired along with basic concepts to be learned and practised until they become embedded and reflexive. When you are studying material that you know will be an integral part of your future profession, you will want to concentrate on deeper approaches where the context and connections become more complex and richer over time.

Säljö (1979) describes a series of steps in the process of learning:

1. A quantitative increase in knowledge by acquiring individual pieces of information.
2. Memorizing and storing information that can be reproduced.
3. Acquiring facts, skills, and methods that can be retained and used as necessary.
4. Making sense or abstracting meaning which involves relating parts of the subject matter to each other and to the real world.
5. Understanding and constructing mental maps in different ways involving comprehension of the world by re-interpreting knowledge in numerous combinations.

The trick is not to think that the first three surface steps are all that you need. They are the foundation that you will use to build your deep understanding in Steps 4 and 5 through course activities applied with personal analysis and thoughtfulness.

Information Gathering → Memorize, Store Information → Application, Methods to Use Info → Contextual Relationships in the World → Constructing Many Combinations

Deep and Surface Approaches to Learning

	Deep Learning – work towards incorporating	Surface Learning – use to bridge to deep learning
Definitions	Examining new facts and ideas critically, and tying them into existing cognitive structures and making numerous links between ideas. Knowledge transforming.	Accepting new facts and ideas uncritically and attempting to store them as individual, unconnected, items. Information reproducing.
Characteristics	Looking for meaning. Focusing on the central argument or concepts needed to solve a problem. Interacting actively and critically with content knowledge. Distinguishing between argument and evidence. Making connections between different modules. Relating new and previous knowledge. Linking course content to real life.	Seeing course content as material to be learned for the exam. Vocabulary building relies on memorization. Focusing only on the formulae needed to solve a problem. Receiving information as fact. Not distinguishing principles from examples. Treating modules/chapters and courses as separate. Not yet seeing how new material builds on previous work.
How to Apply	Have an intrinsic curiosity in the subject. Be determined to do well and mentally engaged when doing academic work. Learn the appropriate background knowledge for a sound foundation in the discipline. Positive experience of education leads to confidence in ability to understand and succeed. Intend to understand material for yourself. Critically interact with content knowledge. Relate ideas to your previous knowledge and experience. Discover and use organizing principles to integrate ideas. Relate evidence to conclusions. Examine the logic of arguments.	Issues arise when you stop here: • Study only for individual exams. • Missing the focus on professional applications. • Lacking background knowledge and understanding. • Often not enough time / too high a workload. • Believing that factual recall is all that is required. • Is associated with high anxiety. • Not reflecting on purpose or strategies. • Memorize facts and procedures routinely without looking at context. • Not distinguishing guiding principles or patterns.
(Compiled from Biggs (1999), Entwistle (1988) and Ramsden (1992) and adapted from **http://exchange.ac.uk/learning-and-teaching-theory-guide/deep-and-surface-approaches-learning.html** *)*		

Other references: Säljö R. (1979) *Reports from the Institute of Education*, University of Gothenburg, 76.
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