### First Wave of Development: Correspondence / Independent Study (1840's ...)

Context (economics/ politics/ societal values and pressures/ government policies/ technological advances)	2) Theories/ Ways of Understanding	3) Institutional and Organizational Developments/ System	4) Teaching/ Learning Methodologies (role of teacher/role of learner)	5) Predominant Technologies	6) Key Authors
Pamela Lopez: Distance Education began to develop in the 1880's. The industrial Revolution gave birth to economic growth an increase in workforce.  Political: There were no political restraints. Classes were offered to anyone anywhere.  Government: The government was concerned about migration from the farmlands to cities. Yvette Klubertanz: World War I and II The railway system network was essential	Pamela Lopez: The first Systematic Correspondence study program in the United States Laura Howard: Rustinsches Fernlehrinstitut method and principles of correspondence learning resources, (Delling, 1966, pp. 19-20 as cited in Holmberg, 2005, pp. 22-23; Holmberg, 2005, p. 21-22). "Occupational training and	Pamela Lopez: RFD was launched as an experiment in 1892 at the following: University of Chicago, Pennsylvania State College, University of Wisconsin Yvette Klubertanz: univ of London (1858) began providing external programs of study. Laura Howard: "1856 foreign language correspondence education may have been developed in Germany (Noffsinger 1926, p. 4 as cited in Holmberg, 2005 p.14)"	Pamela Lopez: Student guidelines: No political restraints, courses were not based on campus semester students were able to register for class at any time. Student/instructor interactions were considered formal based on written assignments. Laura Howard: "independent study"(Haughey, 2010, p.48)  Dewanna Knight The Benton Harbor Plan was introduced within the working	Pamela Lopez: In 1892 RFD: Rural Free Delivery of Correspondence material (free)  Systemic Correspondence program	Pamela Lopez: Garrison & Cleveland-Innes (2010) Yvette Klubertanz: Margaret Hughey (2010) Laura Howard: Delling (1966), Holmberg (2005)  Moore and Kearsley (2012)

	T		<u>,                                      </u>	
o the delivery of	academic courses	Dewanna Knight	class community of	
nstruction materials.	are viewed as to	Home study (for profit	Benton Harbor to	
	be common in	schools) and	provide "distance	
Dewanna Knight	distance	independent study (for	education program"	
Morrill Act 1862 -	education during	universities) was	with nine students. The	
educational	this time"	introduced allowing	plan was a break away	
opportunities open to	(Holmberg, 2005,	people to receive for	from traditional college	
people of all	p.16).	the first time an	preparatory	
packgrounds (Moore	"The learning	education by distance.	coursework, but in the	
and Kearsley, 2012, p.	experience and	(Moore	working class	
26).	knowledge gained	and Kearsley, 2012, p.	community of Benton	
<b>-</b> 0).	is not and does	23).	Harbor provided for (1)	
	not have to be the		isolated students, (2)	
	same for all	Dewanna Knight	enriched small high	
	students in the	"National Home Study	school curriculum, and	
	same course	Council organized to	provided professional	
	(Holmberg, 2005,	regulate and promote	guidance. (Noffsinger,	
	p. 24)".	ethical practices and	1938, p. 85)	
		professionalism."		
		(Moore and Kearsley,		
		2012, p. 26).		
		Dewanna Knight		
		Society to Encourage		
		Home Study (aka		
		"Silent University),		
		first significant		
		example of distance		
		education. Educating		
		women was its goal, in		

the subjects of English, History, Science,
French, German. and
Art.
(Caruth and Caruth,
2013, p. 142).

### Second Wave of Development: Systems Approach to Education (1960's ...)

1) Larger Context (economics/ politics/ societal values and pressures/ government policies/ technological advances)	2) Theories/ Ways of Understanding	3) Institutional and Organizational Developments/ System	4) Teaching/ Learning Methodologies (role of teacher/ role of learner)	5) Predominant Technologies	6) Key Authors
Yvette Klubertanz:	<u>Yvette</u>	Yvette Klubertanz:	Yvette Klubertanz:	Yvette Klubertanz:	Yvette Klubertanz:
age of educational	Klubertanz:	France and Netherlands	communication between	radio, postal mail, early TV,	Borje Holmberg (interview
radicalism	Empathy(teachers	leading the way in	tutors and students	printed books, telephone,	2004)
	should not only	correspondence education,	(Tutor becomes the	conferencing	
Dewanna Knight	feel for their	beginning of Open	most important	Laura Howard: audio/video	Margaret Haughey (2010)
1972: All cable	students but also	Universities	interactions with the	tapes (Peters, 2010, p. 46)	Otto Peters (1993)
companies required by	show that they		student),		Laura Howard: Gary Miller
FCC to provide	feel for them)	Dewanna Knight	learner-centered,	Laura Howard: PBS satellite	(1978)
educational channel	Didactic (lay	Federal Government	counseling,	delivery, 1978 (Miller, pg 32)	Otto Peters (2010)
(Moore and	down rules-you	issued first educational	conversational, personal	Educational Radio	
Kearsley,2012, p. 31)	tell people what	radio license to Latter Day	study model,	• 1934: Educational	Dewanna Knight
	things are)	Saints University of Salt	instructional system	Television	Ludwig von Bertalanffy,
			design (ISD model)		formalized the idea of systems

Correspondence	Lake City, UT (Saettler,		• 1961: Instructional	in his book General System
education con'd;	1990).	Dewanna Knight	Television Fixed Services	Theory (first published in
industralization;		Social-constructivist	(ITFS)	1968), defining it as 'a set of
transactional	Dewanna Knight	models begin to take a		elements standing in
distance	"Schools of the Air" K-12	foothold in distance	(CATV) and Telecourses	interaction, "a complex of
	educational public	education when		interacting elements," and "a
	programming launched.	enabled by email,		dynamic order of parts and
	(Moore and Kearsley,	chat, many-to-many		processes standing in mutual
	2012, p. 29)	communication		interaction" (Davidson, 1983,
		technologies		p. 26).
	Laura Howard: a system	communication		
	of tasks teams were used	become increasingly		
	to create and deliver	available (Anderson &		
	distance education courses	Dron, 2012, p. 5)		
	(Haughey, 2010, pg 54)			
		<u>Dewanna Knight</u>		
	Laura Howard: "support	Delivery of		
	in correspondence	educational		
	education is highly	programming known		
	regarded as necessary and	as "telecourses," were		
	new developments in the	being delivered by		
	industrialization of	broadcast and		
	distance education are	television networks		
	formed"(Peters, 2010, pp.	(Moore & Kearsley,		
	46-47).	2012, p. 31)		

Second Wave of Development: Systems Approach to Education (1960's ...)

1) Larger Context (economics/ politics/ societal values and pressures/ government policies/ technological advances)	2) Theories/ Ways of Understanding	3) Institutional and Organizational Developments/ System	4) Teaching/ Learning Methodologies (role of teacher/ role of learner)	5) Predominant Technologies	6) Key Authors
			Dewanna Knight Emphasis moved towards professionally designed television series introducing new subject matters (that was not being currently taught) to the students, which contributed to classroom curricula (Kofahi and .	Yvette Klubertanz: e-books, satellite, email, CDs/DVDs	

1) Larger Context (economics/ politics/ societal values and pressures/ government policies/ technological advances)	2) Theories/ Ways of Understanding	3) Institutional and Organizational Developments/ System	4) Teaching/ Learning Methodologies (role of teacher/ role of learner)	′	6) Key Authors
	Yvette KLubertanz Constructivism - groups work together to construct knowledge learner (Anderson 2010)	Dewanna Knight Most Important Experiments: 1. University of Wisconsin's AIM Project - purpose was to test the idea of joining communication technologies whilst delivering high-quality, low cost teaching to off campus students. 2. Great Britain's Open University (1969) - A world class fully autonomous university and model of the total system	Dewanna Knight New way to organize technology and human resources emerge, leading to new educational theorizing (Moore and Kearsley, 2012, 31).	Yvette Klubertanz: Webchat, blogs, smartphones, podcasts	Anderson (2010)

		distance education approach (Moore and Kearsley, 2012, p. 33)			
1) Larger Context (economics/ politics/ societal values and pressures/ government policies/ technological advances)	2) Theories/ Ways of Understanding	3) Institutional and Organizational Developments/ System	4) Teaching/ Learning Methodologies (role of teacher/ role of learner)	5) Predominant Technologies	6) Key Authors
Pamela Constructivism is the name given to theories of learning grounded in epistemological alternative to objective theories of knowledge (Cleveland-Innes & Garrison, p. 112).  1993 World Wide Web (WWW) provided educators with ability to change their traditional way of teaching to one which enables the learner to make sense of the	Pamela Constructivism is learning theory where learning is believe to take place as a result of how well learners are able to apply new knowledge to pre-existing knowledge. In 2000 Bransford list four characteristics of constructivist learning environments (Cleveland-Innes & Garrison, p.114):	Pamela Template based approach to online learning:  *University of Phoenix  *Devry  In 2000, The U.S. National Research Council publishes How People Learn, a semi-official text based on constructivists' perspective which summarizes learning	Pamela Learner-Centered teaching focuses more on "what and how"students learn as opposed to how it is being taught. It builds the students "conceptual and cultural knowledge" by tapping into their past knowledge and experiences (Cleveland-Innes & Garrison, p. 115).  Courses must be developed prior to	Pamela Digital media and the integration of www provide an inexpensive way to evaluate, manipulate, create and share interactive video such as Youtube (Cleveland-Innes & Garrison, p. 111)  Web 2.0- Collaborations which include Wikipedia, Wiki, Blog, Global Nomads Group (GNC), Facebook, Twitter, (Cleveland-Innes & Garrison, p. 111).	Pamela  Cleveland-Innes & Garrison, 2010  Michelle Coney A Systems Approach to the Future of Distance Education in Colleges and Universities: Research, Development, and Implementation. (Farhad Saba and Professor Emeritus of San Diego State University, 2012).

information and use it	-Learner- Centered	and educational	student taking classes	Michelle Coney	
to generate knowledge.	Environment	implications. It	which makes it difficult	Stella: system-dynamics	
Multimedia	-Knowledge-Centered	recommends	to for the teacher to	modeling software by Saba	
Integration-	-Assessment-Centered	replacing traditionally	adopt learning activates	and Shearer in 1994. The	
	-Community -Centered	focused learning from	based on the learners	software was used to	
Concurrent with the	Social Constructivists	the delivery of	characteristics.	stimulate the variability of	
WWW growth.		instruction and	Vanaraladas Cantanad	transactional distance w/ two	
2006 Mashap-	believe knowledge and	written material to	Knowledge-Centered	other variables of structure	
designers and	learning is obtained	focusing on	learning environment concentrates on	and dialogue.	
instructors began	through by way of collaboration and social	supporting active			
working together to	interaction	learning and creating	learning within context and when facts and	(Saba, 2012).	
aggregate text, audio,	Interaction	of collaborative			
graphics, videos and	Michelle Coney	communities	procedures of learning are integrated into an		
animated files into	Crown dod on avestores	(Cleveland-Innes &	environment rich in		
unified works.	Grounded on systems science method, and	Garrison, p. 114).	corpora of individual		
Economical- Online	,	Online learning	understanding		
platforms provide	technology. (Moore and	necessitates ongoing	(Cleveland-Innes &		
ongoing assessment of	Kearsley, 2012).	assessments and	Garrison, p. 116).		
the student's complete		feedback (Innes)	Gairison, p. 110).		
records, work	D V : 14	reedback (filles)	Assessment-Centered		
performance, log on,	Dewanna Knight	Digital technologies	learning environment		
e-portfolios, peer	Theory development	such as www remove	emphasizes ongoing		
assessments, computer	becomes an area of	the constraints of	meaningful feedback		
based assessments,	focus. M.G. Moore	authoritative, lecture	from the teacher to the		
automated feedback,	questions the progress of	and text based model	learner		
self-assessments, etc.	DE absent consideration	of knowledge	(Cleveland-Innes &		
	of "macro factors."	transmission.	Garrison, p. 118).		
	Classifying DE				

with little cost to instructors.  Michelle Coney  Post- Industrial view of DE: The origin of the application of systems approach of Charles Wedemeyer. (Saba, 2012).  Dewanna Kni Keegan: Three Classification Independence Autonomy; Industrializate Teaching; and Interaction & Communication & Communicatio	University of Wisconsin-Madison (Saba, 2012).  Dewanna Knight Different types of DE models are developed, which included single-mode, dual/mixed-mode, extension, consortia, and virtual tech-based. (Simonson, 1999).  John of d John John of John	participation with all students	
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		T	
existing theories of	between learner and		
communication and	instructor, and among		
diffusion with	learners. (Saba, 2012).		
philosophies of			
education (Simonson,			
1999, p. 3).			
<u>Dewanna Knight</u>			
Equivalency Theory			
which focused on the			
delivery of instruction			
via real-time			
telecommunications			
technologies is			
introduced (Simonson,			
1999, p. 3).			
Dewanna Knight			
Malcolmn Knowles			
popularizes Androgogy			
in his 1970 book entitled,			
The Modern Practice of			
Adult Education (Bullen,			
1995, p. 2).			

Third Wave of Development: Internet / Web-Based Communication (1995 ...)

Third Wave of Development: Internet / Web-Based Communication (1995)						
1) Larger Context (economics/ politics/ societal values and pressures/ government policies/ technological advances)	2) Theories/ Ways of Understanding	3) Institutional and Organizational Developments/ System	4) Teaching/ Learning Methodologies (role of teacher/role of learner)	5) Predominant Technologies	6) Key Authors	
Laura Howard: "Digitized Learning Era" (Peters, 2010 p.47), beginning of the digital age students who have a new set of university needs in digital technology, curriculum and communication (Peters, 2010 p. 50)  Laura Howard: "mass education" (Peters, 2010, p. 50) and online course delivery and accountability (Peters, 2010, p. 50)  Pamela Lopez Economics:	Laura Howard: education is now a "service" (Peters, 2010, p. 47), "providing and developing quantity and quality education" (Peters, 2010, p.47), pedagogical changes (Peters, 2010, p.47), distance education has become "post- industrial" (Peters, 2010, p. 47)  Pamela Lopez Connectivism: Assumption is the learner becomes the center for connecting and constructing knowledge in a context that includes external groups and networks as well as the learners own past histories and predilections (Anderson & Dron, 2011).  Yvette Klubertanz:	Laura Howard: Penn State World Campus, UMUC, partnerships between sellers of online material/ developers and educational institutions (Peters, 2010, p. 48)  Pamela Lopez University of Phoenix and Devry began to use template based approach to elearning (Swan, 2010)  Michelle Coney Not only are UMUC, University of Phoenix institutions of	Laura Howard: communication between student/teacher by email or chat sessions, multi-media use, more accessibility to information (Peters, 2010, p, 47)  Laura Howard: multitasking and integrating various new types of educational resources, curriculum and material to effectively enable learning (Peters, 2010, p. 50)	Pamela Lopez Web 2.0 tools Wiki and Blogs are being used to facilitate deep and meaningful aggregation of knowledge based information learning (Anderson & Dron, 2011)  Yvette Klubertanz: Learning Management Systems (LMS) - Sakai, D2L, Moodle, and Blackboardincreased computational power and storage capacity of computers (Anderson, 2003).  Michelle Coney Social presence: wikis, twitter, threaded conferences, voicethreads	Laura Howard: Otto Peters (2010)  Pamela Lopez Anderson & Dron (2011) Swan (2010)  Yvette Klubertanz: Anderson (October 2003)  Michelle Coney Saba, (2012). Anderson & Dron, (2011).  Dewanna Knight Randy Garrison: "Naïve Constructivism" typified by "educator's	

Tech bubble e-learning promises were not delivered.

Dot-com crash results in standardized scalable courses that began to achieve consistent results (Swan, 2010).

### yvette klubertanz:

Advancement of the Internet, Web 2.0, virtually mediated discussions (Swan 2010)

### Michelle Coney

Post Industrial Era cont... Globalization (Saba, 2012).

### Dewanna Knight

Online distance learning is increasing in popularity among adult and disenfranchised learners. Teaching institutions are forced to expand the availability of online distance learning opportunities to meet the need for flexibility among

Interaction Model (Anderson, 2003) interaction occurs when two objects and events mutually influence one another (learner & teacher). **The Interaction Equivalency Theorem** differentiating between high and low levels of interactivity (count the number of times members are actively engaged with other participants (Anderson, 2003). Community of Inquiry (COI), learning

Community of Inquiry (COI), learning takes place within a community and that real learning is achieved only through the interaction between social presence, cognitive presence and teaching presence (Swan, 2010).

Blended learning- the organic integration of thoughtfully selected and complementary face-to-face and online approaches and technologies (Vaughan, 2010).

### Michelle Coney

Connectivism through distance education. Building and maintaining networked connections that are current and flexible. (Anderson & Dron, 2011).

### Dewanna Knight

Collaborative Constructivism: regarded as central to the development of online distance education (Garrison, 2009, p. 93).

distance education.
Also Stratford Career
Institute is distance
education. Distance
education also help
develop
homeschooling and
K-12 online learning.

Dewanna Knight
Teaching institutions
increase
asynchronous
delivery of course
materials via the
internet.

Dewanna Knight
Emphasis on learner
control continues to
grow. Teaching
institutions embrace
use of two way
communication
technologies for
exchange of
information between
teachers, students
and groups.

Dewanna Knight
Open and distance
learning are
increasingly
becoming the norm
and not the

### Laura Howard:

"synchronous and asynchronous approaches together" (T. Anderson, online video, November, 2011)

### Pamela Lopez

The teacher is a "guide, helper and partner" and content is secondary to the learning process (Anderson & Dron, 2011)

Yvette Klubertanz: learner-centered / knowledge-centered / Assessment-centered and community-centered are strongly rooted in the constructivist theory of how people learn(Swan, 2010)

Michelle Coney
Shift in learning and
teaching. Independent
study. (Garrison, 2009)
Unlike earlier pedagogies,
the teacher is not

and other network tools. (Anderson & Dron, 2011).

### Dewanna Knight

Computer costs have declined and are increasingly more affordable to individuals and families.

<u>Dewanna Knight</u> Internet availability and accessibility are widespread.

### Dewanna Knight

Mobile technology, discussion groups, email, audio/video content, and social media, are regarded as complements to the distance learning experience and ways in which to increase student engagement/learning.

blind faith in the ability of students to construct meaningful knowledge on their own" (Garrison, 1995, p. 138).

Dewanna Knight
Anderson's Interaction
Equivalency Theorem,
which addresses the
role of interaction
between teacher,
student, and content
in formalized distance
education.

distance learners	Dewanna Knight	exception.	responsible for defining	
(Holmberg, 2005, p. 32).	Social Constructivist Learning		generating, or assigning	
	Theory: regarded as the		content. Learners and	
Increased competition	foundation of distance education		teachers collaborate to	
and the shrinking	(Swan, 2010, p. 5).		create content. (Anderson	
marketplace change the	Dowanna Knight		& Dron, 2011)	
focus of employers and	Dewanna Knight			
institutions of higher	Interaction Equivalency		Dewanna Knight	
learning to shift to a	Theorem is "regarded as the		Virtual learning	
heutagogical approach	first theorem to systematically define interaction in distance		environments create	
in order to allow people to fully express their	education, which		autonomous learning	
capabilities (Hase,	consists of three types of		environments for	
2000).	"learner–content interaction,		students, where	
	learner-instructor interaction,		independence and	
	and learner-learner interaction"		self-control are key	
	(Moore, 1989, p. 1).		factors to success	
	Dewanna Knight			
	Elaboration Theory: states the			
	information should be presented			
	broadly with supporting exercises designed to provide students with			
	opportunities to apply the general			
	knowledge gained in new			
	situations (Holmberg, 2005, p.			
	54).			
	Dewanna Knight			
	Empathetical Pedagogy:			
	regarded as an influential force and motivator for influence in			
	distance education and			

achievable via teacher-learner

discussions (Fuller, R., Kuhne, G., & Frey, B., 2011, pp.		
153-54).		

### Euture Wayer Exploring New Descibilities (2000)

Future Wave: Exploring New Possibilities (			2000's)		
1) Larger Context (economics/ politics/ societal values and pressures/ government policies/ technological advances)	2) Theories/ Ways of Understanding	3) Institutional and Organizational Developments/ System	4) Teaching/ Learning Methodologies (role of teacher/role of learner)	5) Predominant Technologies	6) Key Authors
Current trends: new technology the emergence of social networking software used to enable a group of individuals to collaborate via internet. (Beldarrain, 2006).	Constructivist Theory: closely associated with the epistemic engagement view of learning theoryall forms of constructivism share an understanding that individuals construct knowledge	Columbia University's Teachers College (instructor managed blog: Ulises Mejias) (Belderrain, 2006)  Deakin University (Australia): implemented wikis	Focus is on promoting student to student interactions; learning interactions in dealing with students, teachers, and content between itself and between others (Anderson, 2010)	Blogs, (Webolgs), wikis, and podcast. (Belderrain, 2006). Open source applications: Imeem, Whiteboard, and InstaColl.(Belderrain, 2006) MOOCs (Anderson, 2010) Learning Analytics (Siemens) Web 2.0, virtual philosopher, Twitter, and learner-generated	Barnett (2014) Belderrain, (2006) Blaschke, (2012) Cummane (2011) G. Siemens (2004) Hase & Kenyon (2000) Howard, Veerman & Saunders, 2010) Kamenetz (2010)
sub-clusters:students that are in large online classe (MOOCs) start to gather or cluster together on a common ground or geographical view (Schwier, 2011)	based on "their individual, collective and past experiences" (Anderson, 2010, p. 29).  Connectivism-learning theory of the digital age	called "collaborative icebreaker" (Belderrain, 2006)  Open Educational Resource Products (OER)-are freely accessible, openly licensed documents and	"Flipped classroom"- "various models of lecture and online components where educational roles are switched. There is more focus on	content (Hase & Kenyon, 2000)  Edupunks and other do it yourself teaching/learning tools are gaining in popularity and serve as an alternative to mainstream tools (Kamenetz,	Larrameandy-Jones and Leinhardt (2006) Mejias (2005) Ramirez (2010) Schwier (2006) Schwier (2011) Sparks (2011) T. Anderson (2010)
Kamenetz (2010) idea of educational system, opportunity improvement and learner control (Kamenetz, 2010; UMUC, 2015).	complexity theory-seeks to create	media that are useful for teaching, learning, and assessing as well as for research purposes.	online/media lecture and interactivity in classroom" (Educause, 2012; Knewton, 2015; UMUC, 2015) or "Scrambled	Asynchronous technology, enhanced Browser tools (e.g., Google Docs and Translation Tools), are providing educators and learners with greater	The Edupunks' Atlas (n.d.)

"Edunumka" which are	House as are in the study	Edwards Atlas	annua albii dagawihad	independence is a shift in
<b>"Edupunks</b> "-which are	<b>Heutagogy</b> is the study	Edupunks' Atlas -		independence is a shift in
people with ideas to	of self-determined	"Guide for educational	by Barnett (2014) as	pedagogy (Clark, 2011).
approach and promote	learning (Hase &	resources" (The	"human learning"	X
extraordinary change	Kenyon, 2000)	Edupunks' Atlas, (n.d);	integrated with more	YouTube has become an
and creation in		UMUC, 2015).	focus on benefits of	increasingly useful vehicle for
traditional and	Key Concepts of		lecture and	instruction and serves as an
conformed educational	Heutagogy listed by		communication rather	inexpensive instructional tool
systems, institutions and	Hase and Kenyon		than just at home	(Clark, 2011).
experience (Howard,	(2000):		learning approaches	
Veerman & Saunders,	Double Loop		(Barnett, 2014).	
2010; Cummane, 2011).	Learning: Learners		"Khan Academy	
	consider the problem,		model"-which enables	
"Term "Edupunks"	results, actions and		online tracking	
created by Jim Groom in	outcomes as well as		features of student	
2008" (Howard,	reflecting on problem		progress and	
Veerman & Saunders,	solving phase and how		involvement and	
2010; Cummane, 2011).	it influences the		benefits of educational	
	learner's beliefs and		technology (Sparks,	
Kamenetz describes	their actions (Blaschke,		2012; UMUC, 2015).	
Edupunks as inspired to	p.59)			
change the standards of	,		Mejias's "pedagogy	
the educational system	Net-Aware Theories of		of nearness" (2005)-	
utilizing technologies	Learning_(Anderson,		defined as	
that promote liberation	2010):		"face-to-face	
(Ramirez, 2010).	-Provides powerful low		interactions are of no	
	cost communications		more less value than	
	which are no longer		net-based	
	expensive or		communication for	
	geographically		proper flow of	
	restricted,		blended learning	
	-Provides access and		environment (as cited	
	empower those with		in Anderson, 2010. p.	

hearing, movement or	32).
even visual	
impairments and create	Educational theories
opportunities for many	that are useful and still
forms of collaborations.	applicable today are
Examples mentioned by	Larrameandy-Jones
Anderson (2010):	and Leinhardt's
-Communications	(2006)- presentational
modes stored as	view, epistemic view
artifacts, indexed,	and performance
tagged, harvested,	tutoring view
searched and sorted.	(Anderson, 2010, pp.
-Communications is	26-29)
either synchronous,	Learning to enhance
asynchronous or near	student capability
synchronous (text	(Hase and Kenyon,
messaging) modes.	2000).
-Communication is low	Complex
cost and either	Environments: focus
one-to-one, one-to	is on the students
many, or many-to-many	ability to adapt in the
-creation of information	learning environment
and content scarcity to	(Anderson, 2010).
wide scale contributions	(Anderson, 2010).
and production of	Network Learning:
OER's	Knowledge is gained
	through network
-creation of active and	connections. Student
autonomous agents with	role is to participate &
the ability to loosely	collaborate online,
place content or	teachers role is to
information on the net	facilitate, monitor and

that can be gathered,	guide. (Anderson,	
aggregated, synthesized	2010).	
and filtered for	2010).	
instructors, individual	Pedagogy of	
learners or groups.	Nearness is seen as	
Pedagagy of Nearness	providing a unique opportunity because	
Learning which has the	the online experience	
capacity to flow	offers advantages that	
seamlessly between	cannot be gained	
online and face to face	through "unmediated	
contexts (Anderson,	perception"	
2010, p. 34). An	(Anderson, 2010).	
Example is net infused		
learning.	Heutagogy regards	
Siemans describes  Connectivism as transition thinking about learning and knowledge to one based on connections (Schwier, 2011)	the learner as the control agent is his/her own learning and requires educators move beyond the typical instructor/testing model to one that	
Equivalency Theory gains empirical support and is regarded as an effective in terms of cost-efficiency and delivery of interventional learning.	supports the journey and capacity or learners rather than competency. In this arrangement, teachers serve more as facilitators/guides (Anderson, 2010).	

Presentational View:	The functional gaps
Focus is on the	inherent in
cognition and the value	Transactional
of discourse and	Distance of
visualizations (i.e., use	teacher/learners
of multimedia)	understanding,
(Anderson, 2010, p.	communication and
26).	geographic distance
Performance-Tutoring	are being bridged by
View: Rooted in	means of instructional
behavioral psychology.	design and facilitated
Feedback and	interaction (Bernath &
reinforcement are	Vidal, 2007, p. 443)
regarded as strategies	
that enable learners to	The Transactional
acquire individual	Distance Theory
competencies	"develops authority as
(Anderson, 2010).	people find it useful,"
	which serves as an
Epistemic-Engagemen	endorsement of its
t View: Closely	value in the realm of
aligned with	distance education
Constructivism.	(Vidal, 2007)
Believed to be a	
significant driver in the	
development of	
educational technology	
(Anderson, 2010)	
Complexity Theory:	
Otherwise known as the	
"Science of	
Complexity," this	

theory is drawn from		
the study of evolution		
and holds that		
organisms adapt and		
modify over time to		
their environments,		
resulting in complex		
and unstable systems.		
This theory has grown		
in popularity over the		
past two decades		
(Anderson, 2010)		
Net-Aware Theories:		
States that where		
distance education is		
concerned, the internet		
is (1) a powerful and		
inexpensive		
communication		
platform, (2) the modes		
by which the internet		
can be experienced (i.e.,		
one-to-one,		
one-to-many and		
many-to-many) provide		
the flexibility that most		
benefit distance		
learners, and (3)		
because of its		
accessibility, the		
internet is an		
empowering vehicle for		

those with hearing, movement and/or visual impairments (Anderson, 2010).		

### REFERENCES:

Anderson, T. (2010). Theories for learning with emerging technologies. In G. Veletsianos (Ed.), Emerging technologies in distance education (pp. 23-40). Canada: Athabasca University Press. Retrieved from

http://www.aupress.ca/books/120177/ebook/99Z\_Veletsianos\_2010-Emerging\_Technologies\_in\_Distance\_Education.pdf

Anderson, T. (2011, November). *Third wave of distance education*. [Online video]. Edmonton, AB, Canada. Available from <a href="http://wimeo.com/32596395">http://wimeo.com/32596395</a> (Transcript: <a href="http://www.box.com/s/e8ylcfx3h6fjv4qim3px">http://www.box.com/s/e8ylcfx3h6fjv4qim3px</a>)

Anderson, T., & Dron, J. (2012). Learning Technology through Three Generations of Technology Enhanced Distance Education Pedagogy. *European Journal Of Open, Distance And E-Learning*, (2),

Anderson, T., & Dron, J. (2011). Three generations of distance education pedagogy. *International Review of Research in Online and Distance Learning (IRRODL)*, 12(3), 80-97. Retrieved from <a href="http://www.irrodl.org/index.php/irrodl/article/view/890">http://www.irrodl.org/index.php/irrodl/article/view/890</a>

Barnett, P. (2014, February). Let's scramble, no flip the classroom. *Inside Higher Ed*. Retrieved from <a href="https://www.insidehighered.com/views/2014/02/14/flipping-classroom-isnt-answer-lets-scramble-it-essay">https://www.insidehighered.com/views/2014/02/14/flipping-classroom-isnt-answer-lets-scramble-it-essay</a>

Blaschke, L.M. (2012). Heutogagy and lifelong learning: A review of heytogogical practice and self-determined learning. International Review of Research in Open and Distance Learning, 13(1), 56-71. Retrieved from: <a href="http://www.irrodl.org/index.php/irrodl/article/view1076/2087">http://www.irrodl.org/index.php/irrodl/article/view1076/2087</a>.

Beldarrain, Y. (2006). Distance Education Trends: Integrating new technologies to foster student interaction and collaboration. *Distance Education*, *27*(2), 139-153. doi:10.1080/01587910600789498.

Bernath, B. &. Vidal, M. (2007). The theories and the theorists: Why theory is important for research. *Distance et saviors*, *5*(3), 427-458. Retrieved from http://www.box.com/s/fsgilnj1zxsnlbjqzi0b

Caruth, G. D., & Caruth, D. L. (2013). Distance Education in the United States: From Correspondence Courses to the Internet. *Turkish Online Journal Of Distance Education*, 14(2), 141-149.

Clark, D. (2011). *More pedagogic change in 10 years than last 1000 years - all driven by 10 technology innovations*. [Blog post.] Retrieved from http://donaldclarkplanb.blogpost.com/2011/12/more-pedagogic-change-in-last-10-years.html.

Cunnane, S. (2011). DIY says, 'edupunk' star. Distortion and sell-out, say critics. *The Times Higher Education Supplement, 2025.* Retrieved from <a href="https://global-factiva-com.ezproxy.umuc.edu/ha/default.aspx#./!?& suid=14288501787590743653307536525">https://global-factiva-com.ezproxy.umuc.edu/ha/default.aspx#./!?& suid=14288501787590743653307536525</a>

Delling, R.M. (1966). Der Einfluss der "Methode Rustin" auf das Fenunterrichtsund Fernstudienlehrmaterial der SBZ und der DDR. Epistolodidaktika III, 1, 18-24.

Educause. (2012). Learning initiative: 7 things you should know about flipped classrooms. Retrieved from http://net.educause.edu/ir/library/pdf/eli7081.pdf

The Edupunks' Atlas of Lifelong Learning. (n.d.) *The Edupunks' atlas of lifelong learning: Part of the Edupunks' guide*. Retrieved from <a href="http://atlas.edupunksguide.org/">http://atlas.edupunksguide.org/</a>

Fuller, R., Kuhne, G., & Frey, B. (2011). *Distinctive distance education design: models for differentiated instruction*. Hershey, PA: Information Science Reference. Retrieved from http://books.google.com/books?id=yOfxa3UE5HsC&printsec=frontcover&source=gbs\_ge\_summary\_r&cad=0

Garrison, D. R. (1995). Constructivism and the role of self-instructional course materials. *Distance Education*, 16(1), 136-140.

Garrison, R., (2009). "Implications of Online Learning for the Conceptual Development and Practice of Distance Education." . International Journal of E-Learning and Distance Education, Web. 2 Apr 2015. <a href="http://www.ijede.ca/index.php/jde/article/view/471/889">http://www.ijede.ca/index.php/jde/article/view/471/889</a>.

Garrison, D.R. & Cleveland-Innes, M.F. (2010). Foundations of distance education. In M. F. Cleveland-Innes & D.R. Garrison, *An introduction to distance education: Understanding teaching and learning in a new era.* (pp. 13-25). New York and London: Routledge.

Hase, S., & Kenyon, C. (2000). *From andragogy to heutagogy*. In UltiBase Articles. Retrieved from http://pandora.nla.gov.au/nph-wb/20010220130000/http://ultibase.rmit.edu.au/Articles/dec00/hase2.htm

Haughey, M. (2010). Teaching and learning in distance education before the digital age. In M. F. Cleveland-Innes & D. R. Garrison (Eds.), *An introduction to distance education: Understanding teaching and learning in a new era* (Chapter 4, pp. 46-66). New York and London: Routledge.

Holmberg, B. (2004, September). *The empathy approach to distance education*. [Lecture video]. Retrieved from http://youtu.be/mXRMKkHe9yE Transcript: Holmberg-transcript.pdf

Holmberg, B. (2005). Concepts and terminology - Student bodies. The evolution, principles, and practice of distance education. Oldenburg, Germany: BIS-Verlag der Carl von Ossietzky Universität Oldenburg. (pp. 9-11). Retrieved from http://www.box.com/shared/y97qyc7m0t

Holmberg, B. (2005). *The evolution, principles, and practice of distance education* (pp. 13-36). Oldenburg Germany: BIS-Verlag der Carl von Ossietzky Universität Oldenburg. Retrieved from <a href="http://www.box.com/shared/y97qyc7m0t">http://www.box.com/shared/y97qyc7m0t</a>

Howard, S., Veerman, N., & Saunders, J. (July-August, 2010, excerpted from The Tyree (March 20, 2010)). Meet the EduPunks: Radical self-educators challenge the "tyranny of credentials". *UTNE Reader: Cure Ignorance*. Retrieved from <a href="http://www.utne.com/politics/meet-the-edupunks-radical-self-education.aspx">http://www.utne.com/politics/meet-the-edupunks-radical-self-education.aspx</a> Kamenetz, A. (2010.) *DIY U: Edupunks, edupreneurs and the coming transformation of higher education*. Canada: Chelsea Green Publishing Company. Retrieved from <a href="http://www.chelseagreen.com/bookstore/item/diy\_u">http://www.chelseagreen.com/bookstore/item/diy\_u</a>

Kamenetz, A. (2009, September 1). How Web-Savvy Edupunks Are Transforming American Higher Education. Retrieved April 11, 2015, from http://www.fastcompany.com/1325728/how-web-savvy-edupunks-are-transforming-american-higher-education Kofahi, J. and Srinivas, N. Distance Learning: Major Issues and Challenges.

Knewton. (2015). *The flipped classroom. The flipped classroom infographic. The flipped classroom: Turning traditional education on its head.* Retrieved from <a href="http://www.knewton.com/flipped-classroom/">http://www.knewton.com/flipped-classroom/</a>

Larreamendy-Joerns, J., & Leinhardt, G. (2006). Going the distance with online education. Review of Educational Research, 76(4), 567-605.

Mejias, U. (2005a). Movable Distance: Technology, Nearness and Farness. ulises mejias' blog entry. Retrieved November, 2008, from <a href="http://blog.ulisesmejias.com/2005/01/20/movable-distance-technology-nearness-and-farness/">http://blog.ulisesmejias.com/2005/01/20/movable-distance-technology-nearness-and-farness/</a>

Mejias, U. (2005b). Reapproaching nearness: Online communication and its place in praxis. *First Monday, 10*(3). Retrieved November, 2005, from <a href="http://firstmonday.org/ojs/index.php/fm/article/view/1213/1133">http://firstmonday.org/ojs/index.php/fm/article/view/1213/1133</a>

Miller, G. (2010). Organization and technology of distance education. In M. F. Cleveland-Innes & D. R. Garrison (Eds.), *An introduction to distance education: Understanding teaching and learning in a new era* (Chapter 3, pp. 26-45). New York and London: Routledge.

Moore, M. (1989). Editorial: Three types of interaction. The American Journal of Distance Education, 3 (2), 1-7.

Moore, M. G., & Kearsley, G. (2012). *Distance education: A systems view of online learning* (Chapter 1, pp. 1-22, 31). USA: Wadsworth-Cengage Learning. Retrieved from <a href="https://ares.umuc.edu/nonshib/ares.dll?SessionID=A0222225278&Action=10&Type=10&Value=244039">https://ares.umuc.edu/nonshib/ares.dll?SessionID=A0222225278&Action=10&Type=10&Value=244039</a>

Noffsinger, J. S. (1926). Correspondence schools, lyceums, chatauquas. New York: Macmillan.

Noffsinger, J.S. (1938) The story of the Benton Harbour plan. In Report of the First International Conference on Correspondence Education. Victoria, B.S., Canada: The Department of Education.

Peters, O. (2004). Growing importance of distance education in the world. In O. Peters, *Distance education in transition: New trends and challenges* (4th ed., pp. 13-24). Oldenburg, Germany: BIS-Verlag der Carl von Ossietzky Universität Oldenburg. Retrieved from http://www.box.com/shared/5x3tpynqqf

Peters, O. (2010). The revolutionary impact of distance education. In O. Peters, *Distance education in transition: Developments and issues* (5th ed., pp. 43-56). Oldenburg, Germany: BIS-Verlag der Carl von Ossietzky Universität Oldenburg. Retrieved from http://www.box.com/s/ktx7ipccetotqrr11mct

Peters, O. (2010). The theory of the "most industrialized education". In O. Peters, *Distance education in transition: Developments and issues* (5th ed., pp. 11-32). Oldenburg, Germany: BIS-Verlag der Carl von Ossietzky Universität Oldenburg. Retrieved from http://www.box.com/s/ktx7ipccetotqrr11mct

Peters, O. (2011, December 2). Industrialization theory and distance education. Part 1. [Video interview.] Haag, Germany. Retrieved from http://vimeo.com/33107755 (Transcript: http://www.box.com/s/76m31v2baa3n63vm0bjn)

Peters, O. (2011, December 2). Industrialized theory and distance education. Part 2. [Video interview.] Haag, Germany. Retrieved from http://www.vimeo.com/33523216 (Transcript: http://www.box.com/s/q3f6nuh98mtdydti8b92)

Peters, O. (2011, December 2). Industrialized theory and distance education. Part 3. [Video interview.] Haag, Germany. Retrieved from http://vimeo.com/33525745 (Transcript: http://www.box.com/s/8jzx6qm651gj8kt0aep7)

Peters, O. (2011, December 2). Industrialized theory and distance education. Part 4. [Video interview.] Haag, Germany. Retrieved from http://vimeo.com/33109477 (Transcript: <a href="http://www.box.com/s/cn10nmio1je707iaekmx">http://www.box.com/s/cn10nmio1je707iaekmx</a>

Ramirez, F. (2010, September 2). More change but now its personal. [Review of the book *DIY U: Edupunks, edupreneurs and the coming transformation of higher education*, by Anya Kamenetz]. *The Times Higher Education Supplement, 1963,* 48-49. Retrieved from <a href="https://global-factiva-com.ezproxy.umuc.edu/ha/default.aspx#./!?& suid=142884954286207506078774755438">https://global-factiva-com.ezproxy.umuc.edu/ha/default.aspx#./!?& suid=142884954286207506078774755438</a>

Saba, F. (2012). A Systems Approach to the Future of Distance Education in Colleges and Universities: Research, Development, and Implementation. *Continuing Higher Education Review*, 76, 30-37.

Schwier, R. (2011). *Connectivism. 30 minute video interview with George Siemens*. Retrieved from <a href="http://rickscafe.wordpress.com/2011/08/05/interview-with-george-siemens-about-connectivism/">http://rickscafe.wordpress.com/2011/08/05/interview-with-george-siemens-about-connectivism/</a>

Simonson, M., Schlosser, C. and Hanson, D. (1999). Theory and Distance Education. A New Discussion. *The American Journal of Distance Education*, 13(1), 60-63. Available from <a href="http://www.box.com/s/fsq1r8xmyd6ehqf8oq28">http://www.box.com/s/fsq1r8xmyd6ehqf8oq28</a>.

Sparks, Sarah. (2011, September 27 & 28). Lectures are homework in schools following the Khan Academy lead. *Education Week*, 31(05), 1,14. Retrieved from <a href="http://www.edweek.org/ew/articles/2011/09/28/05khan\_ep.h31.html">http://www.edweek.org/ew/articles/2011/09/28/05khan\_ep.h31.html</a>

Swan, K. (2010). Teaching and learning in post-industrial distance education. In M. F. Cleveland-Innes & D. R. Garrison (Eds.), *An introduction to distance education: Understanding teaching and learning in a new era* (pp. 108-134). New York & London: Routledge.

Vaughan, N. D. (2010). Blended learning. In M. F. Cleveland-Innes & D. R. Garrison (Eds.), *An introduction to distance education: Understanding teaching and learning in a new era* (pp. 165-178). New York & London: Routledge.

University of Maryland University College. (2015). *OMDE 601 9041 Foundations of distance education & e-learning (2152)* [Course syllabus]. Retrieved from University of Maryland University College website: <a href="https://learn.umuc.edu/d2l/le/content/56872/viewContent/2588847/View">https://learn.umuc.edu/d2l/le/content/56872/viewContent/2588847/View</a>

University of Maryland University College. (2015). *OMDE 601 9041 Foundations of Distance Education & E-learning (2152): New developments in distance education*. Retrieved from University of Maryland University College website: <a href="https://learn.umuc.edu/d2l/le/content/56872/Home">https://learn.umuc.edu/d2l/le/content/56872/Home</a>