

	Forms	Forces dominant in the larger context that drove development of DE	Theories/Ways of Understanding DE	Institutional and organizational development	Prevailing teaching/learning theories/methodologies/Prevailing view of of role of teacher and role of learner	Predominant technologies	Key authors and Influencers
First Wave	Correspondence/ Independent Study	<p>1920 radio broadcasting was a way educators saw a medium to provide and support education CNR/CBC-USA, Canada, Australia</p> <p>1921—First educational radio licenses issues by federal government: Latter Day Saints Univ., University of Wisc.</p> <p>1926—CNRV broadcast directly to Point Grey School for the Deaf and Blind</p> <p>1930 CBS/NBC development of educational radio</p> <p>1941—United States Army correspondence education programs begin at Penn State</p> <p>Study Guidance</p>	<p>Borje Holmberg's theory of guided didactic conservation or empathy in DE/course materials and feedback can be written in friendly tone</p> <p>Tony Bates-1960s Open Universities/UK aim - provide high quality education 25,000 students enrolled/completion rates high</p> <p>OU UK – new era of DE</p>	<p>Sir Isaac Pittman Correspondence College</p> <p>International Correspondence Schools</p>	<p>Guided reading and testing</p> <p>Friendly written course material</p> <p>Teacher sympathy</p> <p>Real and simulated (written) conservation between learner and tutor or educational institution</p> <p>Individual studies</p> <p>Shorthand writing</p>	<p>Inexpensive printing</p> <p>Postal delivery</p> <p>Railroads</p>	<p>Isaac Pittman</p> <p>William Harper</p> <p>Thomas Jefferson Forster</p> <p>William Lighty</p> <p>Margaret Haughey (2010)</p>
Second Wave	<p>Systems Approach</p> <p>Develop of a Model of DE</p> <p>Distance education system Education system</p> <p>Systems and subsystems: Components –management content, course design, Human resources Evaluation, policy</p>	<p>Studies by Wisconsin's AIM Project/Breat Britian's Open University Aim -delivering high quality and lower costs off-campus learning</p>	<p>University of South Africa –UNISA oldest DE teaching university</p> <p>Apartheid – UNISA diversity enrollment policy</p> <p>Connectivism</p>	<p>Open universities Expansion</p> <p>Resistance From Conventional universities</p> <p>Single mode institutions emerge</p>	<p>Student support and counseling, peer study groups, and use of campus labs</p> <p>Student-centered learning</p> <p>Transactional Distance (structure, learner autonomy, dialogue)</p>	<p>Telephone</p> <p>Computers</p> <p>asynchronous communication Databases</p> <p>Web surfing</p>	<p>Peters</p> <p>Holmberg</p> <p>Bates</p> <p>Shale</p> <p>Wedemeyer</p>

	<p>Organization of professional conferences</p> <p>Publication of scholarly journals</p> <p>Establishment of professional organizations (regionally and International)</p> <p>DE develops as a major form of education education</p> <p>Industrialized Institutions forms</p> <p>Large open Universities emerge</p>	<p>Major development of scholarly literature in professional journals on key shifts in education principles, strategies, and guidelines – traditional and DE education</p>		<p>Tutors (support for DE students, Counseling, face-to-face teaching)</p> <p>Large regional and local study centers</p> <p>Multi-dimensional open university concept</p> <p>Develop of Multimedia Education</p> <p>Post-Industrial education</p>	<p>Constructivism</p> <p>Autonomous learning</p> <p>Seminars/ conferences Attendance</p> <p>Three generations of DE pedagogy</p> <p>Cognitive-behaviorist</p> <p>Social constructivist</p> <p>Connectivist pedagogy</p>	<p>Tele-Communications (DE design/ Development)</p> <p>Teaching CD ROMs</p> <p>Audio/video cassettes</p> <p>Educational Radio/television</p>	
Third Wave	<p>Internet / Web-based platforms</p> <p>Synchronous/Asynchronous communications</p> <p>Mass Media technology</p> <p>World Wide Web Platforms</p> <p>Globally development Of the systems Approach</p> <p>Expansion - Post-industrial system approach</p> <p>Micro-factors – A Conceptional Model of DE</p>	<p>Quality and quantity of student/teacher interaction</p> <p>Internet/Digital methods suitable for use by large populations</p> <p>Study by Alan Greenberg -2009 mapping the latest research into Video based DE</p> <p>Study by Anderson Garrison, Archer (1999) Assessing social presence in asynchronous Text-based Computer Conferencing</p> <p>Study by Wise,</p>	<p>New Institutional Forms</p> <p>Systems Approach Expands</p> <p>Transactional Distance (Boyd and &amp; Apps, 1980 as cited in Moore &amp; Kearsley, 2012).</p> <p>Andragogy (1995)</p> <p>Constructivism (1995)</p> <p>Internet-Web (Vaughn, 2010)</p> <p>Communities of Inquiry (Swan, 2010; Garrison, Anderson, &amp; Archer, 2000).</p> <p>Equivalency of Interaction (Anderson, 2003)</p>	<p>Rapid, current and lower costs ICT methods to distance education</p> <p>Online Learning</p> <p>Blended Learning</p> <p>Single mode universities</p>	<p>Computer literacy for teachers and learners, and support services</p> <p>Active and authentic Learning</p> <p>Learning by doing</p> <p>Scaffolded learning</p> <p>Student participation – expansion forms of Peer and group interactions</p> <p>Group study for DE Collaboration</p> <p>Students work on group projects</p> <p>Synchronous/asynchronous communication</p> <p>Social presence</p> <p>Learn becomes Non-linear</p>	<p>Streaming Video</p> <p>Learning platforms such as Blackboard</p> <p>Web delivered lecture such as TED Talks</p> <p>K-12 Online Learning</p> <p>Explosion of new technology devices</p>	<p>Terry Anderson</p> <p>Jon Dron</p> <p>John Dewey</p> <p>Randy Garrison</p> <p>Michael Moore</p> <p>Karen Swan</p> <p>Otto Peters</p> <p>Norman Vaughn</p> <p>Faezeh Sadat</p> <p>Tabatabaee Amiree</p>

		<p>Chang, Duffy &amp; Vale (2004) Study by Anderson &amp; Dron – Three Generations of DE (</p> <p>The effects of teacher presence on student satisfaction, engagement, and learning</p>			<p>Students become More self-directed</p> <p>Home schooling</p>		<p>Bentolhodah Khabbazan</p> <p>Federal Government No Child Left Behind - US law</p>
<p>Current Trends</p> <p>Internet/ICT methods</p> <p>Open Universities</p> <p>computer Teacher/student/student/student Support</p>	<p>New theories, new roles, new applications of technology</p> <p>Plan to compete globally with various learners providers.</p> <p>Understand the paradigm of thinking in higher education has changed in the 21st century</p> <p>Various state - Federal level technology In education groups</p> <p>Digital learning Environments</p> <p>Five generations of DE learning</p> <p>Corporate Universities</p> <p>Virtual schools For profit schools</p> <p>University of Phoenix</p> <p>Capella Univesity</p> <p>Penn State University</p> <p>UMUC</p>	<p>Studies on new Education digital devices</p> <p>Social Networking:</p> <p>Smart Phones ITelephone</p> <p>Tablet Computers</p> <p>Single Platform Technologies</p> <p>Blogs</p> <p>Cloud solutions</p> <p>Study by Noreen &amp; Hafeez (2012) A study on adopting emerging metholological trends by distance learners</p> <p>Study by Ravenscroft (2011) Dialogue and connectivism:A new approach to understanding and promoting dialogue-rich networked learning</p> <p>Role of information communication technology (ICT) 1950s</p>	<p>Connstructivism and complexity (Anderson, 2010).</p> <p>Heutagogy (Hase and Kenyon (2000).</p>	<p>MOOCs</p> <p>Open Universities</p> <p>Existing research universities embracing DE.</p> <p>Kahn Academy style freely distributed material</p> <p>Mega-Universities</p> <p>Diploma Mills</p> <p>Community Colleges</p> <p>Association For DE and Independent Learning</p> <p>Corporate Training</p> <p>Certification &amp; testing companies</p> <p>Strong U.S. Department Of Defense Training &amp; degree Institutions</p> <p>Formal Continuing Education Programs</p> <p>Major health</p>	<p>New use of Internet and other technologies</p> <p>Study market and demographic student groups</p> <p>Be responsive to adult learners' needs</p> <p>Focus on quality of materials</p> <p>Streamline instruction systems</p> <p>Conference discussions interaction</p> <p>Online Groups</p> <p>Friendly participant relationships</p> <p>Student positive learning and motivation perceptions -online learning</p> <p>Heutagogy</p> <p>Changes in teaching and learning</p> <p>Allow students to evaluate Learning – teachers guide and facilitate</p> <p>Diverse and international student populations</p> <p>Course design in multiple languages</p> <p>Student culture differences</p>	<p>MOOC</p> <p>Web 2.0</p> <p>Electronic Publishing</p> <p>MP3 files</p> <p>Podcasting</p> <p>Computer Mediated Communication</p> <p>Computer based learning</p> <p>Web based learning platforms/ Learning Management Systems</p> <p>Satellites/ Interactive/Computer based video conferencing</p> <p>Internet-based virtual classes</p> <p>Audio/video Media</p> <p>Social Net-Working and Media applications</p> <p>Learning Management Systems</p> <p>MIT Open Courseware- Harvard</p>	<p>Steven Cohn, Columbia University</p> <p>Terry Anderson</p> <p>George Siemens</p> <p>International Association for Distance Learning</p> <p>Michael Simonson</p>

				care education and training programs	Learning anytime anywhere	University	
				Major cyber-security education And training programs	Online behavior Respectful/friendly		
				Charter/virtual schools	Regular teacher Feedback		
					Non-verbal cues		
					Self-directness Garrison, 2009)		

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