
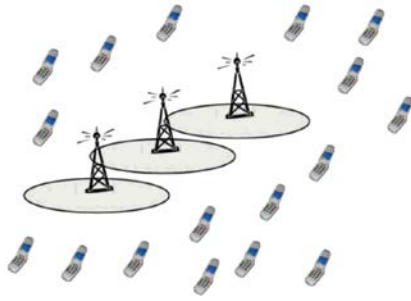
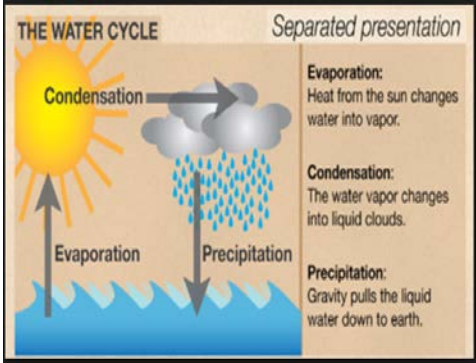
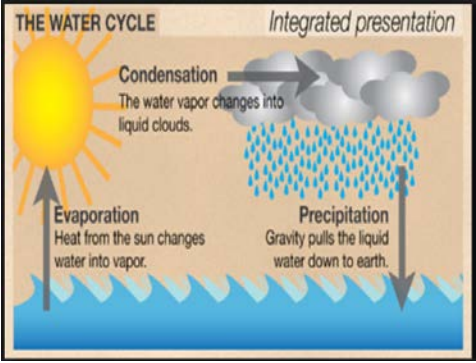




Reduce Extraneous Processing - Causes Cognitive Overload

Principle	Meaning	Practical Application
<p><u>Coherence Principle</u></p>	<p>Avoid adding material that does not support the instructional goal.</p>	<p>Less is more!</p>
<p><u>Examples</u></p>	<div data-bbox="579 345 1052 695" data-label="Image"> <p>Flower</p> <ul style="list-style-type: none"> As a plant's reproductive part, a flower contains a stamen (male flower part) and/or pistil (female flower part), plus accessory parts such as sepals, petals, and nectar glands. The stamen is the male reproductive organ. The pistil is a plant's female part. Sepals are small, green, leaf like structures located at the base of a flower. They protect the flower bud. Collectively, the sepals are called a calyx. Petals generally are the highly colored portions of a flower. Like nectar glands, petals may contain perfume. Collectively, the petals are called a corolla. The number of petals on a flower often is used to help identify plant families and genera. </div> <p>Principle Violated</p>	<div data-bbox="1383 345 1856 699" data-label="Image"> <p>A flower contains a stamen and/or pistil, plus accessory parts such as sepals, petals, and nectar glands.</p> <p>The stamen is the male reproductive organ.</p> <p>The pistil is a plant's female part.</p> <p>Petals generally are the highly colored portions of a flower. Like nectar glands, petals may contain perfume.</p> <p>Sepals are small, green, leaf like structures located at the base of a flower. They protect the flower bud.</p> <p>Principle Applied</p> </div>
<p><u>Signaling Principle</u></p>	<p>Highlight essential material, guiding the learner's attention to key elements in the lesson and then also help learners see the connections between different elements (concepts).</p>	<p>Verbal Signaling: Use outlines, headings, pointer words (i.e. first, second, third, etc.).</p> <p>Visual Signaling: Use arrows, color, pointing gestures, graying out content not being focused on at the moment.</p>
<p><u>Examples:</u></p>	<div data-bbox="579 959 1052 1279" data-label="Image"> <p>Signaling Principle</p> <p>UCO is a thriving, metropolitan university, intent on leading the way to bright, successful futures for our students and community. Through our quality academic programs, innovative leadership development opportunities and nurturing campus environment, we strive to make each student's UCO experience a transformative one.</p> <p>Founded in 1890, UCO is Oklahoma's oldest institution of higher learning, and with more than 17,000 students, we are the state's third largest university. We're located on a 210-acre campus in Edmond, Okla., a northern suburb in the Oklahoma City Metropolitan Area. Our location offers the campus community the benefit of living in what's been ranked as one of the safest communities in the country with close proximity to the activities and opportunities of a rapidly growing city.</p> <p>Principle Violated</p> </div>	<div data-bbox="1383 959 1856 1279" data-label="Image"> <p>Signaling Principle</p> <p>About UCO</p> <p>UCO is a thriving, metropolitan university, intent on leading the way to bright, successful futures for our students and community. Through our quality academic programs, innovative leadership development opportunities and nurturing campus environment, we strive to make each student's UCO experience a transformative one.</p> <p>Founded in 1890, UCO is Oklahoma's oldest institution of higher learning, and with more than 17,000 students, we are the state's third largest university. We're located on a 210-acre campus in Edmond, Okla., a northern suburb in the Oklahoma City Metropolitan Area. Our location offers the campus community the benefit of living in what's been ranked as one of the safest communities in the country with close proximity to the activities and opportunities of a rapidly growing city.</p> <p>Principle Applied</p> </div>
<p><u>Redundancy Principle</u></p>	<p>People learn better from graphics and narration than from graphics, narration, and printed text.</p>	<p>Words + Narration = Yes! Pictures + Narration = Yes! Pictures + Words + Narration = No!</p>

<p><u>Examples:</u></p>	<p style="text-align: center;">Cell Phone 101</p> <ul style="list-style-type: none"> • When you make a call on your cell phone, it is linked to the telephone network via towers. • These towers cover a circular area called a cell. • A large region can be split into a number of cells. • This allows different base stations to use the same frequencies for communication links and allows thousands or even hundreds of thousands of mobile telephone users. • The cell phone network automatically keeps track of the strength of the signal from your phone. • As you move, the base station receiving the strongest signal changes, and the network "hands off" your call from one base station to another.  <p style="text-align: center;">Principle Violated</p>	 <p style="text-align: center;">Principle Applied</p>
<p><u>Spatial Contiguity Principle</u></p>	<p>People learn better when corresponding words and pictures are presented near rather than far from each other on the page or screen.</p>	<p>Align words to corresponding graphics.</p>
<p><u>Examples:</u></p>	 <p style="text-align: center;">Principle Violated</p>	 <p style="text-align: center;">Principle Applied</p>
<p><u>Temporal Contiguity Principle</u></p>	<p>People learn better when corresponding words and pictures are presented simultaneously rather than successively.</p>	<p>Together is better!</p>
<p><u>Examples:</u></p>	 <p style="text-align: center;">Principle Violated</p>	 <p style="text-align: center;">Principle Applied</p>