Date of Creation May 6, 2010												
Instructor: Jane Powel	"Model the Masters" This course focuses the learner on the use of paradox to make a systemic change in elementary education											
1 Essential Question	**1. Is copying the precursor to creativity?**											
Week # 1	***WEEK 1***	***Assessment of the Objective***	***Formative assessment***	***Activities***	***Teaching Strategies***	***NYS***	***Seat Time***	***Online***	***Synchronous time***	***Precious***		
	Objective 1											
	Student will be able to navigate the moodle system features necessary for completion of this course	1. Student will post electronic name badge and profile 2. Students will respond to one other student's introduction.	student will post questions and/or comments after viewing tutorial on how to use the moodle system	view tutorial on using the moodle system student will compile list of questions and/or comments about moodle student will place a self-portrait photo and letter of introduction in their fl	lecture		30 mins.					
	Objective 2											
	Student will be able to defend the use of the 6 creative behaviors in historical discoveries.	Student will write 1-2 paragraphs illustrating how the lack of creative behavior stymies innovation and growth	student will post response to one other student's comments on the use of the behaviors by famous people throughout history	student will be able to link one or more creative behaviors to selected innovators in history student will list the 6 creative behaviors	lecture, mentorship		60 mins.					
		*NOTE- PARAGRAPH WRITING RUBRIC will be used to grade all written assessments										
	Objective 3											
	student will be able to illustrate the prevalence of paradox and duality in the universe			student will be able to define paradox. Student will list 3 examples of duality.								
		student will write 2 paragraphs citing the prevalence of paradox and duality in the un	student will post response to one other student's definition and examples.		mentor, self directed learning, discussion		60 mins.					
							2.5 hrs. total					
					discussion		45 mins					
				student will list 3 examples of copying as teaching method in various disciplines								
INTRODUCTIONS	**WEEK 2**	student will write 1- 2 paragraphs illustrating the benefit of copying to foster creativity										
Week #2			student will post response to one other student's examples									
	objective 1			student will be able to to link 3 specific scientists to one or more creative behaviors.	mentorship, discussion		***45 mins.***					
	student will be able to describe the connection between copying and creativity	student will write 1-2 paragraphs highlighting behaviors and traits common to both adult scientist and young child	student will post a reaction to one other classmate's links		forum							
	Objective 2											
				student will list 10 adjectives applicable to to young children birth to 10 years old								
			student will post a reaction to remarks made by one of the scientists	student will list 10 activities common to scientists; use verbs.	self-directed learning, mentorship, discussion							
	student will be able to inextricably link the young child and the scientist											
		student will cite 3 recent studies (within last 3 years) that make the case for more visual learning in the classroom. Student will post the abstracts or		students will detect the 6 shapes in nature in their own environment			60 mins.					
	objective 3	NOTE- grading research submissions will be binary		swbat integrate the 6 shapes in nature within lesson plans (exemplar pro								
	student will defend the use of more visual learning in the classroom		student will create and post collage of 6 shapes in nature		lecture, discussion, self-directed learning, mentorship		2.5 hrs. total					
	WEEK 3											
	Objectives											
	Objective 1	binary grade		students will identify the 5 platonic solids								
	student will defend use of 3- dimensional activities as superior to 2 D for young children		student will post response to 3 other student's ideas for incorporation of platonic solids into lessons	student will list ideas for use of at least one platonic solid in a math, sci	project							
		assessment is embedded in the project. Students will debate the pros and cons of model building and 3-D learning vs. 2-D instruction in the elementary		student will read excerpts from the *NYTimes* article "The Moral Life of Babies" 5.9.2010			45 mins					
	Objective 2	student will write 1 paragraph explaining which model	students will post 2 responses to students	student will list 6 discoveries made through the use of model organisms								
	Student will be able to evaluate the pros and cons of using model organisms in scientific research	organisms they would not use in the classroom and	regarding discoveries made through the use of									
		student will write 1 paragraph explaining which model organisms they would use in the classroom and why.	model organisms		mentor, self-directed learning, discussion							
							45 mins					
				student will list 5 reasons why they don't use the tools of the scientist in								
	Objective 3		student will respond to another student's post	student will create wishlist of scientific technology for their classroom								
	student will be able to problem solve for elementary teachers who want to do more science.	student will design "motivational office poster" offering 10 things teachers can do to get more science into their classroom. (Binary grade)	re money, time, safety, space and/or cognitive aspe of technology		lecture, small group work		60 mins					
				students will identify 12 tools of the scientist			2.5 hrs. total					
					lecture, ,mentorship, discussion							
	Week #4						75 mins					
			student will post response to another student's choice of scientist									
	Objectives											
	Objective 1				small group work							
		student will choose favorite scientist and design activity requiring students to model their behavior		read excerpts from *The Double Helix* ,(Watson) *What Mad Pursuit* (Crick) *Alone in Her Field* , (McClintock)								
	student will be able to incorporate creative behaviors and experiments of particular scientists into their curriculum	and /or experiment. Binary grade		watch "naturally obsessed" PBS introduce lego First's "gracious professionalism"								
	Objective 2	student will create a *handbook of 21st century critical thinking skills* with examples (binary grade)			small group work							
	student will be able to evaluate which critical thinking skills are most useful for 21st century stude	minimum 4 skills		student will define the critical thinking skills of the scientist			75 mins					
				student will be able to model one or more critical thinking skills of a selected scientist.								
				read excerpts from***Second Nature*** *by Gerald Edelman*			2.5 hrs. total					
			student will respond to another student's comments on the forum		forum							
					lecture							
		Formative assessment										
	Week #5											
	Objectives											
	Objective 1		***Activities***									
	student will be able to evaluate efficacy of virtual tools, animations and templates for instruction											

					mentorship							
					small group work							
		student will publish a list of "10 best virtual tools, animations and templates" for teachers (binary grade)										
	Objective 2				self-directed learning, small group work							
							45 mins.					
	student will relate cognitive development of children with appropriateness of hands-on science labs	Student will diagram a task-analysis of a hands-on lab		student will view and perform 3 virtual dissections								
		illustrating how the input, actions and processing req	student will post response to one other student's ideas									
		directly relate to the cognitive development of the elementary student. (Binary grade)			lecture, small group work							
				student will view 5 animations for science teaching/research								
	Objective 3											
							45 mins					
				student will transform aselected science article into a simulation or lab								
	student will analyze pros and cons of modeling the masters for particular student profile.	Student will prepare an abbreviated "IEP"										
		(Individualized Educational Plan) for a particular stude		student will read excerpt from *Thumbs, Toes and Tears* by Chip Walter								
		ie, asperger's, gifted, hearing impaired, ADHD, etc.,					60 mins					
		uses copying, modeling, and a master to satisfy										
		a short and long term goal.	student will respond only to instructor	student will visit nytimes science blog online								
		Assessment of the Objective					2.5 hrs.					
				student will choose from selected student profiles			total					
				student will review a sample IEP								
				student will brainstorm at least 3 ideas about how "modeling the masters	lecture, self directed learning, discussion							
	Week # 6			***Activities***								
			student will post at least 2 responses to other stude		lecture, self directed learning, discussion							
	Objectives		remarks about "modeling the masters"									
	objective 1											
		student will prepare "keynote address" to *NYS Reading and Math Teachers Conference* on the										
	student will be able to defend placing science at the center of the elementary school curriculum	subject of putting hands on science labs in place of			mentorship, lecture							
	Objective 2	and math periods. (5 paragraph essay) writing rubri					60 mins.					
		student will "*mentor*" a student teacher by providing		student will post average percentage of weekly instructional time								
	student will be able to formulate his/her own template for interdisciplinary lesson creation including science	him/her with a NYS standards-based unit lasting 2 weeks including: unifying theme, essential	student must respond to at least 2 other students' remarks on this topic	dedicated to math and reading. (Instructional time does not include lunch/recess)								
							75 mins.					
				student will cite processing skills, and learning objectives shared in MST and ELA curricula								
					discussion							
	objective 3		student must respond to at least 2 other students' remarks on this topic	review the NYS MST and ELA, SS , Health and Arts standards for the elementary level.								
	student will complete course evaluation			student will define contextual learning								
		student will be able to evaluate course	student will submit course evaluation				15 mins.					
					project							
							2.5 hrs total					
				student will complete course evaluation								
EVALUATIONS												