

App Selection Criteria

Remembering Criteria

Remembering: Apps that fit into the "remembering" stage improve the user's ability to define terms, identify facts, and recall and locate information. Many educational apps fall into the "remembering" phase of learning. They ask users to select an answer out of a line-up, find matches, and sequence content or input answers

Understanding Criteria

Understanding: Apps that fit into this "understanding" stage provide opportunities for students to explain ideas or concepts. Understanding apps step away from the selection of a "right" answer and introduce a more open-ended format for students to summarise content and translate meaning.

Applying Criteria

Applying: Apps that fit into the applying stage provide opportunities for students to demonstrate their ability to implement learned procedures and methods. They also highlight the ability to apply concepts in unfamiliar circumstances.

Analyzing Criteria

Analysing: Apps that fit into the "analysing" stage improve the user's ability to differentiate between the relevant and irrelevant, determine relationships, and recognise the organisation of content..

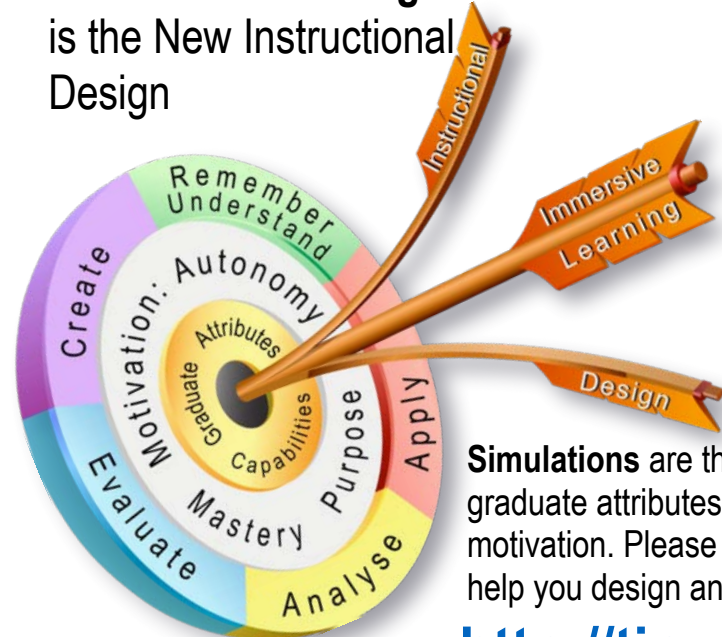
Evaluating Criteria

Evaluating: Apps that fit into the "evaluating" stage improve the user's ability to judge material or methods based on criteria set by themselves or external sources. They help students judge content reliability, accuracy, quality, effectiveness, and reach informed decisions.

Creating Criteria

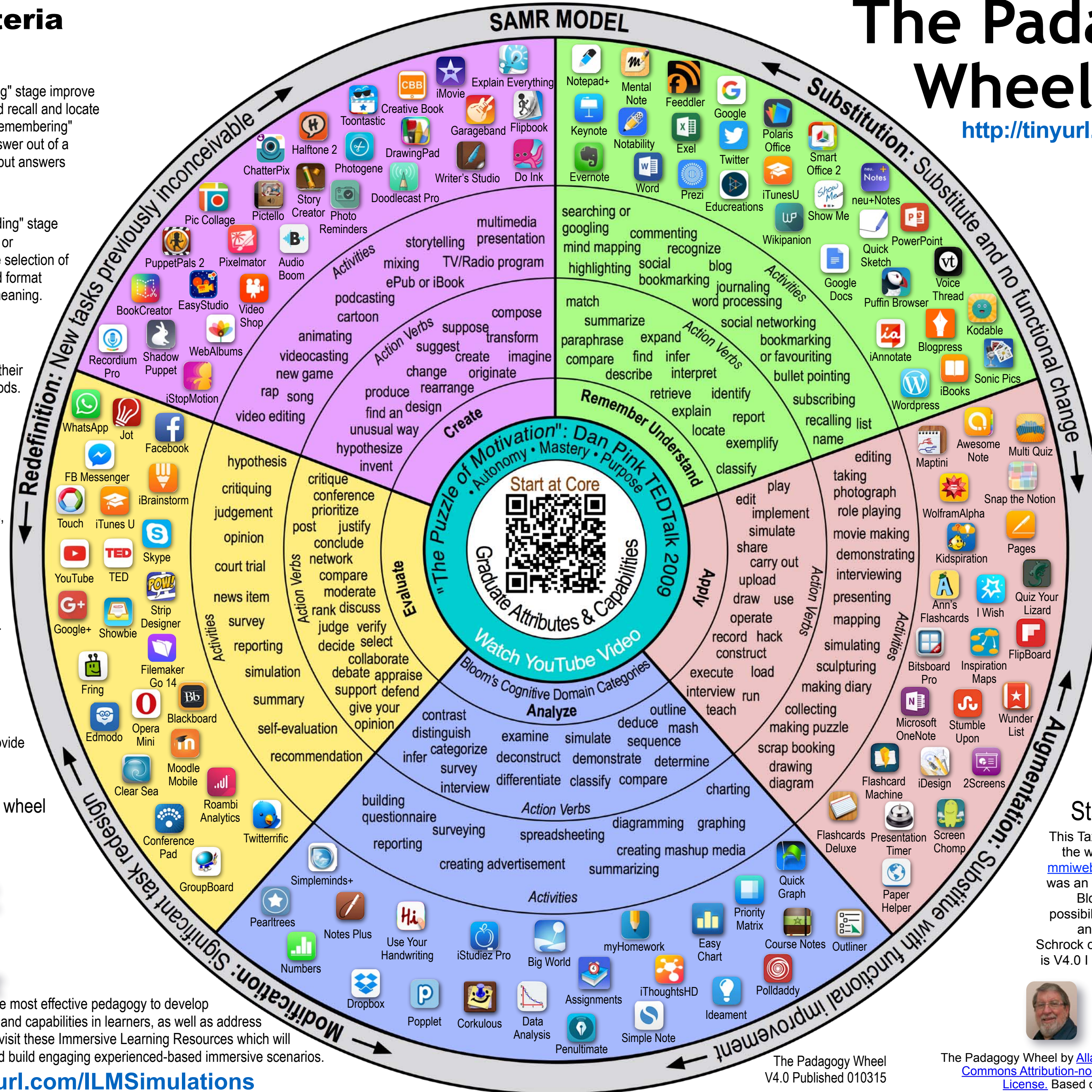
Creating: Apps that fit into the "creating" stage provide opportunities for students generate ideas, design plans, and produce products.

Immersive Learning at the core of the wheel is the New Instructional Design



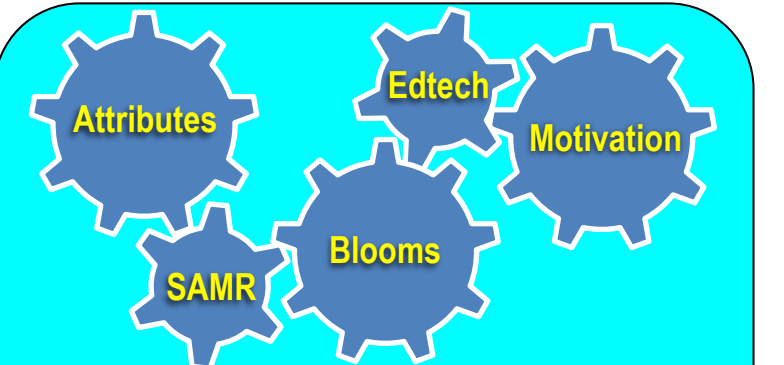
Simulations are the most effective pedagogy to develop graduate attributes and capabilities in learners, as well as address motivation. Please visit these Immersive Learning Resources which will help you design and build engaging experienced-based immersive scenarios.

<http://tinyurl.com/ILMSimulations>



The Padagogy Wheel V4.1

<http://tinyurl.com/posterV4>



Getting the best use out of the Padagogy Wheel

Use it as a series of prompts or interconnected gears to check your teaching from planning to implementation

The Attributes Gear: This is the core of learning design. You must constantly revisit things like ethics, responsibility and citizenship. Ask yourself the question what will a graduate from this learning experience 'look like' i.e. what is it that makes others see them as successful? Ask 'how does everything I do support these attributes and capabilities?'

The Motivation Gear: Ask yourself 'How does everything I build and teach give the learner autonomy, mastery and purpose?'

The Blooms Gear: Helps you design learning objectives that achieve higher order thinking. Try to get at least one learning objective from each category. Only after this are you ready for technology enhancement.

The Technology Gear: Ask 'How can this serve your pedagogy? Apps are only suggestions, look for better ones & combine more than one in a learning sequence.'

The SAMR Model Gear: This is "How are you going to use the technologies you have chosen?"

I would like to thank [Tobias Rodemerk](#) for the idea of the gears. Tobias is a teacher & works for the State Institute for School Development Baden-Württemberg (LS), Germany

Allan Carrington



The Padagogy Wheel First Language Project: 21 languages are planned for 2016. For the latest languages see bit.ly/languageproject

Standing on the Shoulders of Giants

This Taxonomy wheel, without the apps, was first discovered on the website of Paul Hopkin's educational consultancy website mmiweb.org.uk. That wheel was produced by Sharon Artley and was an adaption of Kathwohl and Anderson's (2001) adaption of Bloom (1956). The idea to further adapt it for the pedagogy possibilities with mobile devices, in particular the iPad, for V2.0 and V3.0 I have to acknowledge the creative work of Kathy Schrock on her website [Bloomin' Apps](#). For the major revision that is V4.0 I have to thank the team of ADEs who created APPitc the App Lists for Education Project which has now closed



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The Padagogy Wheel
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BLOOM'S REVISED TAXONOMY/ESSENTIAL QUESTIONS AND LEARNING MAPS

Cognitive Domain	Learning Map Area	Key Words	Question Stems	
Level I - Remembering		choose, how, match, recall, select, spell, when, who, define, label, name, relate, show, tell, where, why, find, list, omit, what, which	What is....? Where is...? How did ____ happen? Why did....? When did...? How would you show...? Who were the main...? Which one....?	How is....? When did ____ happen? How would you explain...? How would you describe....? Can you recall.....? Can you select....? Can you list three....? Who was....?
Level II - Understanding	Assessment Prompts Low Level	classify, explain, interpret, show, compare, extend, outline, summarize, contrast, illustrate, relate, translate, demonstrate, infer, rephrase	How would you classify the type of...? How would you compare/contrast...? State or interpret _____ in your own words...? How will you rephrase this meaning...? What facts or ideas show...? What is the main idea of...?	Which statements support....? Can you explain what is happening...? What is meant...? What can you say about...? Which is the best answer...? How would you summarize...?

<p>Level III - Applying</p>		<p>apply, develop, make use of, select, build, experiment with, model, solve, choose, identify, organize, utilize, construct, interview, plan</p>	<p>How would you use...? What examples can you find to...? How would you solve....? How would you organize & show...? Show your understanding of...? How would you apply what you learned to develop...?</p>	<p>What questions would you ask in an interview with...? What other way would you plan to...? What would result if...? Make use of these facts to...? What elements would you choose to change...? What facts would you select to show....?</p>
<p>Level IV - Analyzing</p>	<p>Lesson Essential Questions Med. Level</p>	<p>analyze, contrast, function, simplify, assume, discover, inference, survey, categorize, dissect, inspect, take part in, classify, distinguish, list, test for, compare, divide, motive, theme, conclusion, examine, relationships</p>	<p>What are the parts of features of...? How is ____ related to...? Why do you think...? What is the theme...? What motive is there...? Can you list the parts...? What inference can you make...? What conclusions can you draw...?</p>	<p>How would you classify...? How would you categorize...? Can you identify the parts...? What evidence can you find...? What is the relationship between...? Can you distinguish between...? What is the function of...? What ideas justify...?</p>

<p>Level V - Evaluating</p>	<p>Unit Essential Questions High Level</p>	<p>agree, deduct, interpret, recommend, appraise, defend, judge, rule on, assess, determine, justify, select, award, disprove, mark, support, choose, dispute, measure, value, compare, estimate, opinion, conclude, evaluate, perceive, criteria, explain, prioritize, criticize, importance, prove, decide, influence, rate</p>	<p>Do you agree with the actions...? With the outcome...? What is your opinion of? How would you prove...? Disprove...? Can you assess the value or importance of...? Would it be better if...? Why did they (the character) choose....? What would you recommend...? How would you rate the...? What would you cite to defend your actions....? How could you determine...?</p>	<p>What choice would you have made....? How would you prioritize...? What judgment would you make about...? Based on what you know, how would you explain...? What information would you use to support he view....? How would you justify....? What data was used to make the conclusion....? Why is it better that...? How would you compare the ideas? People...?</p>
<p>Level VI - Creating</p>		<p>adapt, delete, improve, predict, build, design, invent, propose, change, develop, make up, solution, choose, discuss, maximize, solve, combine, elaborate, minimize, suppose, compile, estimate, modify, test, compose, formulate, original, theory, construct, happen, originate, create, imagine, plan</p>	<p>What changes would you make to solve...? How would you improve...? What would happen if...? Can you elaborate on the reason...? Can you propose an alternative...? Can you invent...? How would you test...? Can you formulate a theory for...? Can you predict the outcome if...? How would you estimate the results for...? What facts can you compile....?</p>	<p>How would you adapt ____ to create a different...? How could you change (modify) the plot (plan)..? What could be done to maximize (minimize)...? What way would you design...? What could be combined to improve (change)...? Suppose you could ____ what would you do....? Can you construct a model that would change...? Can you think of an original way for the...?</p>

Anderson, Lorin W., and Krathwohl, David R. Taxonomy for Learning, Teaching and Assessing. Boston, MA: Allyn and Bacon, 2001.

Thompson, Max. What Moves You: Essential Questions. Boone, NC: Learning-Focused (www.learningfocused.com), 2009.

Quick Flip Questions for Revised Bloom's Taxonomy. Boston, MA: Pearson - Edupress (www.edupressinc.com), 2001.