Reinvent the wheel...

...and put it on the road to learning!

The Intersection of Blooms, TPACK, NETS, the Common Core, and SAMR...

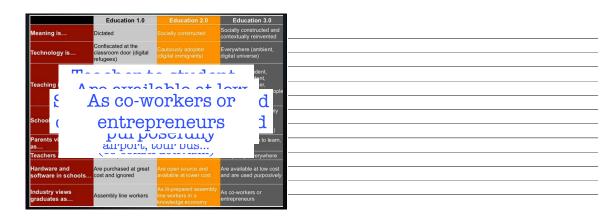
Schoology

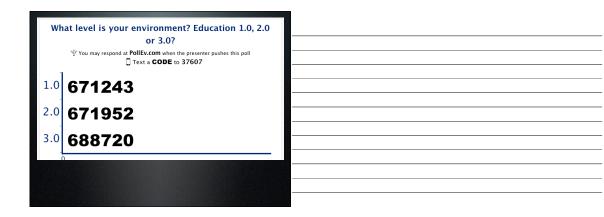
4VJBZ-99FFD (Session 2 and 6)

Twitter #masscue2013

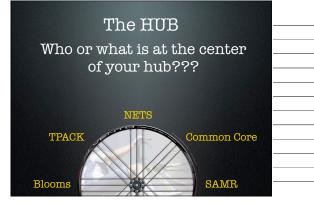
There are wheels...











The wheels...

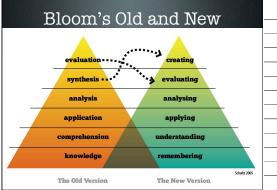
- Blooms Taxonomy / New Blooms
- TPACK
- NETS-S and T, A, C, & CS
- CCSS / MassCORE
- SAMR



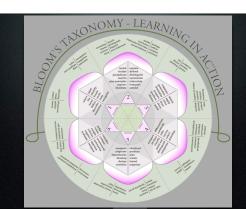
As a PE Major we focused on Bloom's psychomotor domain...





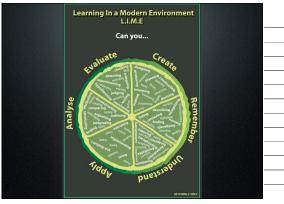




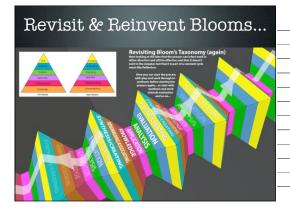












	LOW LEVEL TO	HINKING SKI			•				- KIG	H LEVEL TO	INTING 5	KILLS	-			
arred material d	Auts without which a previously	Comp To show under formation from book understo	nitionaling fire is the tend. Do	English Internationality	Teucie in a r problems by	applying ac techniques a		To examine and breaking identifying o	notives or ca of finding co		To change of Shing new. I gether in a c	a new patter	some .	To postge P ing opinion obout infor	valuation resenting and a by making ju- metion, validit ork beset on a	defend dipenents vol ideas or
ev words:		Key word	s:		Key wor	ds:		Key wor	els:		Key wor			Key wor	ds:	
dari Beo a Bela Idon Bon Icon Rom	e Spel no Seza d Tel al Tel al Teor te Whet and News are White est Why est Why est Why	One Cassify Company Contrast Demos- 10100 Discuss Estimate Epiden	Detend Generation Give mam- piles Illusinete Illusinete Illusinete Indersent Indersent Indersent Indersent Indersent	Outline Profect Purpoor Relate Rephysics Repty Restau Review Brean Summarise Transiste	Art Activities Nooliate Bulle Catagorise Choose Cho	Employ Experiment with Group Bostnete Interport Interport Interport Manipulate Make use o Manipulate Make Use o Manipulate Make Use o Manipulate Manipulat	Represent Select Sinulate Solice Solice Solice Solice Solice Solice Solice Solice Solice Solice Solice Solice	Analyse Appraise Anange Anange Anange Masadesen Gause and affect Desen Occolle Differences Differences Disorver Disorver Disorver	Examine Find Focul Punction Group Highligh In-doph discussion Inderenar Import Investigate Nation Nation	Noritice Question Rank Reson Relations High Response Response Resonants Separate Sep	Adapt Addro Bullo Charge Charge Cangeli	Estimate Experiment Extended Formulate Regen Ingothesis Imgothesis	Rowths Simplify Solve Specsiste Substitute Subpone Tabulate Text	Agree Aggesie Argus Asawa Asawa Bed Chesaw Consider Consider Consider Consider Consider Consider Consider Consider Consider Consider Consider Debare	Obgrove Obgate Obgate Effective Exclusive Exclusive Data Grant Record Insportance Information Informat	Measure Ophian Persisahin Persisahin Persisahin Persisahin Rotern Rotern Rotern Select Select Select Select Tex Used Used Validare
ections: earling edg earlying drag setting action	Dubcomes: Definition Fat: Libel Libel Libel Desidention	Actions: Chesilying Comparing Description Description	Cult Example		Domation Actions: Corrying and Decoring Implementing Using	100	lutcomes: monobalian ary ary ary ary ary ary ary ary ary	Detection Duringuish Device Databash Actionss: Advisoring Decembracki Imagrating Departure Departure Departure Departure Departure	4 0 0 0	ubline advent	Device Discover Discover Discover Discover Devices Devices Devices Devices Devices Devices Devices Devices Devices Devices Discover Discov	Ad Fai No	ida product w gatte inling	Decide Deduct Defend Determine Actions Actions Decising Decising Degining Degining Degining	444 014	oliz Kase
espining ethnolog	Yoz Viirklook Viirkloek	Pursphrasing Sumnarizing Question	500 R	e and tail mary	Question	5 15:	mantation ulpture mulation	Questio	ii NS:	ood sheet. Vity	Producing Question	20 55	ń.	Structuring Question	ns:	ead sheet: eey
an you fit three in you recall? in you select? ow did	ggen) uite_7 tan_7	Can you mplain is meani	clearly then company? coghrain the commartie og about? fean show?	pe of?	Now would y What example How would y you have lear How would y show? How would y of? What approx	es san yna fir nu solve nud2 nu arganise _ nu show ynur	toing adust To understanding	Here is Why do you to What is the to What indove Can you lot to What inforce	NAR		Now would y What would I Can you shife Can you prop Can you invest New would y different_1	ou improve happen X? orate on the n scur an alterna el?	doa_7 to yeade a	What is your How would y Can you and Would it be Why did the What would How would it	opinion of? mu preve,16spr m the volue/im	portance of _2 (choose_1 4_2
hen did hen didi hen is? hich one? ho were the main hey did?	s Taxonomy:	Mish is the lat Which stateme Will you state o works _2	si aniaer? nis support r interpret in	Your own	Now would y develop? What other w What would in Can you make What demen change? What facts w	to apply whe out if? For all the full to would provide cold you action	I paulearred to a plan to? elix to? doese to	Here would p Can you iden	m categorise iPy the difference of can you fin ristionship be a distinction restor of 1	1.2 1.2 1.2	(plar)? What could b (maining)? What way we Suppose you you do? Row would y Can yoo pand Row would y What facts or Can yoo pand Row would y What facts or Can yoo com Can yoo com	er done to min 2 2047 poc desig 2004 00 test2 ndate a theory 00 solimate 0 ne you comple trust a mobil	ine Janual Janual Lang Lang Lang Lang Lang Lang Lang Lang	tans? How would y How could y What chains What would y What judget faces would y What judget faces do shit explain? What judget faces do shit explain?	mu evaluate1 model you have you salect1 must would you at you know, he attern would you at you know, he	nate.2 mite store.2 mite store of uppediates

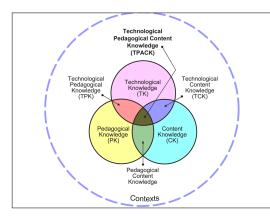




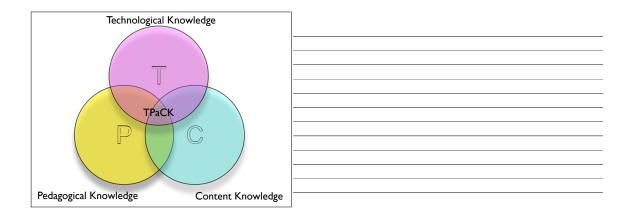


Are you familiar with...

- Blooms Taxonomy / New Blooms
- TPACK
- NETS-S and T, A, C, & CS
- CCSS / MassCORE
- SAMR

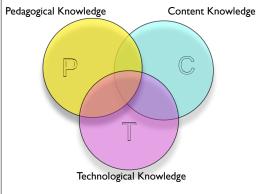




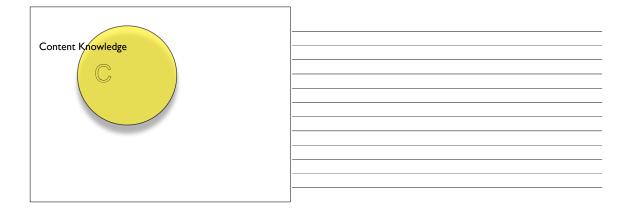


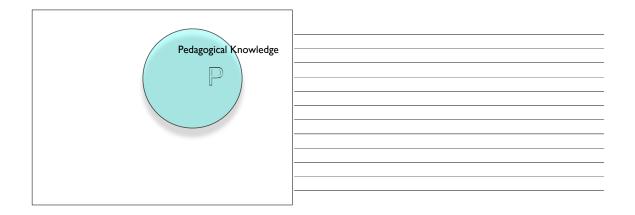


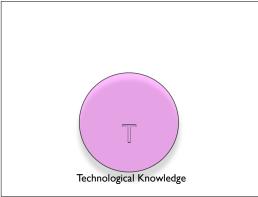




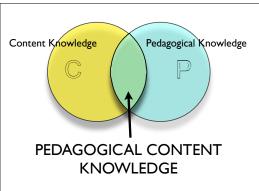




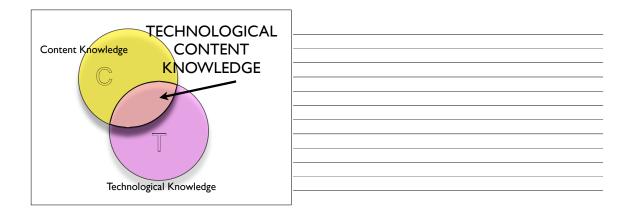


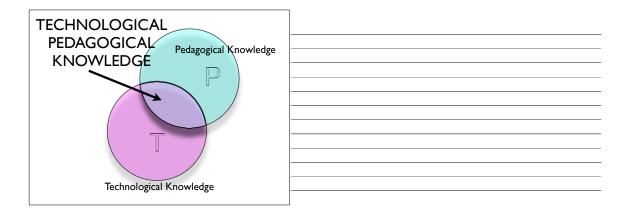


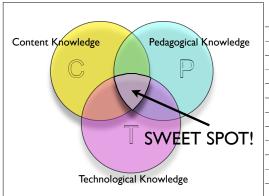














۵.	



Another new wheel...



Are you familiar with...

- Blooms Taxonomy / New Blooms
- TPACK
- NETS-S and T, A, C, & CS
- CCSS / MassCORE
- SAMR

STE NETS Standards

- NETS-Students
- NETS-Teachers
- NETS-Administrators
- NETS-Coaches
- NETS-Computer Science

NETS for Students K-12Standard 1: Creativity & InnovationStandard 2: Communication & CollaborationStandard 2: Communication & CollaborationStandard 3: & Information FluencyStandard 4: Critical Thinking, Problem Solving,
& Decision MakingStandard 5: Digital Citizenship

Standard 6: Technology Operations & Concepts

ISTE NETS for Teachers

Standard 1: Facilitate and Inspire Creativity & Innovation Standard 2: Design & Develop Digital-Age Learning

Experiences & Assessments Standard 3: Model Digital-Age Work & Learning Standard 4: Critical Thinking, Problem Solving, & Decision Making

Standard 5: Engage in Professional Growth & Leadership

The ISTE NETS and Performance Indicators for Teachers (NETS+T)

Are you familiar with...

- Blooms Taxonomy / New Blooms
- TPACK
- NETS-S and T, A, C, & CS
- CCSS / MassCORE
- SAMR



Common Core State Standards as they relate to Technology

Grades 1-8

- Graces 1-5 Forse 1 1.4.1.5. Known and nex various text features (e.g., houlings, tables of context, glosnains, inclusion, inclus

Grade 3 3.RL5 Use test features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently. 3.W.4 With guidance and support from adults, use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with oldens. 3.W.7 Conduct abort research projects that build harowledge about a topic. 3.W.8 Recall information from experimences or gather information from print and digital sources; take buref notes on sources and sort evidence into provided categories. 3.SL2. Determine the main ideas and supporting details of a test read aloud or information presented in diverse media and formats, including visually, quantitatively, and crally. 3.SL5. Crate engaging and on exceedings of stories or ponen that demonstrate fluid redding at an understandable pace, add visual displays when uppropriate to emphasure or enhance certain facts or denils.

Grade 4 4.8L7 7 Interpret information presented visually, or quantitatively (e.g., in charts, graphs, diagrams, tune lines, animations, or interactive clearly, or quantitatively (e.g., in charts, graphs, mathemation, contributes to an understanding of the text in which it appears. 4.W% of With some guadance and support from adults, use technology, including the liternet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding salils to type a minimum of one page in a single siting. 4.W.7 Conduct short research projects that build knowledge through investigation of different spects of a topic. f a topic

4.W.3 accult relevant information from experiences or gather relevant information from print and approximation of the statement of the statement of the statement of the arXL. Praphenes portions of a tert result aloud an information presenter in diverse media and formats, including youndly, quantitatively, and only. 4.S.L.5 Add audio recordings and visual displays to presentations when appropriate to enhance the development of man idea or dimension.

4.5.1.5 Add auton recentings ant visus unpays to presentence. In the development of main idea or themes. Grade 5 5 and 5 an

5.SL.5 Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.

Grach 6 6.3.27 Integrate information proceeded in different media or formativ (e.g., visually; 6.3.27.1 Compare and contrast the experience of reading a story, drama, or poem to intening to or viewing an auxie, vision, vision, or the viewing of the distance of the storest and "back" when reading the text to what they perceive when they listen or watch. 6.3.4.2. To charge a store of the terminet, to produce and publish writing as well as to interact and collaborate with others, demonstrate sufficient command of Keyboarding dista to write the store of the store of the terminet of the store and publish writing as well as to interact and collaborate with others, demonstrate sufficient command of Keyboarding dista to the store of the store of the store in the store of the

Grade 7

Grade 7
7.84.7. Compare and contrast a text to an audio, video, or multimedia version of the text, analyzing excl. medium's portrayal of the subject (e.g., how the delivery of a speech affects the impact of the work).
To any other subject (e.g., how the delivery of a speech affects the impact of the work).
W.M. Guest and a subject (e.g., how the delivery of a speech affects the impact of the work).
N.M. Guest and the strength of the subject (e.g., how the delivery of a speech affects the subject (e.g., how the delivery of a speech affect (e.g., how the delivery of the speech and collaborate with others, including linking to and critic sources, and well as to interact and collaborate with others, including linking to and critic sources, and accel point research properties detail speech cource, and quete or panylarise the data and conclusions of others while avoiding plagarism and following a standard format for ratio of other while avoiding plagarism and following a standard format of restart in speech and guest a standard format for ratio (e.g., vanib), quantitatively, onally) and explain how the idea clarity a speec, text, or ssue under XLS. A fully tembering the clarity and speech in the speech of the speec

SHOP. 7.SL.5 Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.

Grade 8 S.R.J. "Exable the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea. S.R.L. "Analyze the extent to which a filmed or live production of a story or drama stays faithful to or departs from the text or script, evaluating the choices made by the director or actors. S.W.A. Use technology, including the Internet, to produce and public writing and present the relationships between unformation and dises efficiently as well as to utercate and collaborate with others.

relationships between information and ideas efficiently as well as to interact and coursoncare w_{hite} others. 8.W.7 Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related. Focused questions that allow for multiple avenues of exploration. 8.W.8 Gather relaxating interaction of each source; and quote or panphrase the data and conclusions of others while avoiding plaparatum and following a standard format for estima-d conclusions of others while avoiding plaparation and following a standard formation (e. g., visually, quantitatively, cality) and evaluate the motive (e.g., occial, commercial, polinical) behind in presentation. 8.S.L.5 Integrate multimedia and visual displays into presentations to clarify information, strengthen chains and evidence, and add interest.



Do the NETS "wheels" help?

- Study and reflect
- refine your practice
- best practices
- pedagogy for 21st century engagement

Technology can impact...

- learning
- achievement
- engagement
- effort
- Creativity
- ???

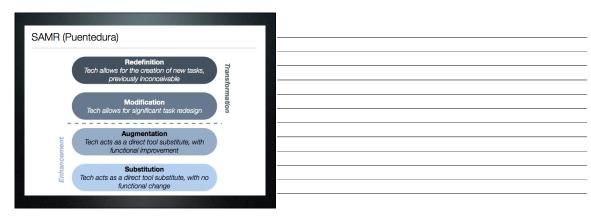
Are you familiar with...

- Blooms Taxonomy / New Blooms
- TPACK
- NETS-S and T, A, C, & CS
- CCSS / MassCORE

• SAMR



<iframe width="560" height="315" src="//
www.youtube.com/embed/I2sD3K3daq8"
frameborder="0" allowfullscreen></iframe>





1-Redefinition Technology allows for the creation of new tasks, previously inconceivable. 2 Modification OR Technology allows for significant task design. OR 3- Augmentation M Technology acts as a direct tool substitute, with functional improvements. N 4- Substitution N technology acts as a direct tool substitute with no functional change. N

|--|

1-Redefinition Technology allows for the creation of new tasks, previously inconceivable.	T R A	
2 Modification Technology allows for significant task design.	0 R M	
3- Augmentation Technology acts as a direct tool substitute, with functional improvements.	E	
4- Substitution technology acts as a direct tool substitute with no functional change.	N C E	

1-Recentition A Technology allows for the creation of new tasks, Previously inconceivable. 2 Modification B Technology allows for significant task design. B 3- Augmentation B Technology acts as a direct tool substitute, with functional improvements. E 4- Substitution N technology acts as a direct tool substitute with no N		T R
2 Modification 0 Technology allows for significant task design. M 3- Augmentation E Technology acts as a direct tool substitute, with functional improvements. E 4- Substitution N technology acts as a direct tool substitute with no E		A N S
Technology acts as a direct tool substitute, with functional improvements. Image: Constraint of the second substitute image: Constraint of the second substitute with no second substitute no second substitute with no second substitute no second su		0 R
Technology acts as a direct tool substitute, with N functional improvements. H 4- Substitution N technology acts as a direct tool substitute with no E	3- Augmentation	
4- Substitution C technology acts as a direct tool substitute with no E		N H
		N C

1-Redefinition Technology allows for the creation of new tasks, previously inconceivable. 2 Modification Technology allows for significant task design. 3- Augmentation ENHANCE Technology acts as a direct tool substitute, with functional improvements. 4- Substitution technology acts as a direct tool substitute with no functional change.

• Integrating Technology into the Curriculum...

• Redesign the Curriculum to take advantage of the unique capabilities of technology

What do you think about this last statement?

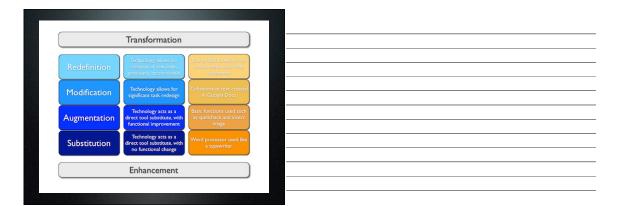
• Redesign the Curriculum to take advantage of the unique capabilities of technology

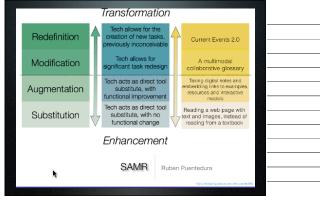


The SAMR Ladder: Questions and Transitions

Substitution:

- What will I gain by replacing the older technology with the new technology? What will I gain by repracing the other technology management of Augmentation:
 Substitution to Augmentation:
 Have I added an improvement to the task process that could not be accomplished with the older technology at a fundamental level?
 How does this feature contribute to my design?
- Augmentation to Modification:
- Augmentation to moorineaturit: How is the original task being modified? Does this modification fundamentally depend upon the new technology? How does this modification contribute to my design?
- Modification to Redefinition:
- What is the new task?
 Will any portion of the original task be retained?
 How is the new task uniquely made possible by the new technology?
 How does it contribute to my design?

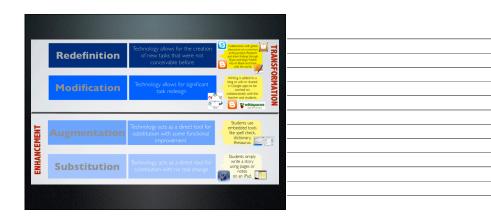


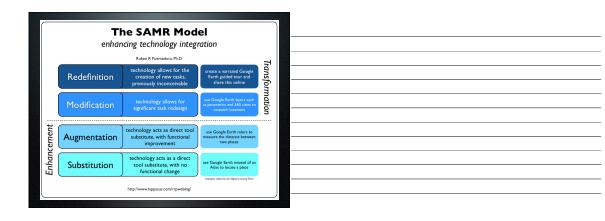


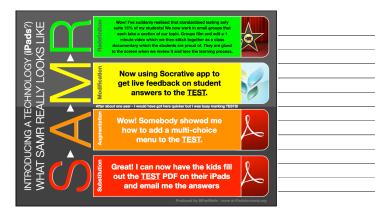




	Transforma	ation							
Redefinition	Tech allows for the creation of new tasks, previously inconceivable	???, Skype interview with Jack London scholar, use of Maps to follow Buck's travels, use of Flickr to picture the locales, Wordle word study, Tweet's from Buck's perspective, Photabulary,							
Modification	Tech allows for significant redesign	Teams use Google Doc to summarize a chapter, then asynchronously script, and finally use GarageBand to record CliffNotes styled podcasts or a ComicLife graphic novel							
Augmentation	Tech acts as direct tool substitute, with functional improvement	Students read <i>Call of The Wild</i> using iBooks, using the built in dictionary, highlighting passages, and taking notes							
Substitution	Tech acts as direct tool substitute, with no functional change	Students read <i>Call of The Wild</i> using IBooks							
AMB - Ruben Puertedura	Enhancem	nent							





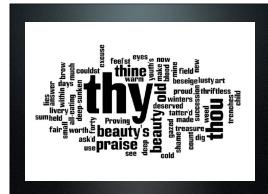






Let's look at these	
• Shakespeare's Sonnets Using Wordle	

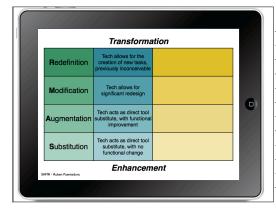


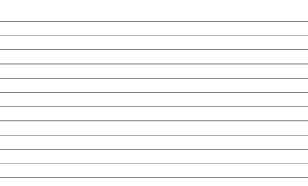












Class Task	Substitution	Augmentation	Modification	Redefinition	
ciuss rusk					
Note Taking	Taking notes using IOS Notes	Using Evernote to Categorise and Tag class notes	Using SlingNote to curate online sources	Sharing notebooks and collaborating using Evernote	
Researching	Using Safari to research and collate information (select/copy)	Bookmark and Share sources using the share button	Download and annotate image using Skitch	Mind mapping concepts visually	
Presentation	Create a Keynote presentation on the iPad	Demonstrate understanding using Show Me Everything	Combine audio, video and text notes in iMovie Presentation	NearPod Presentation	
Content Distribution	Copy, paste and send a web address by email	Send a 'Meeting Request' for deadline reminders	Create and Scan a QR Code	Augmented Reality (AR) using Aurasma	
uthoring Documents	Open a PDF from an email to read the document	Dictionary / Search Document	Annotating digital documents in GoodReader and iBooks	Creating an interactive document using iBooks Author	
File Management	Students email documents from Pages to Teacher	Student submit to submissions folder from Pages	Managing files from Server and Google Drive using GoodReader	Allowing peer-feedback and collaboration using a Wiki	











