

Deviant by Design

Forging Systems for Path-Diverse Learners

Ruth S. Xing

Abstract

Deviant by Design: Forging Systems for Path-Diverse Learners introduces a systems-level analytical framework for understanding and critiquing educational design. At its core, this framework centers human variability, developmental diversity, and equity as realities that educational systems must prioritize in their design.

All learners can be understood as ‘path-diverse’ learners. Path-diversity refers to the reality that learners inherently vary in their developmental trajectories and patterns across multiple dimensions over time, including pacing, sequencing, and modes of engaging in learning. At any given point or period, learners occupy different positions along these spectral dimensions, which are dynamic and shaped by a combination of context, circumstance, and behavior.

Educational systems, however, tend to be designed for uniformity and conformity to normative and idealized expectations rather than for human variability or developmental realities. These expectations—which span assumptions about pacing, motivation, definitions of “success,” and beyond—are encoded in a mythological “ideal learner” that shapes the design and implementation of educational structures, policies, institutional practices, and assessment schemes. As a result, educational systems privilege and reward learners whose developmental trajectories tend to align more closely with prescribed norms and ideals, while simultaneously marginalizing and punishing others, who disproportionately experience constrained opportunity, misclassification, and overlooked potential.

This zine advances an analytical framework of path-diverse learning that (1) reconceptualizes learner variability as a core developmental reality to be centered in educational design, and (2) locates educational problems at the systemic level rather than the individual level. Building upon interdisciplinary scholarship spanning education, psychology, sociology, and adjacent fields, this zine explores how the mythological “ideal learner” has become structurally entrenched in educational systems, how these structures shape learners’ experiences over time, and how they produce or reinforce inequities that emerge as unevenly distributed harms. The zine concludes by outlining tentative design directions for more effective and equitable educational systems, including guiding principles, responsive integrations, and reflective structures that support human variability, developmental diversity, and plasticity.

Overall, these conceptual contributions position path-diverse educational design as a central framework for shifting how educational systems anticipate, respond to, and design for real learners, thereby forging effective, human-centered educational systems.

References

- Apple, Michael W. 2019. *Ideology and Curriculum*. 4th ed. Routledge.
- Baglieri, Susan, Jan W. Valle, David J. Connor, and Deborah J. Gallagher. 2010. "Disability Studies in Education: The Need for a Plurality of Perspectives on Disability." *Remedial and Special Education* 32 (4): 267–78. <https://doi.org/10.1177/0741932510362200>.
- Bourdieu, Pierre. 1986 (1983). "The Forms of Capital." Translated by Richard Nice. In *Handbook of Theory and Research for the Sociology of Education*, edited by John G. Richardson, 241–58. Greenwood Press.
- Bourdieu, Pierre, and Jean-Claude Passeron. 1977 (1970). *Reproduction in Education, Society and Culture*. Translated by Richard Nice. Sage Publications.
- Bowles, Samuel, and Herbert Gintis. 1976. *Schooling in Capitalist America: Educational Reform and the Contradictions of Economic Life*. Basic Books.
- Bronfenbrenner, Urie. 1979. *The Ecology of Human Development: Experiments by Nature and Design*. Harvard University Press.
- Callahan, Raymond E. 1964. *Education and the Cult of Efficiency: A Study of the Social Forces That Have Shaped the Administration of the Public Schools*. University of Chicago Press.
- Costanza-Chock, Sasha. 2020. *Design Justice: Community-Led Practices to Build the Worlds We Need*. MIT Press. <https://doi.org/10.7551/mitpress/12255.001.0001>.
- Davis, Lennard J. 1995. *Enforcing Normalcy: Disability, Deafness, and the Body*. Verso Books.
- Dotson, Kristie. 2014. "Conceptualizing Epistemic Oppression." *Social Epistemology* 28 (2): 115–38. <https://doi.org/10.1080/02691728.2013.782585>.
- Duckworth, Angela L., Christopher Peterson, Michael D. Matthews, and Dennis R. Kelly. 2007. "Grit: Perseverance and Passion for Long-Term Goals." *Journal of Personality and Social Psychology* 92 (6): 1087–1101. <https://doi.org/10.1037/0022-3514.92.6.1087>.
- European Education and Culture Executive Agency (EECEA). 2025. "Germany: Overview." Eurydice. Last modified May 12. <https://eurydice.eacea.ec.europa.eu/eurypedia/germany/overview>.
- Foucault, Michel. 1977 (1975). *Discipline and Punish: The Birth of the Prison*. Translated by Alan Sheridan. Vintage Books.
- Fricker, Miranda. 2007. *Epistemic Injustice: Power and the Ethics of Knowing*. Oxford University Press.
- Gamoran, Adam. 1992. "The Variable Effects of High School Tracking." *American Sociological Review* 57 (6): 812–28. <https://doi.org/10.2307/2096125>.
- Immordino-Yang, Mary Helen. 2016. *Emotions, Learning, and the Brain: Exploring the Educational Implications of Affective Neuroscience*. W. W. Norton & Company.
- Labaree, David F. 2012. *Someone Has to Fail: The Zero-Sum Game of Public Schooling*. Harvard University Press.
- Maslow, Abraham H. 1943. "A Theory of Human Motivation." *Psychological Review* 50 (4): 370–96. <https://doi.org/10.1037/h0054346>.
- McEwen, Bruce S. 1998. "Stress, Adaptation, and Disease: Allostasis and Allostatic Load." *Annals of the New York Academy of Sciences* 840 (1): 33–44. <https://doi.org/10.1111/j.1749-6632.1998.tb09546.x>.

- Meyer, John W., John Boli, George M. Thomas, and Francisco O. Ramirez. 1997. "World Society and the Nation-State." *American Journal of Sociology* 103 (1): 144–81. <https://doi.org/10.1086/231174>.
- Oakes, Jeannie. 2005. *Keeping Track: How Schools Structure Inequality*. 2nd ed. Yale University Press.
- Organisation for Economic Co-operation and Development (OECD). 2025. "United States: Overview of the Education System (Education at a Glance 2025)." OECD Education GPS. <https://gpseducation.oecd.org/CountryProfile?primaryCountry=USA&treshold=10&topic=EO>.
- Resnick, Mitchel. 2017. *Lifelong Kindergarten: Cultivating Creativity through Projects, Passion, Peers, and Play*. MIT Press. <https://doi.org/10.7551/mitpress/11017.001.0001>.
- Rose, Todd. 2016. *The End of Average: How We Succeed in a World That Values Sameness*. HarperOne.
- Tyack, David, and Larry Cuban. 1995. *Tinkering toward Utopia: A Century of Public School Reform*. Harvard University Press.