

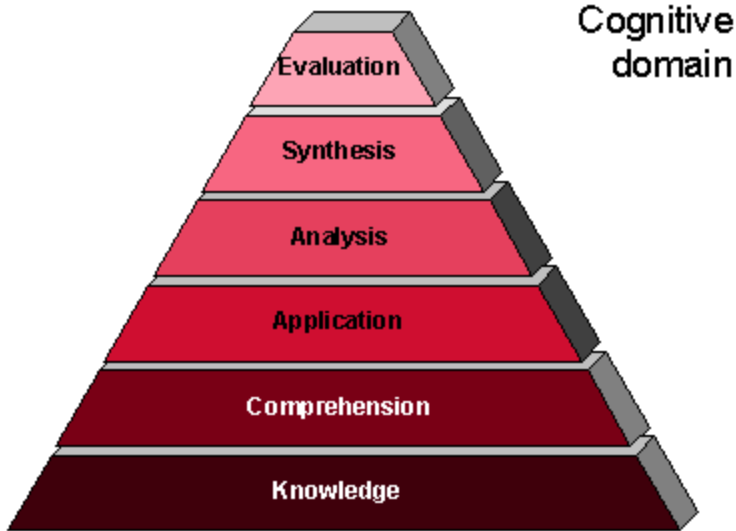
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# Testing Tasks and Bloom's Taxonomy

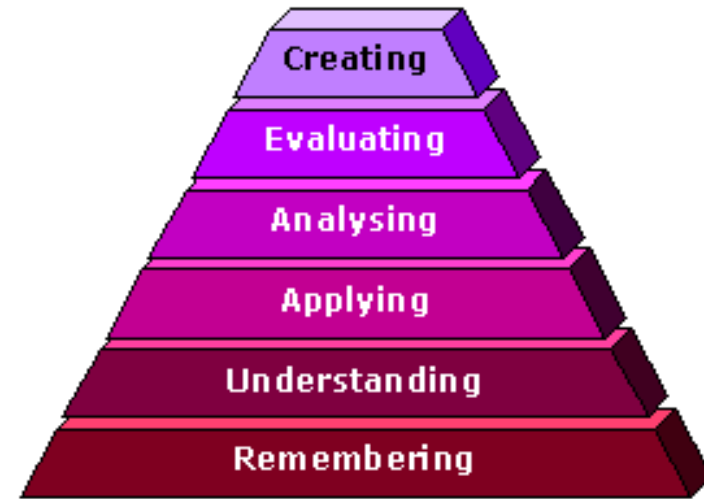
A work in progress



# The Taxonomy



Cognitive domain



*Revised taxonomy of the cognitive domain following Anderson and Krathwohl (2001)*

Bloom's original taxonomy

\* Graphics from <http://www.learningandteaching.info/>





# The Taxonomy

## Bloom's Taxonomy

The Knowledge Dimension	The Cognitive Process Dimension					
	<u>Remember</u>	<u>Understand</u>	<u>Apply</u>	<u>Analyze</u>	<u>Evaluate</u>	<u>Create</u>
<u>Factual Knowledge</u>	<u>List</u>	<u>Summarize</u>	<u>Classify</u>	<u>Order</u>	<u>Rank</u>	<u>Combine</u>
<u>Conceptual Knowledge</u>	<u>Describe</u>	<u>Interpret</u>	<u>Experiment</u>	<u>Explain</u>	<u>Assess</u>	<u>Plan</u>
<u>Procedural Knowledge</u>	<u>Tabulate</u>	<u>Predict</u>	<u>Calculate</u>	<u>Differentiate</u>	<u>Conclude</u>	<u>Compose</u>
<u>Meta-Cognitive Knowledge</u>	<u>Appropriate Use</u>	<u>Execute</u>	<u>Construct</u>	<u>Achieve</u>	<u>Action</u>	<u>Actualize</u>

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<http://ecampus.oregonstate.edu> Designer/Developer - Dianna Fisher





# The Taxonomy

**Remembering:** Retrieving, recognizing, and recalling relevant knowledge from long-term memory.

**Understanding:** Constructing meaning from oral, written, and graphic messages through interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining.

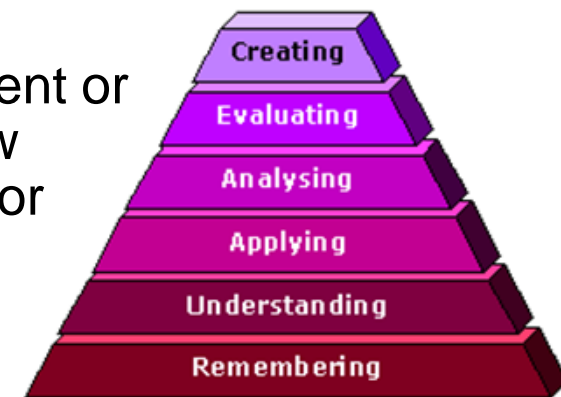
**Applying:** Carrying out or using a procedure through executing, or implementing.

**Analyzing:** Breaking material into constituent parts, determining how the parts relate to one another and to an overall structure or purpose through differentiating, organizing, and attributing.

**Evaluating:** Making judgments based on criteria and standards through checking and critiquing.

**Creating:** Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing.

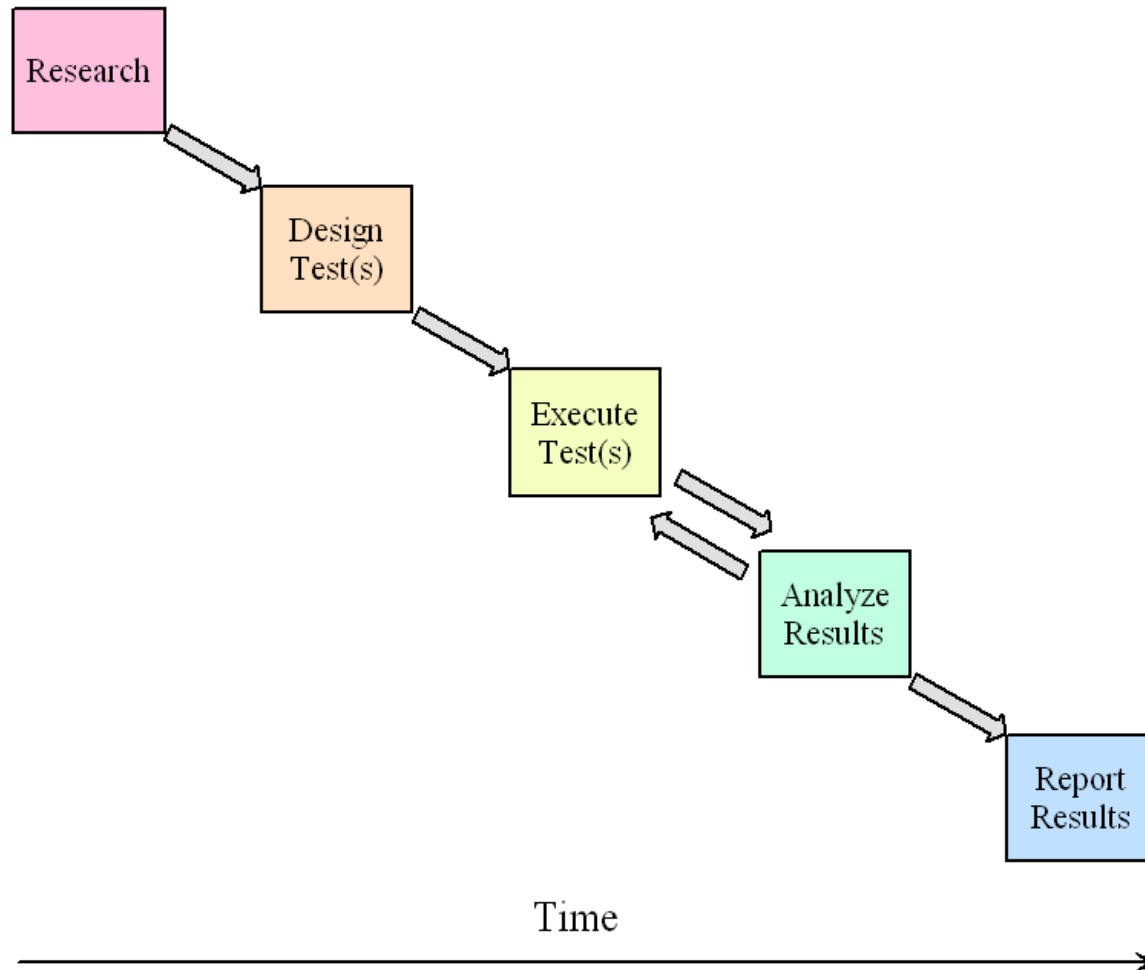
(Anderson & Krathwohl, 2001, pp. 67-68).





# Waterfall

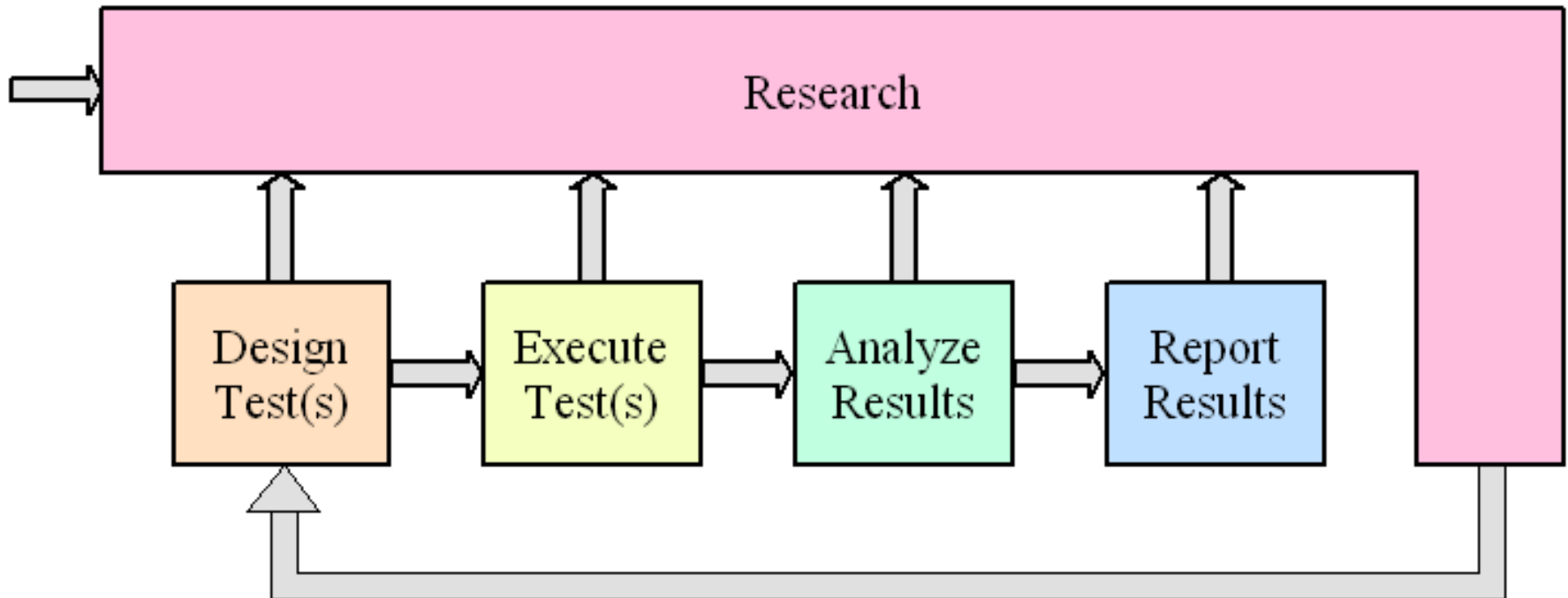
## Testing, Waterfall-Style





# Iterative

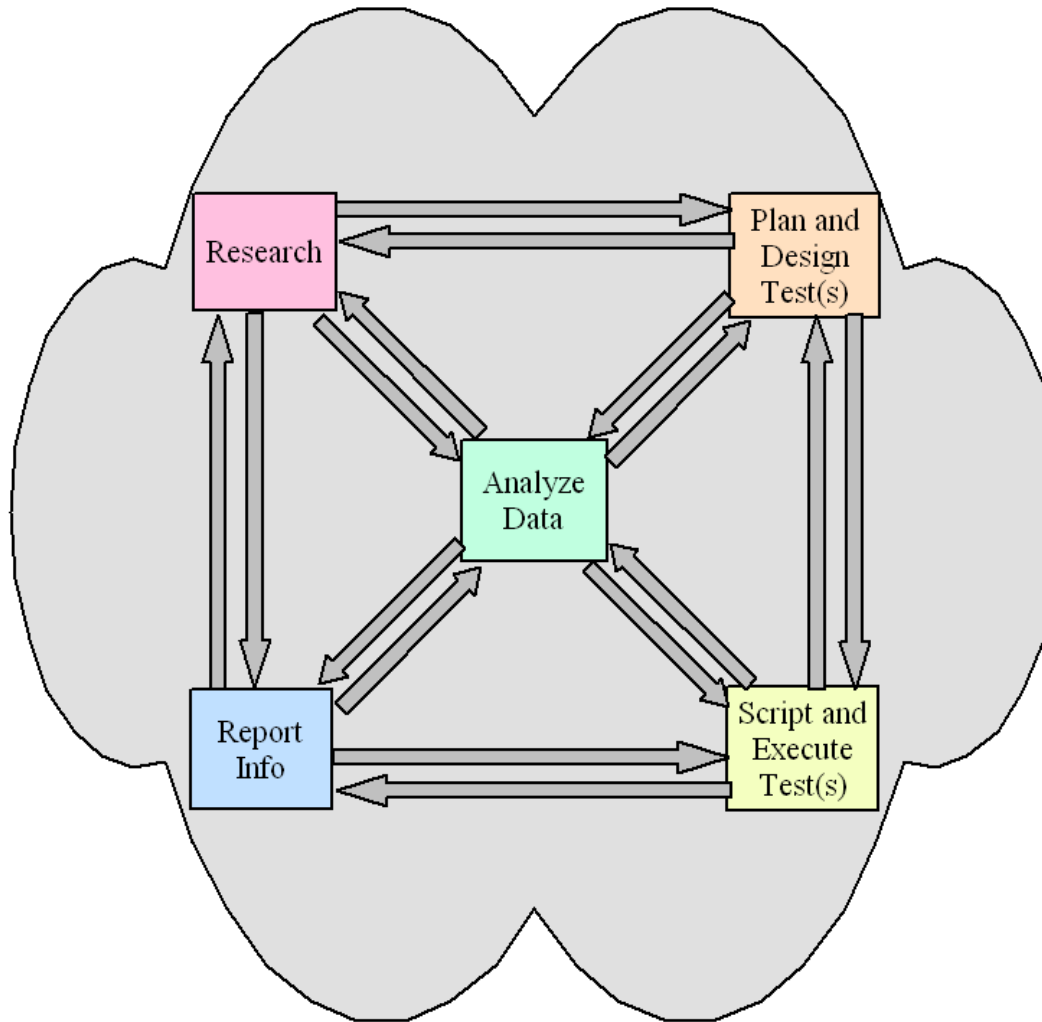
## Testing, Iterative-Style





# Agile

## Testing, Agile-Style





# Rough Mapping - Draft

	Activities	Artifacts	Skills	Taxonomy
<b>Research</b>	<ul style="list-style-type: none"> <li>• Read Documents</li> <li>• Interview Stakeholders</li> <li>• Use Competitors</li> <li>• Observe Users</li> <li>• Use Application</li> </ul>	<ul style="list-style-type: none"> <li>• Notes</li> <li>• Sketches</li> <li>• MindMaps</li> <li>• Use Cases</li> <li>• Usage Models</li> </ul>	<ul style="list-style-type: none"> <li>• Read</li> <li>• Interview</li> <li>• Use</li> <li>• Observe</li> </ul>	Remembering
<b>Design</b>	<ul style="list-style-type: none"> <li>• Create Plans/Strategies</li> <li>• Choose Techniques</li> <li>• Generate Data</li> <li>• Script Tests</li> <li>• Identify Risk</li> <li>• Classify Test Areas</li> </ul>	<ul style="list-style-type: none"> <li>• Test Cases</li> <li>• Test Plan</li> <li>• Test Strategy</li> <li>• Test Data</li> <li>• Test Scripts</li> <li>• Risk Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Classify</li> <li>• Identify</li> <li>• Group</li> <li>• Document</li> <li>• Scripting</li> </ul>	Understanding
<b>Execute</b>	<ul style="list-style-type: none"> <li>• Run Tests</li> <li>• Interpret Results</li> <li>• Prioritize Tests</li> </ul>	<ul style="list-style-type: none"> <li>• Notes</li> <li>• Results</li> <li>• Defect Reports</li> </ul>	<ul style="list-style-type: none"> <li>• Interpret</li> <li>• Demonstrate</li> <li>• Choose</li> <li>• Script Execution</li> </ul>	Applying
<b>Analyze</b>	<ul style="list-style-type: none"> <li>• Evaluate Results</li> <li>• Question Tests</li> <li>• Differentiate Symptoms from Causes</li> <li>• Compare w/ Previous Results</li> </ul>	<ul style="list-style-type: none"> <li>• Notes</li> <li>• Findings</li> <li>• Defect Reports</li> <li>• Trends</li> </ul>	<ul style="list-style-type: none"> <li>• Question</li> <li>• Differentiate</li> <li>• Consolidate</li> <li>• Compare</li> <li>• Discriminate</li> <li>• Interpret</li> </ul>	Analyzing
<b>Report</b>	<ul style="list-style-type: none"> <li>• Document Results</li> <li>• Create Presentations</li> <li>• Make Recommendations</li> </ul>	<ul style="list-style-type: none"> <li>• Reports</li> <li>• Charts &amp; Graphs</li> <li>• Emails</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate</li> <li>• Defend</li> <li>• Judge</li> </ul>	Evaluating
<b>Notes by SDLC Type</b>				
	<ul style="list-style-type: none"> <li>• Sequential approach limits tester's ability to apply what they learn to improve testing</li> <li>• There is very limited opportunity for informed creation by testers</li> </ul>			
	<ul style="list-style-type: none"> <li>• Most tester learning is applied between iterations</li> <li>• Variable opportunities for informed creation based on speed of iterations</li> </ul>			
	<ul style="list-style-type: none"> <li>• Any task or cognitive skill can be applied at any time</li> <li>• Maximizes testers ability to create at any point during the project</li> </ul>			

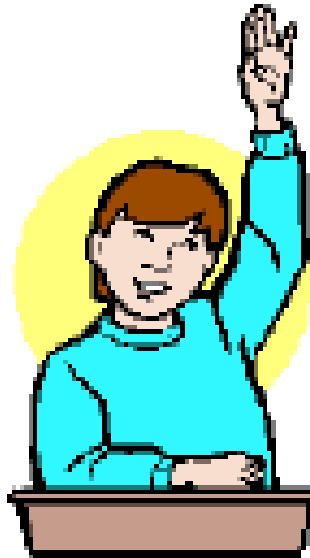






# Questions

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# Contact Info

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