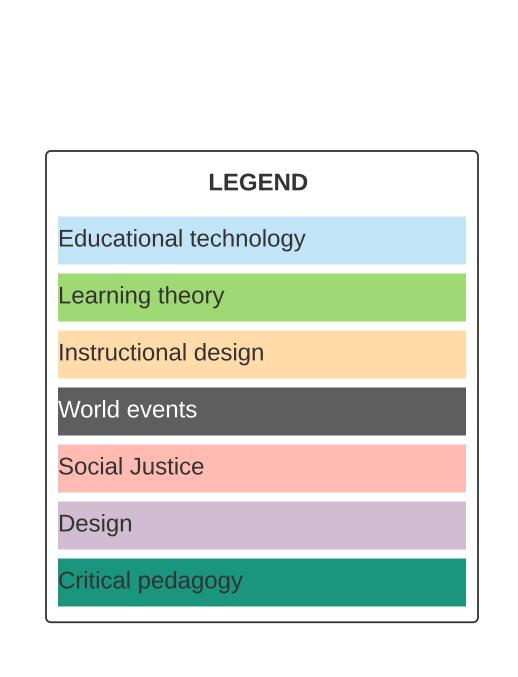
R511 Midterm Digital Poster: A Horizontal History of IST Rachel Koblic

Inspired by Bradshaw (2018) and Urban (2016)



	Behaviorism				
Radio	Sound films				
	WWII				
	Systemati	tic training of military Cold War			
		Korean War Brown v. Board of Education			
		Vietnam War			
		Emmett Till Rosa Parks			
		Sputnik Skinner's Teaching Machin	es		
		Problem-based L Programmed Ins	earning originated at McMaster		
		ISD emerges			
		PLATO & CAI Design re-defines itself			
		First definition of instruction	gnitivism		
		March on Washington	ar technology		
		JFK assassinated Selma to Montgomery N	larch		
		Malcolm X assassinated			
		Gagné's Conditions of L MLK Jr. assassinat			
		Paulo Freire's <i>Peda</i> The Moon Landin	gogy of the Oppressed		
		Sesame Street fi	st airs		
		Audiocassette	uctional TV		
			efinition of instructional technology Andragogy		
		1970	Third definition of instructional technology		
			Vygotsky's ZPD Dick & Carey model published		
			"Hypermedia"		
			Design examines to Sweller's Cognitive L		
			Lave's Situated Lear Brown, Collins, & D	ning Theory uguid's Cognitive Apprenticeship	
			Peter McLaren's <i>L</i>		
			1980	Lave & Wenger's Communities of Practice Instructional Design Paradigm Wars	e
				the d.school, and design thinking The Internet	
				Constructivism	
				g & LA Riots r-centered Design emerges	
				definition of instructional technology	
				OPM-launched degree (Bisk)	
			Hut	The New Science of Learning chins' Distributed Cognition	
			1990	Mayer's Multimedia Learning Understanding by Design published	
				Google founded	
				Wikipedia founded 9/11 Terrorist Attacks	
				Merrill's First Principles published Moodle released	
				SARS pandemic	
				YouTube founded	
				iPhone launched	
				Flipped Learning	
				The Great Recession MOOCs	1
			2	Dede's Shifting Episte	emology
				2U founded Most recent definition	n of instructional technolog
				Joe Kincheloe founds Obama	s Critical Pedagogy project
				Canvas launche	ed
				Zoom founded Trayvon Mart	in
				The Design V Ebola Pande	<i>Vay</i> published
				BLM	
					Kaepernick -centered / Liberatory Desi —
				· · · · · · · · · · · · · · · · · · ·	

Category Design	Event/Trend Design redefines itself	Years 1960-1980	In-text Citation Szczepanska, 2019
Design	Design examines the designer	1980s	Szczepanska, 2019
Design	IDEO and Design Thinking	1990-2005	Szczepanska, 2019
Design	The Design Way published	2012	Nelson & Stolterman, 2014
Design	Equity-centered / Liberatory Design	2016	Hasso Plattner Institute of De Stanford University, 2017
Educational Technology	Silent films	1910s-1920s	Molenda & Boling, 2008
Educational Technology	Radio	1920s-1930s	Molenda & Boling, 2008
		competed with silent films	
Educational Technology	Sound films	during 1930s but didn't	Molenda & Boling, 2008
Educational recimology	Souria illins	become standard until	Willeria & Boiling, 2000
		after WWII	
Educational Technology	Skinner's teaching machines	1957-1962	Molenda & Boling, 2008
Educational Technology	Programmed instruction	1960s	Molenda & Boling, 2008
	PLATO (CAI)	1961-2000s	Molenda & Boling, 2008
	First definition of instructional technology	1963	Reiser, 2018
	Sesame Street airs	1969	History.com Editors, 2009a
	Instructional television	1970s-1980s	Molenda & Boling, 2008
	Audiocassettes	1970s	Molenda & Boling, 2008
	Second defintion of instructional technology	1972	Reiser, 2018
Educational Technology	Third defintion or instructional technology	1977	Reiser, 2018
Educational Technology	"Hypermedia"	1980s	Molenda & Boling, 2008
Educational Technology	Internet Fourth definition of instructional technology	1990s+	Molenda & Boling, 2008
	Fourth definition of instructional technology First OPM-launched degree by Bisk	1994 1995	Reiser, 2018
	Google founded	1995	Bisk Education, Inc. Google
Educational Technology	Wikipedia founded	2001	Wikipedia, 2020
	Moodle released	2001	Gilbert, 2017
Educational Technology	YouTube founded	2002	Leskin, 2020
	iPhone launched	2007	History.com Editors, 2012
<u> </u>	MOOCs	2007-2020	Schroeder, 2019
	2U founded	2008	Empson, 2012
	Most recent defintion of instructional technology	2008	Reiser, 2018
	Canvas launched	2011	Correia, 2018
	Zoom founded	2011	Zoom
World Events	Cold War	1947-1991	History.com Editors, 2009c
World Events	Sputnik	1957	NASA
World Events	Moon Landing	1969	Dunbar, 2019
	9/11	2001	Public knowledge
World Events	SARS	2002-2004	Ries, 2020
World Events	Iraq war	2003-2011	The Editors of Encyclopaedia
World Everits		2003 2011	Britannica, 2004
World Events	Financial Crisis / Great Recession	2008-2009	Chappelow, 2020
World Events	Ebola Outbreak	2014-2016	Ries, 2020
World Events	COVID-19	2020	Ries, 2020
Learning Theory	Behaviorism	1913-1970s	Driscoll, 2005
Learning Theory	Cognitivism	1960s-1990s	Willis, 2011
Learning Theory	Andragogy	1970s-1980s	Culatta, 2018
Learning Theory	Vygotsky's ZPD	1978	Mcleod, 2020
Learning Theory	Cognitive Load Theory	1988	Sweller, 1988
Learning Theory	Situated Learning Theory	1988+	Lave, 1988
Learning Theory	Situated Cognition and Cognitive Apprenticeship	1989+	Brown, Collins, & Duguid, 198
Learning Theory	Constructivism	1990s+	Wilson, 2018
Learning Theory	New Science of Learning	1990s+	Sawyer, 2006
Learning Theory	Distributed Cognition Mayor's Multimodia Learning	1990s	David, 2020b
Learning Theory Learning Theory	Mayer's Multimedia Learning Connectivism	2000s 2005+	David, 2020a krist2366, 2015
Learning Theory Learning Theory	A Seismic Shift in Epistemology	2005+	Dede, 2008
Instructional Design	Systematic Training in the Military	1940-1944	Saettler, 1990
Instructional Design	ISD emerges	1960s	Willis, 2011
Instructional Design	Problem-Based Learning originates at McMaster	Originated 1960s at	McMaster University
Instructional Design	Gagne's Conditions of Learning	1965	Willis, 2011
Instructional Design	Dick & Carey model published	1978	Clark, 2014
Instructional Design	Instructional design Paradigm Wars	1990s	Smith & Boling, 2009
Instructional Design	Lave & Wenger's Communities of Practice	1990s	David, 2014
Instructional Design	Learner-Centered Design emerges	1994	Barr & Tagg, 1995
Instructional Design	Understanding By Design published	1998+	Wiggins & McTighe, 1998
Instructional Design	Merrill's First Principles	2002	Merrill, 2002
Instructional Design	Flipped Learning	2007+	Noonoo, 2012
Social Justice	Brown v. Board of Education	1954	History.com Editors, 2009b
Social Justice	Emmett Till	1955	History.com Editors, 2009b
Social Justice	Rosa Parks	1955	History.com Editors, 2009b
Social Justice	March on Washington	1963	History.com Editors, 2009b
Social Justice	Selma to Montgomery March	1965	History.com Editors, 2009b
Social Justice	Malcolm X assassinated	1965	History.com Editors, 2009b
Social Justice	MLK assassinated	1968	History.com Editors, 2009b
Social Justice	LA riots, Rodney King	1992	Sastry & Bates, 2017
Social Justice	Trayvon Martin	2012	Bates, 2018
Social Justice	BLM	2013	Bates, 2018
Social Justice	Obama elected president	2008	Public knowledge
Social Justice	Colin Kaepernick	2016	Public knowledge
Social Justice	George Floyd	2020	Public knowledge
Social Justice	Breonna Taylor Baylo Freiro's Bodogogy of the Oppressed	2020	Public knowledge
Critical Pedagogy	Paulo Freire's Pedagogy of the Oppressed	1968	Freire & Ramos, 2014
Critical Pedagogy	bell hooks Teaching to Transgress	1994	Burke, 2019 McLaren, 1989
Critical Pedagogy	Peter McLaren's Life in Schools	1989	

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Midterm Script

Hi everyone,

Thanks so much for taking the time to watch my video. For my midterm project I wanted to pick up on a thread that emerged for me in Week 7 after reading Amy Bradshaw's 2018 article "Reconsidering the Instructional Design and Technology Timeline Through a Lens of Social Justice." Throughout this course we've been learning about the intertwining histories of educational technology and instructional design, but Bradshaw's article opened my eyes to the idea that histories of our field are often told through a very specific lens that neglects to take into account what was going on in the world at large as the discipline emerged.

At the time, the article made me think of the concept of "Horizontal Histories" which I first read about in a 2016 post by Tim Urban on his blog Wait But Why. In the post, Urban explains that we often look at history focusing on the linear vertical progression of a single topic over time. But that looking at a horizontal cross sections of history across an array of topics actually paints a richer picture and provides greater context on each individual story.

So what I decided to do for my project was to map out a timeline of the topics and events we've been talking about in educational technology, learning theory, and instructional design, and add in other simultaneously occurring events and trends to see what additional light it might shed on what we've been learning. Specifically, tried to add in major events in world history, events in the history of civil rights and social justice, a few key events in the history of design as a discipline, and some milestones in critical pedagogy.

Now the problem with this project is that you could literally spend your entire life building it out, and it would never be done. I really really enjoyed the exercise, but in the interest of time I've had to draw a line today and show you what I have so far. So. It is most definitely incomplete. It will be revealing of my own biases and knowledge gaps, which is wonderfully metacognitive and valuable for me to see as I think about moving forward in my career and studies. But I did want to give that caveat before we dive in.

OK. So let me explain what you are looking at. This is the full timeline in all of its glory spanning from the beginning of the 20th century all the way through to 2020. I'm going to zoom in shortly so don't get stressed out about not being able to see anything. I just wanted you to be able to see everything all at once first. You can see that I've color coded events and that there is a legend over here, and I've added both things that span a number of years, and specific occurrences or events. I'm going to admit right off the bat that some of this is an imperfect science and my goal hasn't been to get the dates exactly perfectly precisely right in all cases. For example, where I've added things like behaviorism or cognitivism or constructivism, I've used approximate timeframes for when they had a relatively significant impact. For the specific milestones or events, most of those dates are precisely accurate, but the flaw there is that with some things, it doesn't fully represent the scope of influence of that event in the years before or after it. For example, when we look at something like Sweller's cognitive load theory, which I've

represented as being first published in 1988, it doesn't really capture the fact that Sweller was working on that theory for years before publishing it and the impact of that theory has extended well past 1988 even to the present day. The intent here is to look at the big picture and not get hung up on the details.

A quick note on citations. I didn't want to clutter up the timeline itself, so you'll see a table to the right here that has all of the events with in-text citation. And then the list of references beside it.

So we can't talk through this whole thing, because we'd be here all day, so I thought I'd pick a couple of moments to look at and then you can look through the rest on your own if you are interest. The first time period I wanted to look at is the 1960s, which I think is a super interesting period of time.

Broadly speaking, there's a lot going on in the 1960s. It's a time of war and nuclear threat, great technological advancement, political unrest and civil rights, but also things like the Beatles, LSD and the summer of love. The 1960s saw the Cuban Missile Crisis and increasing tensions with the Societ Union in 1962, it saw JFK assassinated in Dallas in 1963, Martin Luther King Jr. assassinated in Memphis in 1968, and in 1969 we see an exceptional achievement for mankind when Neil Armstrong becomes the first man to walk on the moon.

So what do we know about what's going on in learning and technology during the 1960s? Well, Behaviorism is firmly rooted as a theory of learning and B. F. Skinner is in his prime. But at the same time, folks are beginning to look internally and cognitivism is emerging as a theory of its own. Films are firmly embedded in instruction, having grown in popularity during and after the second world war, and we see things like teaching machines, programmed instruction and computer assisted instruction having a moment. The 1960s also sees instructional systems design emerging as a discipline, having grown out of the systematic training of the military during world war II. And in 1963 we get the first official definition of instructional technology, which focuses more on the process of design than the media itself. This, by the way, was the same year as the March on Washington, aimed at drawing attention to the continuing challenges faced by African Americans more than a century after emancipation, and the occasion of Martin Luther King Jr's iconic "I Have a Dream" speech.

In the 1960s we also see the Selma to Montgomery march, Malcolm X is assassinated, and a number of other big civil rights events. So it is not surprising to me then to see that 1968 was the year that Paulo Freire wrote Pedagogy of the Oppressed, one of the foundational texts in the field of critical pedagogy.

While our field can trace its roots much further back than the 1960s, this decade really feels like the cradle of a lot of things that are very important in the field today from systematic design to computer-based instruction and more. Interestingly enough, this is also a time when the field of "design" is redefining itself as well, separating itself from engineering and sciences and applying itself to intangible things like software and interactions. All of this is happening against a backdrop of conflict, revolution, and unrest. In some ways I guess it is not so surprising that our

fundamentally problem-solving field emerged at this time when it seems like there were so many problems to solve.

OK so in the interest of time, let's move on. We're going to skip over the 1970s and 80s and focus in quickly each on the 1990s, the 2000s, and the most recent prior decade leading up to today.

The 1990s feel as important to the present day of our disciplines as do the 1960s. The internet alone would make this true, but the 1990s also sees the rise of design thinking, constructivism, and the learning sciences. Instructional design is in the middle of paradigm wars challenging the supremacy of systems design, wiggins and mctighe publish understanding by design, and Google is founded in 1998.

The 1990s is the decade of Bill Clinton. Of Princess Diana. Of Kurt Cobain and OJ Simpson. The hubble telescope was launched in 1990, and Dolly the sheep is cloned in 1996. IN 1992 riots break out in Los Angeles after four policemen are acquitted of beating Rodney King, an African American man, even though they are captured on video by a bystander. In 1994 apartheid comes to an end in South Africa and Nelson Mandela becomes the country's first black president. The 1990s is a big one for critical pedagogy. Bell hooks publishes Teaching to Transgress, and folks like Peter McLaren and Joe Kincheloe are actively building on the work of Paulo Freire. IN many ways, the 1990s feels hopeful and forward looking and was an accelerator for progress is technology and cultural awareness. It feels like a garden in which seeds are planted that continue to bloom in 2020.

The 2000s see a number of other seeds planted that have had a huge impact on today's world. Especially in technology and online learning. Wikipedia is founded in 2001. Moodle is released as an open source LMS in 2002. YouTube is launched in 2005 and the iPhone is released to the world in 2007. The first MOOCs are offered and my own company, an online program manager called 2U is founded in 2008. This rapid evolution in technology drives a shift in the very nature of knowledge itself and in how people learn. Connectivism emerges as its own distinct theory of learning defined by sharing information across the world wide web and networks of people. One of my favorite authors on the subject, Christopher Dede (a professor in learning technologies at Harvard Graduate School of Education) writes about a seismic shift in epistemology in this digitally connected world where we negotiate meaning and expertise isn't only about how much you know.

But the 2000s are marred by a number of major, unsettling events. In 2001 in America we witness the tragedies of 9/11. Little did we know that the SARS pandemic in 2002 through 2004 would foreshadow a much greater one in 2020. The 2000s is the decade of Sadam Hussein, Osama bin Laden, the financial crisis of 2008 and a spate of mass shootings. It is also the decade that we elect our first Black president, President Barack Obama, elected in 2008.

So the 2000s create a little bit of a sobering environment for Gen Z, the kids growing up at the time. But is also defined by great and swift technological advancement that is so significant and meaningful that it actually changes how we know and learn, and ultimately how we need to design.

That brings us to the 2010s – the decade leading up to today. What a decade! It's a little bit sparse on my timeline here, but I think it highlights a few things that will continue to impact us in the years to come. In the last ten years we've continued to see this rapid pace of technological growth and advancement. Canvas and Zoom were founded in 2011. So was Twitch. Tiktok was founded in 2016 and Fortnite was released in 2017. This has been the decade of Trump and fake news. Of the Ebola pandemic and now COVID-19, which has forced the world into a digital learning revolution. We've seen the senseless deaths of Black Americans at the hands of the police and growing support for the Black Lives Matter movement. And I think these are the things that will continue to drive change and evolution in our industry in the coming years. More advancement in tech with a focus on connecting people and immersive experiences, reliance on online education and an emphasis on equity-centered and anti-oppressive design practices.

That's about all we have time for now. I hope you've enjoyed our stroll through history together. Please be sure to check out the rest of the timeline and I look forward to chatting with you about it in the discussion board.

And I'm just going to scroll through the references here quickly as a credit reel...

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