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Motivational aspects in e-learning: How to engage participants and keep them motivated

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SUCCESS & MOTIVATION are linked!

"There are no secrets to success. It is the result of preparation, hard work, and learning from failure."

– Colin Powell

"The ones who are crazy enough to think they can change the world, are the ones that do."

– Anonymous

All progress takes place outside the comfort zone."

– Michael John Bobak



What is motivation?



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- The study of motivation is the study of *why* people do what they do (Beck, 1978).
- Motivation
 - is what people *desire*, *choose* to do, and *commit* to do (Keller, 2009),
 - can influence what we learn, how we learn and when we choose to learn (Schunk and Usher 2012),
 - is a necessary causal factor of learning, because it mediates learning and is a consequence of learning as well” (Wlodkowski, 1985),
 - ‘engine’ of learning (Paris and Turner, 1994).
- Without the proper motivation for students to engage in the learning experience, e-learning initiatives will be unsuccessful.

Hartnett, M. (2016). *Motivation in online education*. Springer. Smith, R. (2008). Motivational factors in e-learning.

Classification of motivation theories



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- Content (need) theories (Maslow, Alderfer ERG, Herzberg, McClelland)
- Process theories (goal orientation – expectancy, comparison – equity)
- Reinforcement theory (Skinner)

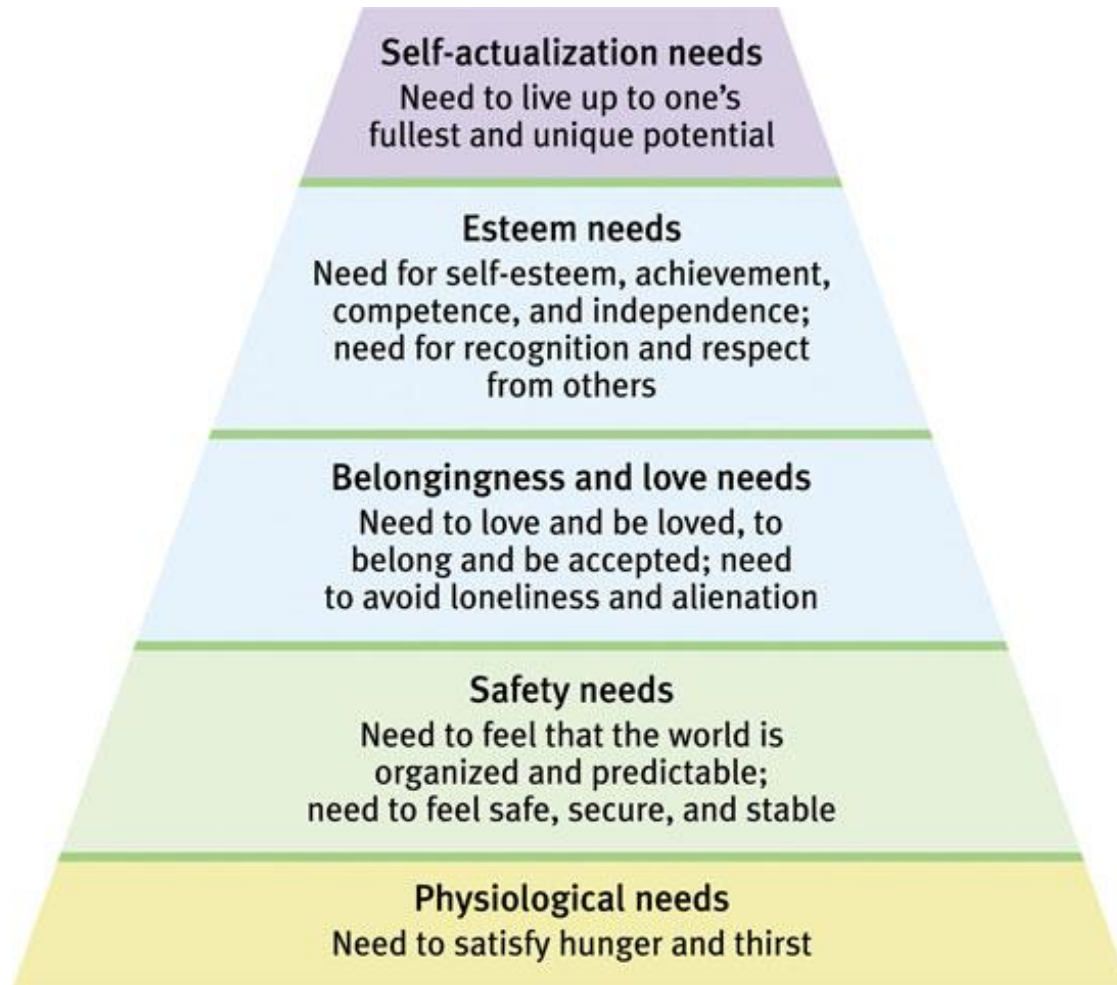
	Content theories	Process theories	Reinforcement theories
Focus	<ul style="list-style-type: none">• Identify the needs that learners want to satisfy• Identify the factors that influence the behaviour of learners	<ul style="list-style-type: none">• The process of goal setting• Evaluation of satisfaction after goals have been achieved	<ul style="list-style-type: none">• Behaviour as a function of its consequences
Theories/models	<ul style="list-style-type: none">• Maslow's hierarchy of needs model• The ERG theory of motivation• Herzberg's two-factor model• Acquired needs theory	<ul style="list-style-type: none">• Equity theory• Expectancy theory	<ul style="list-style-type: none">• Reinforcement theory

Brevis, T., Vrba, M. (2012). Contemporary Management Principles. Chapter 20.4. THE MOTIVATION THEORIES
<https://juta.co.za/print/catalog/Product/1479>

Motivation theories (content/needs): Maslow's Hierarchy of Needs



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Motivation theories (content/needs): Alderfer's Hierarchy of Motivational Needs



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- Clayton **Alderfer** reworked Maslow's Need Hierarchy to align it more closely with empirical research.
- **ERG theory** -- **E**xistence, **R**elatedness, and **G**rowth.
- ERG theory demonstrates that **more than one need may be operative at the same time**. ERG theory **does not assume a rigid hierarchy**.

Level of Need	Definition	Properties
Growth	Impel a person to make creative or productive effects on himself and his environment	Satisfied through using capabilities in engaging problems; creates a greater sense of wholeness and fullness as a human being
Relatedness	Involve relationships with significant others	Satisfied by mutually sharing thoughts and feelings; acceptance, confirmation, understanding, and influence are elements
Existence	Includes all of the various forms of material and psychological desires	When divided among people one person's gain is another's loss if resources are limited

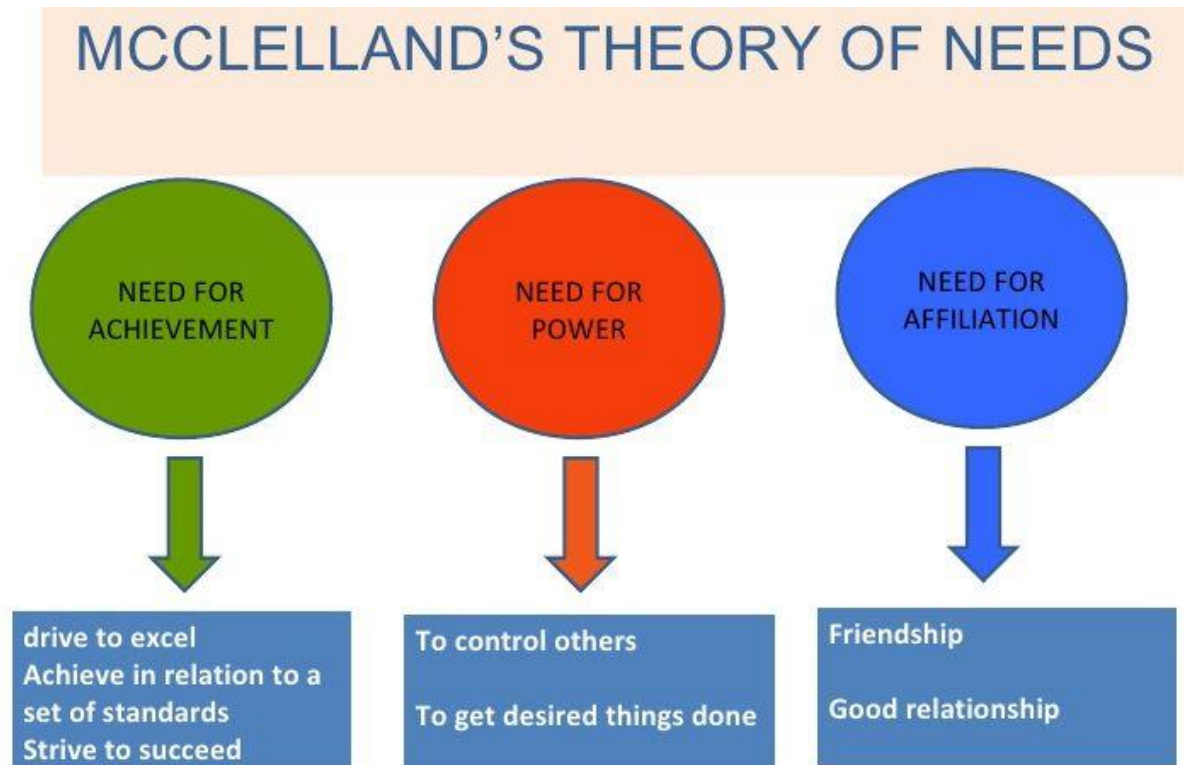
Motivation theories (content/needs):

McClelland's Theory of Needs:



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- According to David McClelland, regardless of culture or gender, people are driven by three motives:
 - achievement,
 - Influence/power
 - affiliation.

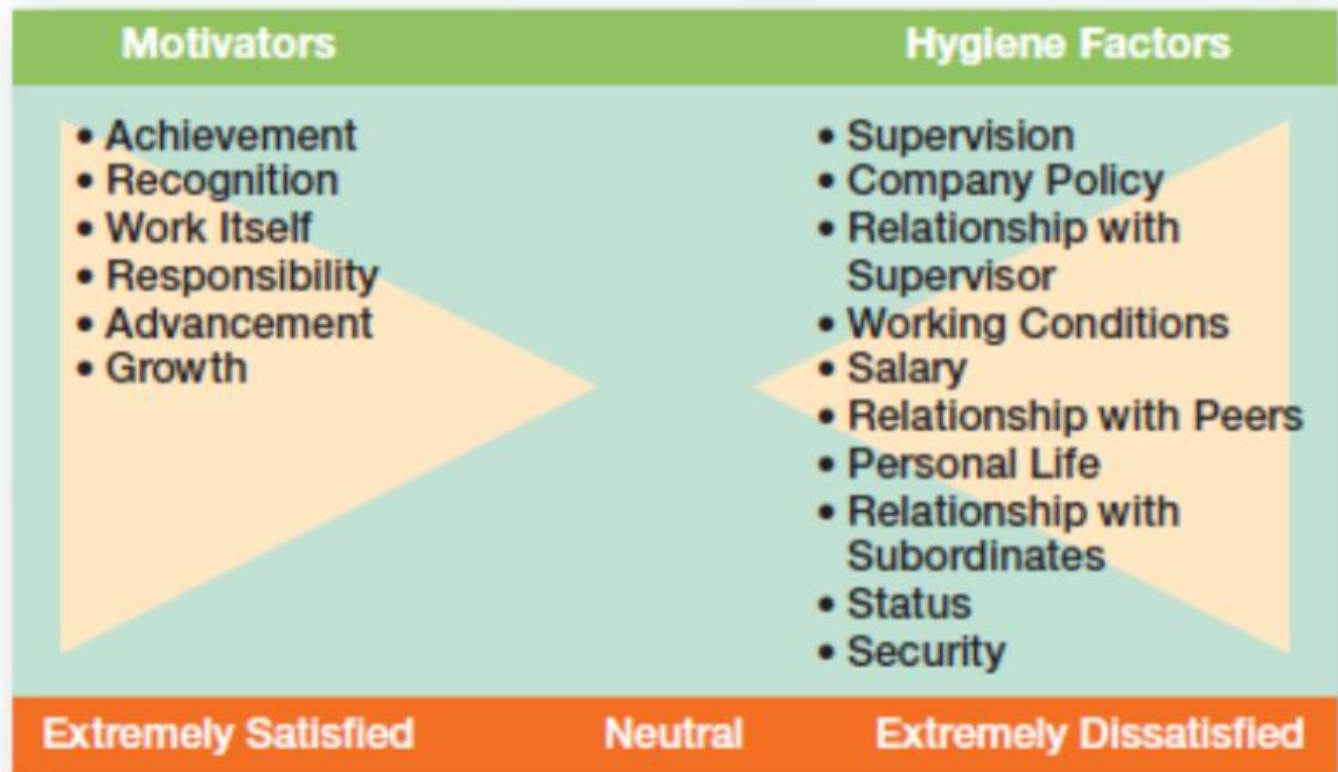


Motivation theories (content/needs): Herzberg Motivation/Hygiene Theory



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- the motivating (internal) factors meet the self-actualization needs
- hygiene factors covering the process of getting the job done (external factors)



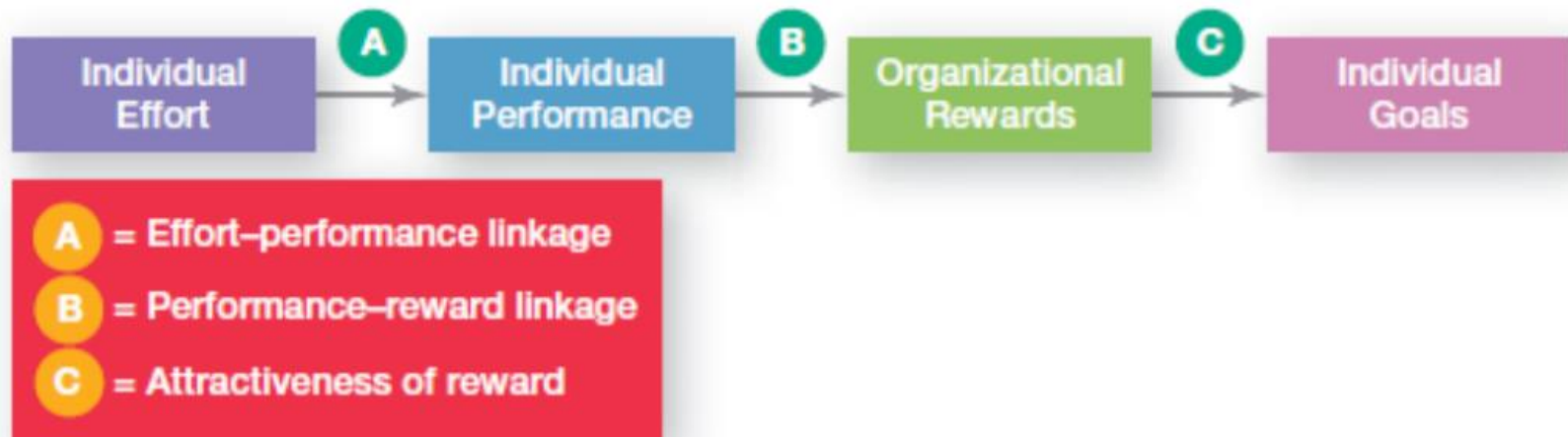
Motivation theories (process):

Expectancy model (Vroom, 1964)



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- Vroom's theory assumes that behavior results from conscious choices among alternatives whose purpose it is to maximize pleasure and minimize pain.
 - the individual will consider the outcomes associated with various levels of performance and elect to pursue the level that generates the greatest reward for him or her.



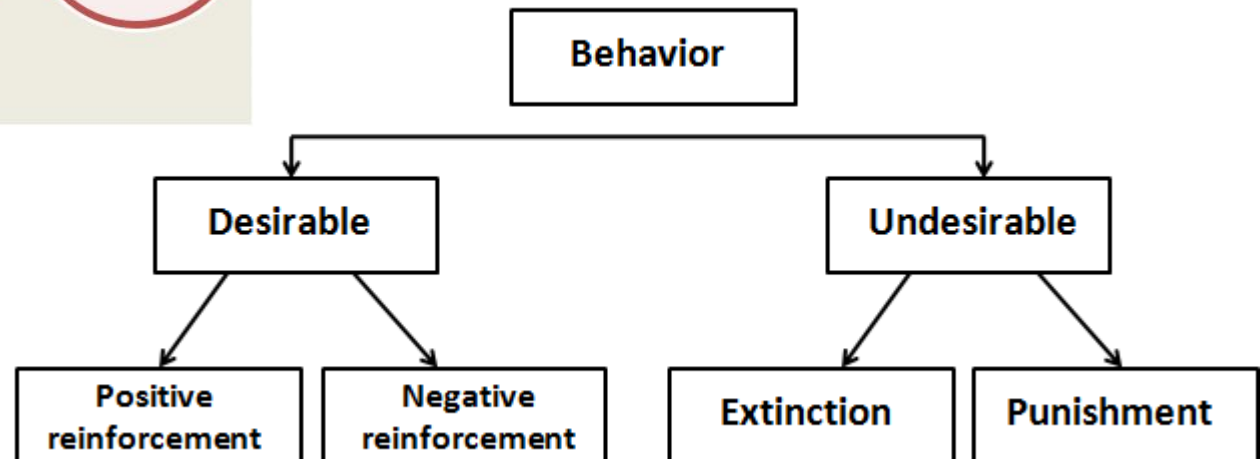
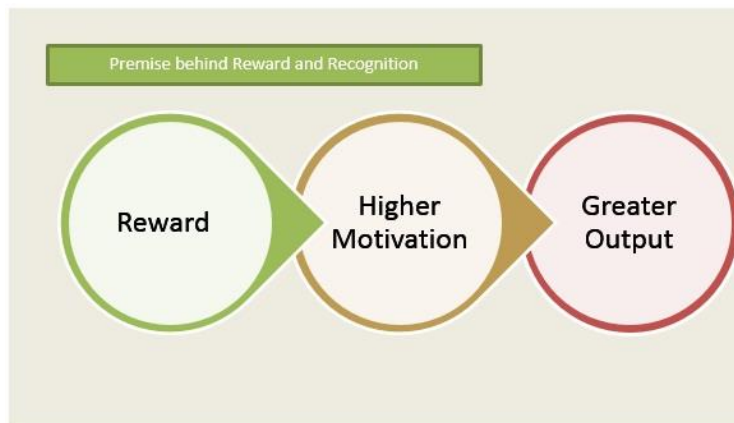
Motivation theories:

Reinforcement theory (Skinner, 1938)



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- To reinforce the behavior, a **reward** for it is provided, and vice versa to weaken any behavior, a **punishment** is used.



Adult learners – or the non-traditional student



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- **1. Adult learning is selective.** Adults will learn what is meaningful for them. They are “not very inclined to learn something they are not interested in, or in which they cannot see the meaning and importance” (Rubenson, 2011, p. 49).
- **2. Adult learning is self-directed.** Adults take responsibility for their own learning. Malcolm Knowles defined self-directed learning as “a process by which people identify their learning needs, set goals, choose how to learn, gather materials, and evaluate their progress” (Rubenson, 2011, p. 53).
- **3. Many adult learners have been away from formal schooling** for many years, and may have had negative experiences with school. These adult learners may be reentering schooling with anxiety and low self-esteem (Rubenson, 2011, p. 53).
- **4. Conversely, adult learners also bring years of previous knowledge and experience to the classroom,** as well as **an established system of values and beliefs** governing their thought (Jarvis, 2004, p. 144). They expect to be treated as adults.
- **5. Adults often have a problem-centered approach** to learning, and are interested in content that has a direct application to their lives. They want to see immediately how the course content is relevant to their current problems or situations (Rochester Institute of Technology).

Course Design Elements Most Valued by Adult Learners in Blended Online Education Environments: An American Perspective

Lynna J. Ausburn, *Oklahoma State University, USA*



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- The most highly rated design elements in a blended online learning environment were those that provided “
 - **personal relevance in what they learn,**
 - **participation in setting their learning outcomes based on their real-world needs,**
 - **self-direction of their learning resources and pathways,**
 - **and establishment of an active learning community.**

For faculty developing courses with an online at-distance component, awareness that adults may value options, variety, and self-directedness in their learning opportunities can help guide effective instructional design that will attract and retain adult learners. The adults in this study also placed high value on effective two-way communication with their classmates and instructor, and felt they benefited from frequent announcements and reminders from their instructor.

Online learning for adults - main factors



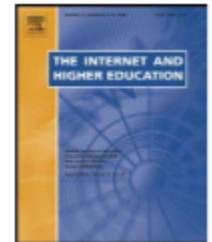
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- Connecting new knowledge to past experience
- Immediacy in application
- Social interaction and collaboration with peers
- A climate of self-reflection
- Self-regulated learning



Contents lists available at [ScienceDirect](#)

Internet and Higher Education



Toward deep learning for adult students in online courses

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Applying motivation theories to design of (e)-learning activities



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- Motivation is a complex issue and a very important constituent of all types learning. It influences engagement, cognitive efforts and thereby affects the ability to process information and construct knowledge (Garrison, 2011).
- Persistence in e-learning courses is higher if students are satisfied with the e-learning course itself and if they are happy with their academic achievements along the way (Gortan & Ereb, 2007).
- **Importance of making e-learning that has the right combination of multimedia, intuitive design, appropriate challenges and relevant feedback, factors that directly or indirectly affect learner motivation.**

Isaksen, G., & Hole, S. F. (2016). How to evaluate student motivation & engagement in e-learning. Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC) 2016. Paper No. 16164.

General course development scheme

ADDIE



■ **A** nalysis

■ **D** esign

■ **D** evelopment

■ **I** mplementation

■ **E** valuation



Usability of the e-learning environment



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Usability is one of the major topics in the context of e-learning due to its strong effect on the motivation of learners: A poorly structured e-learning course makes students feel lost, confused, and frustrated.



E-Learning:
Didactical Recommendations and
Quality Assurance
An Overview

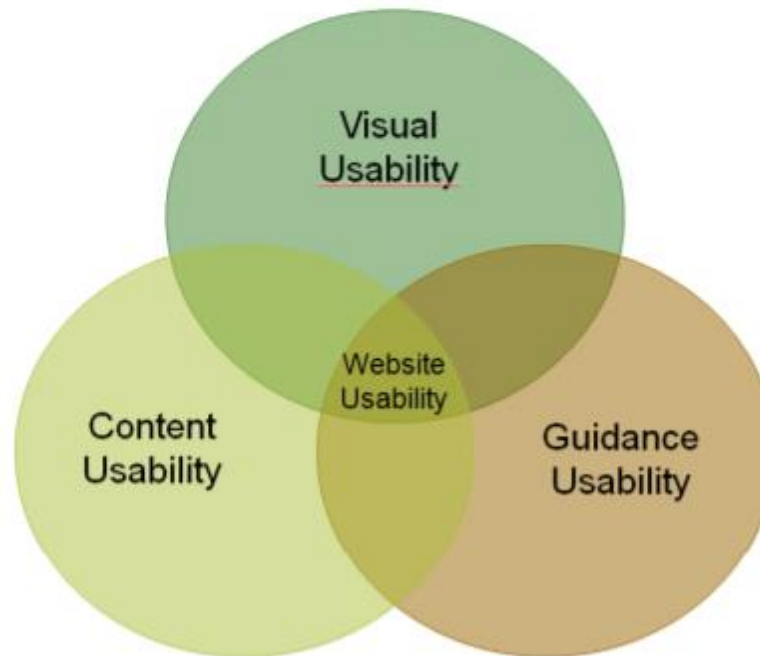


Figure 2: Usability-aspects of an e-learning course (Schmeißer & Sauer, 2003).

Recommendations



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The following aspects should be considered when planning and structuring an e-learning course.

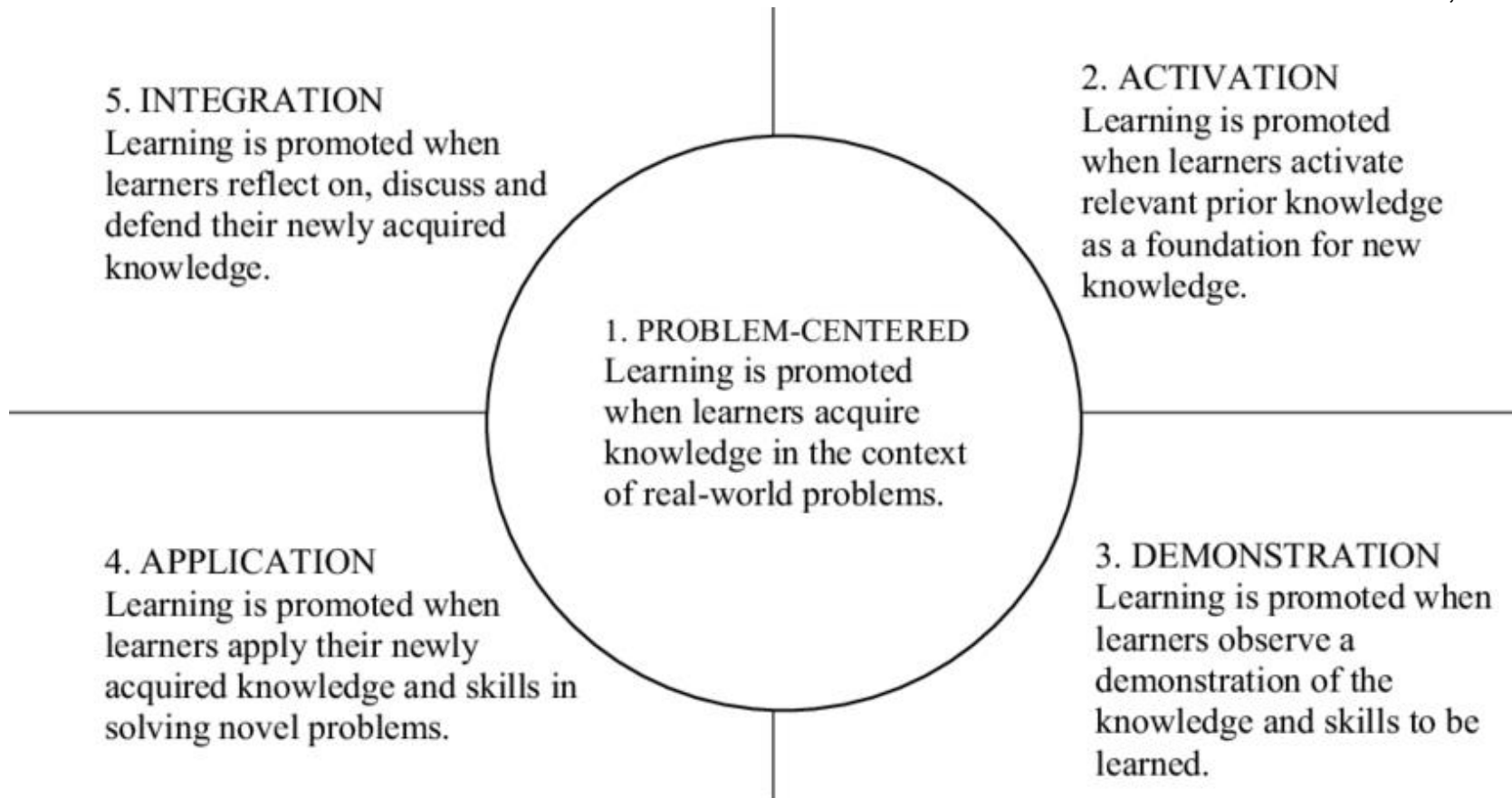
Visual usability – recommendations

- ✓ The structure has to remain simple to keep the barrier of participating online for the students as low as possible.
- ✓ Clear demarcation of „units“ of learning material and of activities.
- ✓ The “units” must be easy to spot for the students, not hidden in a folder without labels.
- ✓ An overview of the units of the course should be visualized (e. g., listed in a table or with the help of a figure).

First principles of instruction (Merill, 2002)



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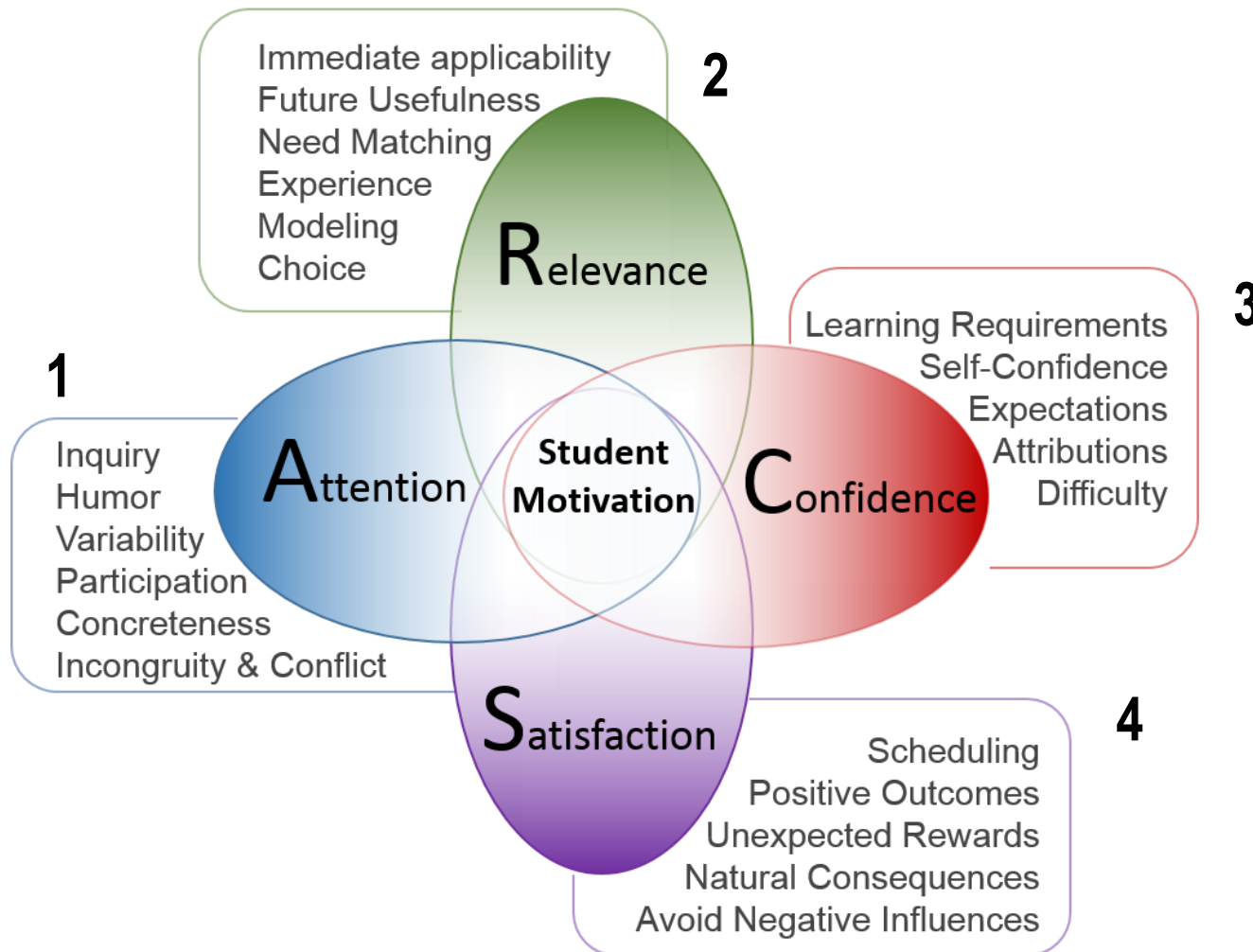
Tiruneh, D.T (2017). Toward a Systematic and Model-Based Approach to Design Learning Environments for Critical Thinking

First principles of motivational design

ARCS-model (Keller, 2008)



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Combining instructional design (ADDIE) with motivational aspects (Keller)



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- Keller as components of motivation
 - Attention, Relevance, Confidence, and Satisfaction
 - All factors are treated along all ADDIE steps

INSTRUCTIONAL DESIGN PHASES

MOTIVATION	Analysis	Design	Development	Implementation	Evaluation
Attention Relevance Confidence Satisfaction	learners' interest in the subject matter instructional needs are to arouse the students' curiosity.	generate performance objectives meeting the affective needs, select the appropriate strategies, learning activities, and media best motivating	Often a compromise most desirable method and mode of instructional delivery and what is within the budget	Motivation needs to be considered in the instructional design – as this phase is usually performed by the (entertaining) teacher	Feedback on motivation by teacher/student
Validation and Feedback					

Attention
Capture Interest (Perceptual Arousal): <i>What can I do to capture their interest?</i> Stimulate Inquiry (Inquiry Arousal): <i>How can I stimulate an attitude of inquiry?</i> Maintain Attention (Variability): <i>How can I use a variety of tactics to maintain their attention?</i>
Relevance
Relate to Goals (Goal Orientation): <i>How can I best meet my learner's needs? (Do I know their needs?)</i> Match Interests (Motive Matching): <i>How and when can I provide my learners with appropriate choices, responsibilities, and influences?</i> Tie to Experiences (Familiarity): <i>How can I tie the instruction to the learners' experiences?</i>
Confidence
Success Expectations (Learning Requirements): <i>How can I assist in building a positive expectation for success?</i> Success Opportunities (Learning Activities): <i>How will the learning experience support or enhance the students' beliefs in their competence?</i> Personal Responsibility (Success Attributions): <i>How will the learners clearly know their success is based upon their efforts and abilities?</i>
Satisfaction
Intrinsic Satisfaction (Self-Reinforcement): <i>How can I provide meaningful opportunities for learners to use their newly acquired knowledge/skill?</i> Rewarding Outcomes (Extrinsic Rewards): <i>What will provide reinforcement to the learners' successes?</i> Fair Treatment (Equity): <i>How can I assist the students in anchoring a positive feeling about their accomplishments?</i>



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Combining instructional design (ADDIE) with motivational aspects (Keller)

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