ARCS Model of Motivational Design

EDTEC 544

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ARCS Model:
The ARCS Model of Motivational Design was created by John Keller while he was researching ways to supplement the learning process with motivation. The model is based on Tolman’s and Lewin’s expectancy-value theory, which presumes that people are motivated to learn if there is value in the knowledge presented (i.e. it fulfills personal needs) and if there is an optimistic expectation for success (Ely 234). The model consists of four main areas: Attention, Relevance, Confidence, and Satisfaction.

Attention and relevance according to Keller’s ARCS motivational theory are essential to learning. The first 2 of 4 key components for motivating learners, attention and relevance can be considered the backbone of the ARCS theory, the latter components relying upon the former.

Attention:
The attention mentioned in this theory refers to the interest displayed by learners in taking in the concepts/ideas being taught. This component is split into three categories: perceptual arousal, using surprise or uncertain situations; inquiry arousal, offering challenging questions and/or problems to answer/solve; and variability, using a variety of resources and methods of teaching. Within each of these categories, Keller has provided further sub-divisions of types of stimuli to grab attention, which include:

- Perceptual Arousal
  - Concreteness – Use specific, relatable examples.
  - Incongruity and Conflict – Stimulate interest by providing the opposite point of view.
  - Humor – Use humor to lighten up the subject.

- Inquiry Arousal
  - Participation – Provide role-play or hands on experience.
  - Inquiry – Ask questions that get students to do critical thinking or brainstorming.

- Variability – Incorporate a variety of teaching methods (video, reading, lecture).

Grabbing attention is the most important part of the model because it initiates the motivation for the learners. Once learners are interested in a topic, they are willing to invest their time, pay attention, and find out more.

Relevance:
Relevance, according to Keller, must be established by using language and examples that the learners are familiar with. The 3 major strategies Keller presents are: goal orientation, motive matching, and familiarity. Like the Attention category, Keller divided the 3 major strategies in to sub-categories, which provide examples of how to make a lesson plan relevant to the learner:

- Goal Orientation:
  - Present Worth – Describe how the knowledge will help the learners today.
  - Future Usefulness – Describe how the knowledge will help in the future (getting into college, finding a job, getting a promotion).

- Motive Matching
  - Needs Matching – Assess your group and decide whether the learners are learning because of achievement, risk taking, power, or affiliation.
  - Choice – Give the learners a choice in what method works best for them when learning something new.

- Familiarity
Modeling – The concept of “be what you want them to do.” Also, bring in role models (people who have used the knowledge that you are presenting to improve their lives).

Experience – Draws on learner’s existing knowledge/skills and shows them how they can use their previous knowledge to learn more.

Learners will throw concepts to the wayside if their attention cannot be grabbed and sustained and if relevance is not conveyed.

Confidence:
The confidence aspect of the ARCS model focuses on establishing positive expectations for achieving success among learners. The confidence level of learners is often correlated with motivation and the amount of effort put forth in reaching a performance objective. For this reason, it’s important that learning design provides students with a method for estimating their probability of success. This can be achieved in the form of a syllabus and grading policy, rubrics, or a time estimate to complete tasks. Additionally, confidence is built when positive reinforcement for personal achievements is given through timely, relevant feedback.

Keller offers learning designers the following confidence building strategies:

- Performance Requirements - Learners should be provided with learning standards and evaluative criteria upfront to establish positive expectations for achieving success. If learners can independently and accurately estimate the amount of effort and time required to achieve success, they are more likely to put forth the required effort. Conversely, if learners are unaware or feel that the learning requirements are out of reach, motivation normally decreases.
- Success Opportunities – Being successful in one learning situation can help to build confidence in subsequent endeavors. Learners should be given the opportunity to achieve success through multiple, varied, and challenging experiences that build upon one another.
- Personal Control- Confidence is increased if a learner attributes their success to personal ability or effort, rather than external factors such as lack of challenge or luck.

Satisfaction:
Finally, learners must obtain some type of satisfaction or reward from a learning experience. This satisfaction can be from a sense of achievement, praise from a higher-up, or mere entertainment. Feedback and reinforcement are important elements and when learners appreciate the results, they will be motivated to learn. Satisfaction is based upon motivation, which can be intrinsic or extrinsic.

Keller suggests three main strategies to promote satisfaction:

- Intrinsic Reinforcement – encourage and support intrinsic enjoyment of the learning experience. Example: The teacher invites former students to provide testimonials on how learning these skills helped them with subsequent homework and class projects.
- Extrinsic Rewards – provide positive reinforcement and motivational feedback. Example: The teacher awards certificates to students as they master the complete set of skills.
- Equity – maintain consistent standards and consequences for success. Example: After the term project has been completed, the teacher provides evaluative feedback using the criteria described in class.

To keep learners satisfied, instruction should be designed to allow them to use their newly-learned skills as soon as possible in as authentic a setting as possible.
## A: Attention

**Arouse and sustain a learner’s curiosity and interest**

<table>
<thead>
<tr>
<th>Component</th>
<th>Strategy</th>
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</thead>
<tbody>
<tr>
<td>Perceptual Arousal</td>
<td>Use surprise or uncertain situations to create curiosity and wonderment.</td>
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<td><em>Ex: Placing a sealed box covered with question marks on a table in front of the class.</em></td>
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<tr>
<td>Inquiry Arousal</td>
<td>Nurture thinking challenges and generate inquiry by offering difficult problems to solve.</td>
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<td><em>Ex: Presenting a scenario of a problem situation and asking the class to brainstorm possible solutions based on what they have learned in the lesson.</em></td>
</tr>
<tr>
<td>Variability</td>
<td>Incorporate a variety of teaching methods to sustain interest.</td>
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<td><em>Ex: After displaying and reviewing each step in the process on the overhead projector, the teacher divides the class into teams and assigns each team a set of practice problems.</em></td>
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## R: Relevance

**Link a learner’s needs, interests, and motives**

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<tbody>
<tr>
<td>Goal Orientation</td>
<td>Describe how the knowledge will help the learner today as well as the future.</td>
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<td><em>Ex: The instructor explains the course objectives.</em></td>
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<tr>
<td>Motive Matching</td>
<td>Assess the learner’s needs and reasons for learning and provide choices in their learning methods that are conducive to their motives.</td>
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<td><em>Ex: The instructor allows students to submit their final project in any format that they choose - written, audio, or graphically.</em></td>
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<tr>
<td>Familiarity</td>
<td>Tie instruction into the learner’s experience by providing examples of that relate to the learner’s work.</td>
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<td><em>Ex: The instructor requests that students speak about examples of previous work that apply to the newly learned classroom concepts.</em></td>
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### Confidence:
Develop positive expectations for achieving success

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| **Performance Requirements** | Provide learning standards and evaluative criteria to establish positive expectations and trust with learner.  
  *Ex: The instructor presents an assignment list and provides a rubric outlining the assessment criteria and points by which each deliverable will be graded.*                                                                 |
| **Success Opportunities**  | Present multiple, varied challenges for learners to experience success.  
  *Ex: The instructor allows students to submit an outline and first draft for approval before beginning to work on their final term paper.*                                                             |
| **Personal Control**       | Use techniques that allow learners to attribute success to personal ability or effort.  
  *Ex: The instructor provides feedback on the quality of the students work (in the form of a letter grade and comments).*                                                                                         |

### Satisfaction:
Provide reinforcement and reward for learners

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| **Intrinsic Reinforcement** | Encourage and support intrinsic enjoyment of the learning experience.  
  *Ex: The instructor invites former students to provide testimonials on how learning these skills helped them with subsequent homework and class projects.*                                     |
| **Extrinsic Rewards**    | Provide positive reinforcement and motivational feedback.  
  *Ex: The instructor awards certificates to students as they master the complete set of skills.*                                                                                                             |
| **Equity**               | Maintain consistent standards and consequences for success.  
  *Ex: After the term project has been completed, the instructor provides evaluative feedback using the criteria described in class.*                                                                              |
## Integrating ARCS Model into a Lesson Plan

**“Writing an Effective Resume”**

<table>
<thead>
<tr>
<th><strong>Objective</strong></th>
<th><strong>Strategy</strong></th>
<th><strong>Example</strong></th>
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<tbody>
<tr>
<td><strong>Attention</strong></td>
<td>To focus learner’s attention to writing a good resume.</td>
<td>Perceptual Arousal (Concreteness) – Use specific, relatable examples.</td>
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<td></td>
<td>Inquiry Arousal (Participation) – Provide role play or hands on experience.</td>
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<tr>
<td><strong>Relevance</strong></td>
<td>To show learners the importance of learning to write an effective resume.</td>
<td>Goal Orientation (Future Usefulness) – Describe how the knowledge will help in the <em>future</em> (getting into college, finding a job, getting a promotion, completing assigned tasks).</td>
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<td>Familiarity (Modeling) – Bring in role models (people who have used the knowledge that you are presenting to improve their lives).</td>
</tr>
<tr>
<td><strong>Confidence</strong></td>
<td>To help increase confidence in the new writing skills learned.</td>
<td>Learning Requirements- Learners should be provided with learning standards and evaluative criteria (rubric) upfront to establish positive expectations for achieving success.</td>
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<td>Success Opportunities – Learners should be given the opportunity to achieve success through multiple, varied, and challenging experiences that build upon one another.</td>
</tr>
<tr>
<td><strong>Satisfaction</strong></td>
<td>To reward students for learning new resume writing skills.</td>
<td>Extrinsic Rewards – provide positive reinforcement and motivational feedback.</td>
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<td>Equity – maintain consistent standards and consequences for success.</td>
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References:

Journals:


Books:


Websites: