DARTMOUTH COLLEGE EDUCATION 27: THE IMPACT OF POVERTY ON EDUCATION

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Class Time: (10A slot) Tue & Thur 10:10-12:00 X-hour: Wed 3:30-4:20 Classroom: Moore B03

i. COURSE DESCRIPTION

Rising income inequality is undermining the ability of public K-12 schools to meet a foundational goal: to provide children from impoverished areas the opportunity to succeed. This course focuses on the forces that have translated the growing income gap into a growing education gap. We will examine primary research from various fields that details how poverty affects developing children, families, neighborhoods, and schools in ways that go on to affect educational outcomes. We will also consider how interventions strategically targeted at these contexts can improve the educational success of children growing up in poverty.

ii. COURSE GOALS

By the end of the course, you will be able to:

(1) interpret, explain, and critically analyze interdisciplinary research about how the forces of inequality affect the education and lives of low-income children.

(2) understand the ways in which the multiple levels affected by poverty (i.e., child, family, neighborhood, schools) interact with one another.

(3) consider promising areas for research-based intervention.

(4) propose a project that would help society understand or mitigate the impact poverty has on developing children's education.

iii. COURSE READINGS

There is no textbook for this class. The majority of the readings are research articles that have been carefully selected because they ask and answer a very specific question. Together, in class, we will build an understanding of how the research articles come together to address larger questions about how poverty affects children, families, neighborhoods, and/or schools in ways that go onto affect educational outcomes. The articles can all be found on the course Canvas site.

We will also read two memoirs to provide a voice to research findings and insight into the ways rural and urban poverty are distinct. These books are widely available at book retailers.

Vance, J.D. (2016). *Hillbilly elegy: A memoir of a family and culture in crisis*. New York, NY: Harper Collins Publishers. ISBN-978-0-06-230054-6

Suskind, R. (1998). A hope in the unseen. New York, NY: Broadway Books. ISBN-07679-0125-8

iv. ASSESSMENTS

Participation (10%)

Copious research shows participation benefits learning. To encourage participation, you will need to complete the readings before you come to class. You will also need to post at least one comment about at least two readings on the Canvas discussion board <u>before</u> the start of class each day. Comments can include questions, critiques, links to other topics discussed, and/or suggestions about follow-ups. The quality of your posts, as well as your participation in class, will count towards your participation grade. Please understand that if you must miss a class, it is still your responsibility to complete the readings and post to Canvas before class, as well as borrow notes from a classmate, review the power point slides, and acquire any other materials used.

Simulation Reflections (2% each)

During two class meetings, we will participate in small group simulations to help understand the complex ways the multiple levels affected by poverty interact with one another. Research has shown that simulation activities provide an ideal tool to achieve this goal, as they allow you the opportunity to experience aspects of a phenomenon for yourself and, in turn, reduce prejudice, promote perspective taking, and increase self-reflection. After each simulation, you will be asked to provide a brief (2-page) reflection statement about the experience. Detailed instructions are posted to Canvas.

Simulation 1: The Brain Architecture Game

The Brain Architecture Game was created through a partnership between The Center on the Developing Child at Harvard University, the USC Creative Media & Behavioral Health Center, and the Clinical & Translational Science Institute at the University of Pittsburg, and the FrameWorks Institute. See https://dev.thebrainarchitecturegame.com

The Brain Architecture Game is a tabletop game experience that builds an understanding of the powerful role experiences have on early brain development– what promotes it, what derails it, and with what consequences for society. The goal is to build a brain that is as tall as possible, which represents functionality, and as sturdy as possible, which represents the ability to withstand stressors. In small groups you will work together, drawing Life Experience cards to gain materials for brain building. Positive experiences earn a pipe cleaner and a straw for support. Negative experiences? Pipe cleaner, but no straw. After the initial period of early childhood brain development, weights must be hung from the structure of the brain when life hands out stressors. Will the foundation withstand these weights, or will it collapse? Afterward, we will discuss the experiences that strengthened or weakened the architecture of the developing brains and unpack how the simulation aligns with what we covered in class about neurocognitive development. Detailed instructions will be provided in class.

Simulation 2: The Game of Social Life

This simulation activity was designed in part by a 2014 grant from the Teaching about Diversity Fund through the Learning and Teaching Office at Ryerson University, Toronto, Ontario, Canada. See http://teachingcommons.yorku.ca/the-game-of-social-life-poverty-simulation/

The simulation is designed to motivate you to reflect on and discuss concepts of social stratification based on multiple dimensions of poverty. Prior to class, you will 1) be assigned character resources at random and 2) complete a budget exercise to determine the resources that you will have available to them during game play. In class, we will break into small groups for game play. The first part of the board game represents childhood, with the goal of remaining

healthy and accumulating education credits. In the second part of the game, representing adulthood, education credits earn prestige and wealth (or lack of prestige and wealth) in the form of occupational opportunities. Detailed instructions will be provided in class.

Book Verification Quizzes (2% each)

During the term, you will read two books. *Hillbilly Elegy* is a memoir written by J.D. Vance about his childhood growing up in poor in rural Appalachia. *A Hope in the Unseen* written by Ron Suskind is about Cedric Jennings, who grew up in an inner-city project on the southeast corner of Washington, DC. There will be a brief multiple-choice quiz on each book. The purpose of the quizzes is to motivate you to read the books. The intention is that if you have read the books, you will easily be able to answer the quiz questions.

Rural vs Urban Poverty Paper (13%)

The lives of J.D. Vance and Cedric Jennings as portrayed in *Hillbilly Elegy* and *A Hope in the Unseen* bear striking similarities. There are also striking differences. Some of the differences have to do with the fact that one was raised in an impoverished rural context and the other in an impoverished urban context. In a four-page (double-spaced) paper, you will need to discuss one **similarity** that exists between J.D. and Cedric. You must discuss how this similarity links to research related to a topic we cover in class. You must cite at least two research articles when discussing the similarity. You must also discuss one **difference** that exists between J.D. and Cedric. You grew up in a rural context and Cedric grew up in an urban context. You must cite at least three research articles when discussing the difference. Detailed instructions are available on Canvas.

Grant Proposal (20%)

Assume you have the opportunity to compete for a \$50,000 grant to conduct a research project that addresses a research-based problem associated with poverty and education. You will write a grant proposal to convince a grant review panel (myself and your classmates) that your project is worthy of funding. Your proposal should be six pages in length (not including the reference list) and should include a(n): abstract, rationale, statement of purpose, methods, timeline, budget justification, and reference list. In addition to the paper, you will also be asked to give the class a (timed) 30-second pitch of your proposal; we will vote on 5 proposals that we, as a class, feel are the most worthy of the \$50,000 (based on the pitches). Detailed instructions are available on Canvas.

Midterm Exam (23%)

The midterm exam will include a variety of question types including multiple choice, short answer, and short essay. It will cover material from articles, lectures, and in-class discussions, but not material from simulations or books.

Final Exam (26%)

The final exam will also include a variety of question types including multiple choice, short answer, and short essay. It will be cumulative.

v. GRADE BREAKDOWN

Participation: 10% Simulation Reflection 1: 2% Simulation Reflection 2: 2% Book Quiz 1: 2% Book Quiz 2: 2% Rural vs Urban Poverty Paper: 13% Grant Proposal: 20% (includes in-class pitch) Midterm Exam: 23% Final Exam: 26%

vi. POLICIES

Late policy

Any written assignment handed in after the start of the class period on the day it is due will be counted as one day late. Ten percent will be deducted the first day an assignment is late and an additional five percent will be deducted for each additional day that passes. If you cannot be in class on the day an assignment is due, you are responsible for getting me a hard copy before the start of the class period. Email versions will not be accepted. Also, please note that the Canvas discussion board will be closed at the start of class each day. Therefore, you will be unable to post your responses to the readings after the start of any given class. This late policy is a no exceptions policy. I hold firm to it because I believe it is inequitable to do otherwise; extensions benefit only a select group of students, specifically those who to have more extroverted personalities and are comfortable approaching me to ask for an extension.

Classroom Climate

Due to the nature of the topics covered in this course, we will discuss issues that are value-laden and sensitive. It is critical that each member of the class feels comfortable expressing his or her individual viewpoint. Remember that it is our privilege to be exposed to diverse perspectives.

Students with Disabilities

Students with disabilities who may need disability-related academic adjustments and services for this course are encouraged to see me as early in the term as possible. Students requiring disability-related academic adjustments and services must consult the Student Accessibility Services office. Once SAS has authorized services, students must show the originally signed SAS Services and Consent Form and/or a letter on SAS letterhead to me. As a first step, if you have questions about whether you qualify to receive academic adjustments and services, you should contact the SAS office. All inquiries and discussions will remain confidential. Contact information for SAS: 205 Collis Student Center, 646-9900, Student.Accessibility.Services@Dartmouth.edu

Academic Honor Principal

I take the Academic Honor Principle seriously. I expect you to familiarize yourself with it and uphold it. It stated clearly at http://www.dartmouth.edu/judicialaffairs/honor/index.html. For this course, you may not receive or provide assistance on any quiz or exam and you may not plagiarize. Plagiarism is the submission or presentation of work, in any form, that is not your own, without acknowledgment of the source. For this course, cite all sources according to the formal APA guidelines. If you have any clarification questions about how the Academic Honor Principal applies to this course, please ask me- and please do so before submitting an assignment. Any violation of the Academic Honor Principal will result in a zero on the assignment and a referral to Judicial Affairs.

Religious Observances

Some of you may wish to take part in religious observances that occur during this academic term. If you have a religious observance that conflicts with your participation in the course, please meet with me as early in the term as possible to discuss appropriate accommodations.

Mental Health

I recognize that the academic environment at Dartmouth is challenging, that our terms are intensive, and that classes are not the only demanding part of your life. There are a number of resources available to you on campus to support your wellness, including:

Undergraduate deans (http://www.dartmouth.edu/~upperde/) Counseling and Human Development (http://www.dartmouth.edu/~chd/) Student Wellness Center (http://www.dartmouth.edu/~healthed/)

I encourage you to use these resources, and come speak with me, to take care of yourself throughout the term.

vii. SCHEUDLE OF TOPICS AND DUE DATES

Class	Торіс	Due
Week 1	Introduction to the Course	
Thur Jan 3		
	Poverty at the Child Level	
Week 2	No class	
Tues Jan 8		
Week 2 (XHOUR)	Poverty & Neurocognitive Development	
Wed Jan 9		
Week 2	SIMULATION: The Brain Architecture Game	
Thur Jan 10		
Week 3	Poverty & Pre-K	Simulation Reflection 1
Tues Jan 15		
Week 3	Poverty & K-12 Educational Outcomes	Book Verification Quiz 1
Thur Jan 17		
	Poverty at the Family Level	
Week 4	Poverty, Family Structure & Investments in Children's Learning	
Tues Jan 22		
Week 4	Poverty & Parenting: Influences on Education	
Thur Jan 24		
	Poverty at the Neighborhood Level	
Week 5	Poverty & Neighborhood: Influences on Education	
Tues Jan 29		
Week 5	Exam	Exam
Thur Jan 31		
Week 6	Poverty & School Mobility	Book Verification Quiz 2
Tues Feb 5		
	Poverty at the School Level	
Week 6 (XHOUR)	Poverty & Local Employment: Influences on Education	
Wed Feb 6		
Week 6	SIMULATION: The Game of Social Life	Rural vs. Urban Poverty
Thur Feb 7		Paper
Week 7	Poverty & Teachers	Simulation Reflection 2
Tues Feb 12		
Week 7 (XHOUR)	Poverty, Segregation, & Desegregation of Schools	
Wed Feb 13		
Week 7	Poverty, Crime, & Safe Schools	
Thur Feb 14		
	Promising Interventions	
Week 8	No class	
Tues Feb 19		
Week 8	Child & School Level Interventions	
Thur Feb 21		
Week 9	Family & Neighborhood Level Interventions	
Tues Feb 26		
Week 9	Summary, Conclusions, Moving forward & Grant Pitches	Grant Proposal Pitch
Thur Feb 28		
Week 10	Exam	Exam
Tues March 5		
	Grant Proposal due by 11:00 a.m. EST	Grant Proposal
Tues March 12		

viii. DAILY SCHEDULE OF READINGS

Thur Jan 3 | Introduction to the Course

Educational Testing Service (2013). Poverty and education: Finding a way forward. [Research Brief]. Retrieved from https://www.ets.org/s/research/pdf/poverty_and_education_report.pdf

Evans, G. (2004). The environment of childhood poverty. *American Psychologist 59*(2), 77–92.

Chmielewski, A.K., & Reardon, S.F. (2016). State of the union: The poverty and inequality report. *Pathways Stanford Center on Poverty and Inequality Publication*, 45-50.

<u> Tues Jan 8 | No class</u>

Wed Jan 9 | Poverty & Neurocognitive Development

Hanson, J.L., Hair, N., Shen, D.G., Shi, F., Gilmore, J.H., Wolfe, B.L. & Pollak, S. (2013). Family poverty affects the rate of human infant brain growth. *PLoS ONE 8*(12), 1–9.

Noble, K.G. (2017). What inequality does to the brain. *Scientific American*, *316*(3),44-49.

Noble, K.G., Houston, S.M., Bartsch, H., Kan, E., Kuperman, J.M., Akshoomoff, N., Amaral, D.G., Bloss, C.S., Libiger, O., Schork, N.J., Murray, S.S., Casey, B.J., Chang, L., Ernst, T.M., Frazier, J.A., Gruen, J.R., Kennedy, D.N., Van Zijl, P., Mostofsky, S., Kaufmann, W.E., Keating, B.G., Kenet, T., Dale, A.M., Jernigan, T.L., & Sowell, E.R. (2015). Family income, parental education, and brain structure in children and adolescents. *Nature Neuroscience*, *18*(5), 773-778.

Katsnelson, A. (2015). The neuroscience of poverty. PNAS, 112 (51) 15530–15532.

Sektnan, M., McClelland, M., Acock, A., & Morrison, F. (2010). Relations between early family risk, children's behavior regulation, and academic achievement. *Early Childhood Research Quarterly, 25*, 464-479.

Mani, A., Mullainathan, A., Shafir, E., & Zhao, J. (2013). Poverty impedes cognitive function. *Science*, *341* (6149), 976-980.

Thur Jan 10 | Simulation

In class simulation: The Brain Architecture Game

<u> Tues Jan 15 | Poverty & Pre-K</u>

Loeb, S., & Bassok, D. (2007). Early childhood and the achievement gap. In H.F. Ladd & E.B. Fiske (Eds.), *Handbook of Research in Education Finance and Policy* (pp. 517-534). New York, NY: Routledge Press.

Child Trends (2015). Early school readiness: Indicators of child and youth well-being [Research Brief]. Retrieved from: https://www.childtrends.org/wp-content/uploads/2015/07/07_School_Readiness.pdf

Fernald, A., Marchman, V.A., & Weisleder, A. (2013). SES differences in language processing skill and vocabulary are evident at 18 months. *Developmental Science*, *16*(2), 234-248.

Magnuson, K. & Shager, H. (2010). Early education: Progress and promise for children from low-income families. *Children and Youth Services Review, 32*, 1186-1198.

REMINDER: SIMULATION REFLECTION 1 DUE TODAY

Thur Jan 17 | Poverty & K-12 Educational Outcomes

Reardon, S. (2013). The widening of the income achievement gap. *Educational Leadership, 70*(8), 10-16.

Alexander, K. L., Entwisle, D. R., & Olson, L. S. (2007). Lasting consequences of the summer learning gap. *American Sociological Review*, 72(2), 167-180.

Baker, B.D. & Corcoran, S.P. (2012). The stealth inequities of school funding: How state and local school finance systems perpetuate inequitable student spending. *Center for American Progress*, *1*, 13-55.

REMINDER: BOOK VERIFICATION QUIZ 1 GIVEN IN CLASS TODAY

Tues Jan 22 | Poverty, Family Structure, & Investments in Children's Learning

McLanahan, S & Percheski, C (2008). Family structure and the reproduction of inequalities, *Annual Review of Sociology*, *34*, 257-276.

Amato, P. (2005). The impact of family formation change on the cognitive, social, and emotional well being of the next generation. *Future of Children, 15*(2), 75-96.

Lino, M. (2013). *Expenditures on children by families, 2012*. Washington DC: US Department of Agriculture. [Research Brief] Retrieved from:

https://www.cnpp.usda.gov/sites/default/files/expenditures_on_children_by_families/crc2012.p df

Thur Jan 24 | Poverty & Parenting: Influences on Education

Davis-Kean, P.E. (2005). The influence of parent education and family income on child achievement: The indirect role of parental expectations and the home environment. *Journal of Family Psychology*, *19*(2), 294-304.

Brooks-Gunn, J. & Markman, L.B. (2005). The contribution of parenting to ethnic and racial gaps in school readiness. *The Future of Children*, *15*(1), 139-168.

Reeves, R.V. & Howard, K. (2013). The parenting gap. [Research Brief] Retrieved from: https://www.brookings.edu/wp-content/uploads/2016/06/09-parenting-gap-social-mobility-wellbeing-reeves.pdf

Tues Jan 29 | Poverty & Neighborhood: Influences on Education

Leventhal, T. & Brooks-Gunn, J. (2000). The neighborhoods they live in: The effects of neighborhood residence on child and adolescent outcomes. *Psychological Bulletin, 126*(2), 309-337.

Sandonmatsu, L., Kling, J., Duncan, G., & Brooks-Gunn, J. (2006). Neighborhoods and academic achievement: Results form the MTO experiment. *Journal of Human Resources*, *41*(4), 649-691.

Harding, D.J. (2009). Violence, older peers, and the socialization of adolescent boys in disadvantaged neighborhoods. *American Sociological Review*, 73(3), 445-464.

Sampson, R., Sharley, P. & Raudenbush, S. (2008). Durable effects of concentrated disadvantage on verbal ability among African American children. *PNAS*, *150*(3), 8945-852.

<u> Thur Jan 31 | Midterm</u>

In class midterm exam

Tues Feb 5 | Poverty & School Mobility

Lash, A.A. & Kirkpatrick, S.L. (1990). A classroom perspective on student mobility. *Elementary School Journal*, *91*(2), 177-192.

Haynie, D., South, S.J., & Bose, S. (2006). The company you keep: Adolescent mobility and peer behavior. *Sociological Inquiry*, *76*(3), 397-426.

Reynolds, A.J., Chin-Chih, C. & Herbers, J.E. (2009). School mobility and educational success: A research synthesis and evidence on prevention. Paper presented for the *National Research Council's Board on Children, Youth, and Families*. Washington, DC.

REMIDNER: BOOK VERIFICATION QUIZ 2 GIVEN IN CLASS TODAY

Wed Feb 6 | Poverty & Local Employment: Influences on Education

Stevens, A.H. & Schaller J. (2011). Short run effects of parental job loss on children's academic achievement. *Economics of Education Review*, *30*(2), 289-299.

Rege, M., Telle, K., & Votruba, M. (2011). Parental job loss and children's school performance. *Review of Economic Studies*, *78*(4), 1462-1489.

Dahl, G. & Lochnew L. (2008). The impact of family income on child achievement: Evidence from the earned income tax credit. *American Economic Review*, *102*(5), 1927-1956.

Thur Feb 7 | Simulation

In class simulation: The Game of Social Life

REMINDER: RURAL VS. URBAN POVERTY PAPER DUE TODAY

Tues Feb 12 | Poverty & Teachers

Adamson, F. & Darling-Hammond, L. (2011). The inequitable distribution of teachers: What it will take to get qualified, effective teachers in all communities. [Research Brief] Retrieved from: https://edpolicy.stanford.edu/sites/default/files/publications/addressing-inequitable-distribution-teachers-what-it-will-take-get-qualified-effective-teachers-all-_1.pdf

Boyd, D., Grossman P., Ing, M, Lankford, H., Loeb, S. & Wyckoff, J. (2011). The influence of school administrators on teacher retention decisions. *American Education Research Journal, 48*(2), 303-333.

Kalogrides, D., & Loeb, S. (2013). Different teachers, different peers: The magnitude of student sorting within schools. *Educational Researcher*, *42*(6), 304-316.

Balu, R., Beteille, T., & Loeb, S. (2010). Examining teacher turnover: The role of school leadership. *Politique Americaine*, *15*, 55-79.

REMINDER: SIMULATION REFLECTION 2 DUE TODAY

Wed Feb 13 | Poverty, Segregation, & Desegregation of Schools

Reardon, S.F., Grewal, E., Kalogrides, D., & Greenberg, E. (2012). Brown fades: The end of courtordered school desegregation and the resegregation of American public schools. *Journal of Policy Analysis and Management*, *31*(4), 876-904.

Shores, K., & Ejdemyr, S. (2017). Do school districts spend less money on poor and minority students? [Research Brief] Retrieved from https://www.brookings.edu/blog/brown-center-chalkboard/2017/05/25/do-school-districts-spend-less-money-on-poor-and-minority-students/

Edsall, T. (2017). Integration works. Can it survive the Trump era? [Blog Post] Retrieved from: https://www.nytimes.com/2017/02/09/opinion/integration-works-can-it-survive-the-trump-era.html?action=click&pgtype=Homepage&clickSource=story-heading&module=opinion-c-col-right-region®ion=opinion-c-col-right-region&WT.nav=opinion-c-col-right-region&_r=2

Wall, P. (2017). The privilege of school choice: When given the choice, will wealthy parents ever choose to desegregate schools? [Blog Post] Retrieved from: https://www.theatlantic.com/education/archive/2017/04/the-privilege-of-school-choice/524103/

Thur Feb 14 | Poverty & Safe Schools

Margolin, G. & Gordis. E.B. (2000). The effects of family and community violence on children. *Annual Review of Psychology*, *51*, 445-479.

American Psychological Association Zero Tolerance Task Force (2008). Are zero tolerance policies effective in schools? An evidentiary review and recommendations. *American Psychologist, 63*(9), 852-862.

Sweeten, G. (2006). Who will graduate? Disruption of high school education by arrest and court involvement. *Justice Quarterly, 23*(4), 462-480.

Sampson, R., Raudenbush, S., & Earles F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science*, *277*, 918-924.

Tues Feb 19

No class today

Thur Feb 21 | Child and School Level Interventions

Goldstein, Dana. (2013). What happens when great teachers get \$20,000 to work in low-income schools? Results. *Slate* [Blog Post] Retrieved from http://www.slate.com/articles/double_x/doublex/2013/11/talent_transfer_initiative_a_ne w_education_experiment_finds_that_merit_pay.html

Chetty, R., Friedman, J.N., & Rockoff, J.E. (2012). Great teaching. Education Next, 12(3), 58-64.

Darling-Hammond, L., Zielezinki, M.B., & Goldman, S. (2014). Using technology to support at-risk students' learning. [Research Brief] *Stanford Center for Opportunity Policy in Education*, 1-18. Retrieved from https://edpolicy.stanford.edu/sites/default/files/scope-pub-using-technology-report.pdf

Hoxby, C.M. & Murarka, S. (2009). Charter schools in New York City: Who enrolls and how they affect their students' achievement. *NBER Working Paper No. 14852*. Cambridge, MA: National Bureau of Economic Research.

Dobbie, W & Fryer, R. (2011). Are high quality schools enough to increase achievement among the poor: Evidence from the Harlem Children's Zone. *American Economic Journal: Applied Economics, 3, 158-187.*

Tues Feb 26 | Family & Neighborhood Level Interventions

Katz, L.F. (2014). Reducing inequality: Neighborhood and school interventions. *Focus, 31*(2), 12-17.

Sandel, M., Faugno, E., Mingo, A., Cannon, J., Byrd, K., Garcia, D.A., Collier, S., McClure, E., & Jarrett, R.B. (2016). Neighborhood-level interventions to improve childhood opportunity and lift children out of poverty. *Academic Pediatrics*, *16*(3), 128-135.

Berg, M. Coman, E., & Schensul, J.J. (2009). Youth action research for prevention: A multi-level intervention designed to increase efficacy and empowerment among urban youth, *American Journal of Community Psychology*, *43*, 1115-1122.

Thur Feb 28 | Summary, Conclusions, & Moving Forward

Brooks-Gunn, J. & Duncan, G.J. (1997). The effects of poverty on children. *The Future of Children*, 7(2), 55-71.

Darling-Hammond, L. (2011). The service of democratic education. Commencement speech given at Teacher's College at Columbia University, New York, NY Retrieved from: <u>https://www.thenation.com/article/service-democratic-education/</u>

In class grant proposal pitches

Tuesday March 5| Final

Final exam in class

Tuesday March 12 (Exam week) | Grant Proposal

Grant Proposal due anytime prior to 11:00 am. Submit it as a .pdf on Canvas.