Course Description

MEDD7124 Individual and Home Predictors of Students' Academic Achievement

Course description and objectives

This course examines the research to-date on key student and home influences on academic achievement. The design of the course is premised on the belief that 21st century educators should be conversant with the state-of-the-art scientific knowledge on what really matters in affecting student learning and achievement, and be able to critically evaluate and leverage on the different sources of influences to complement their teaching in the school. The student-level psychological predictors that will be discussed in the course include educational stages, gender, self-concept, and motivation. The home-level predictors to be examined will include socioeconomic status, cultural capital, home environment, and parental involvement.

Coursework / Examination ratio: <u>100</u> % Coursework, <u>0</u> % Exami	natio
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Course learning outcomes

- 1. Understand that student learning is influenced by both effective school teaching and also a variety of personal characteristics and home influences
- 2. Critically evaluate the evidence base on different ways in which personal characteristics and home factors impact student learning

Course assessment method Assessment method Individual responses to 2 Moodle questions Group presentation 20 Individual critique of 1 presentation 40

Course content and topics

Group essay

- Course introduction
- Predictors of student achievement, educational stages and gender

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- Self-concept and motivation
- Socioeconomic status and cultural capital
- Home environment and parental involvement
- Course synthesis (including critique of sample essay)

Required / recommended readings and online materials

General Readings

Required:

- 1. Hattie, J. (2009). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. London & New York, NY: Routledge. (Chapters 1 to 5)
- 2. Heyneman, S. P. (2005). Student background and student achievement: What is the right question? American Journal of Education, 112, 1-9.
- 3. Kingston, P. W., Hubbard, R., Lapp, B., Schroeder, P., & Wilson, J. (2003). Why education matters. Sociology of Education, 76(1), 53-70.

Recommended:

- 4. Chiu, M. M. (2010). Effects of inequality, family and school on mathematics achievement: Country and student differences. Social Forces, 88(4), 1645-1676.
- 5. Gilleece, L., Cosgrove, J., & Sofroniou, N. (2010). Equity in mathematics and science outcomes: Characteristics associated with high and low achievement on PISA 2006 in Ireland. International Journal of Science and Mathematics Education, 8(3), 475-496.
- 6. Hampden-Thompson, G., & Johnston, J. S. (2006). Variation in the relationship between

non-school factors and student achievement on international assessments (NCES 2006-014). Statistics in Brief (April). Institute of Education Sciences, U.S. Department of Education.

7. Reay, D. (2004). Education and cultural capital: The implications of changing trends in education policies. Cultural Trends, 13(2), 73-86.

A. Educational stages and gender

Required:

- 1. Duncan, G. J. et al. (2007). School readiness and later achievement. Developmental Psychology, 43(6), 1428-1446.
- 2. Tan, C. Y., Peng, B., & Lyu, M. (2019). What types of cultural capital benefit students' academic achievement at different educational stages? Interrogating the meta-analytic evidence. Educational Research Review, 28.
- 3. Else-Quest, N. M., Hyde, J. S., & Linn, M. C. (2010). Cross-national patterns of gender differences in mathematics: A meta-analysis. Psychological Bulletin, 136(1), 103-127. Recommended:
- 4. Darling-Hammond, L. (1995). Cracks in the Bell Curve: How education matters. The Journal of Negro Education, 64(3), 340-353.
- 5. Feinstein, L. (2003). Inequality in the early cognitive development of British children in the 1970 cohort. Economica, 70, 73-97.
- 6. Murray, C. (1997). IQ and economic success. Public Interest, 128, 21-35.

B. Self-concept and motivation

Required:

- 1. Valentine, J. C., DuBois, D. L., & Cooper, H. M. (2004). The relation between selfbeliefs and academic achievement: A meta-analytic review. Educational Psychologist, 39(2), 111-133.
- 2. Kriegbaum, K., Becker, N., & Spinath, B. (2018). The relative importance of intelligence and motivation as predictors of school achievement: A meta-analysis. Educational Research Review, 25, 120-148.

Recommended:

- 3. Chiu, M. M., & Chow, B. W. Y. (2010). Culture, motivation, and reading achievement: High school students in 41 countries. Learning and Individual Differences, 20, 579-592.
- 4. Rutherford, M. B., (2011). The social value of self-esteem. Society, 48, 407-412.
- 5. Twenge, J. M., Zhang, L., & Im, C. (2004). It's beyond my control: A cross-temporal meta-analysis of increasing externality in locus of control, 1960-2002. Personality and Social Psychology Review, 8(3), 308-319.
- 6. Vu, T., Magis-Weinberg, L., Jansen, B. R. J., van Atteveldt, N., Janssen, T. W. P., Lee, N. C., van der Maas, H. L. J., Raijmakers, M. E. J., Sachisthal, M. S. M., & Meeter, M. (2021). Motivation-achievement cycles in learning: A literature review and research agenda. Educational Psychology Review.

C. Socioeconomic status and cultural capital

Required:

- 1. Bradley, R. H., & Corwyn, R. F. (2002). Socioeconomic status and child development. Annual Review of Psychology, 53, 371–399.
- 2. Kim, S. W. (2019). Is socioeconomic status less predictive of achievement in East Asian countries? A systematic and meta-analytic review. International Journal of Educational Research, 97, 29-42.
- 3. Sirin, S. R. (2005). Socioeconomic status and academic achievement: A meta-analytic

review of research. Review of Educational Research, 75(3), 417-453.

4. Tan, C. Y. (2017). Examining cultural capital and student achievement: Results of a meta-analytic review. Alberta Journal of Educational Research, 63(2), 139-159.

Recommended:

- 5. Baker, D. P., Goesling, B., & LeTendre, G. K. (2002). Socioeconomic status, school quality, and national economic development: A cross-national analysis of the "Heyneman-Loxley Effect" on mathematics and science achievement. Comparative Education Review, 46(3), 291-312.
- 6. Huang, H., & Liang, G. (2016). Parental cultural capital and student school performance in mathematics and science across nations. The Journal of Educational Research, 109(3), 286-295.
- 7. Kim, S. W., Cho, H., & Kim, L. Y. (2019). Socioeconomic status and academic outcomes in developing countries: A meta-analysis. Review of Educational Research, 89(6), 875–916.
- 8. Savage et al. (2013). A new model of social class? Findings from the BBC's Great British Class Survey Experiment. Sociology, 47(2), 219-250.
- 9. Tan, C. Y. (2017). Conceptual diversity, moderators, and theoretical issues in quantitative studies of cultural capital theory. Educational Review, 69(5), 600-619

D. Home environment and parental involvement

Required:

- 1. Campbell, L. A., & Parcel, T. L. (2010). Children's home environments in Great Britain and the United States. Journal of Family Issues, 31(5), 559-584.
- 2. Cheadle, J. E., & Amato, P. R. (2011). A quantitative assessment of Lareau's qualitative conclusions about class, race, and parenting. Journal of Family Issues, 32(5), 679-706.
- 3. Tan, C. Y. (2017). Do parental attitudes toward and expectations for their children's education and future jobs matter for their children's school achievement? British Educational Research Journal, 43(6), 1111-1130.
- 4. Tan, C. Y., Lyu, M., & Peng, B. (2019). Academic benefits from parental involvement are stratified by parental socioeconomic status: A meta-analysis. Parenting: Science and Practice, 20(4), 241-287.

Recommended:

- 5. Ciping, D., Silinskas, G., Wei, W., & Georgiou, G. K. (2015). Cross-lagged relationships between home learning environment and academic achievement in Chinese. Early Childhood Research Quarterly, 33, 12-20.
- 6. Evans, M. D. R., Kelley, J., Sikora, J., & Treiman, D. J. (2010). Family scholarly culture and educational success: Books and schooling in 27 nations. Research in Social Stratification and Mobility, 28(2), 171-197.
- 7. Yeo, L. S., Ong, W. W., & Ng, C. M. (2014). The home literacy environment and preschool children's reading skills and interest. Early Education and Development, 25, 791-814.
- 8. Henderson, M. (2013) A test of parenting strategies. Sociology, 47, 542-559.
- 9. Lareau, A. (2011). Unequal childhoods: class, race, and family life (2nd Edition). Berkeley, CA: University of California Press.
- 10. Pensiero, N. (2011). Parent-child cultivation and children's cognitive and attitudinal outcomes from a longitudinal perspective. Child Indicators Research, 4(3), 413-437.
- 11. Rodriguez, A. J., Collins-Parks, T., & Garza, J. (2013). Interpreting research on parent involvement and connecting it to the science classroom. Theory into Practice, 52(1), 51-58.

- 12. Byun, S.-Y., Schofer, E., & Kim, K.-K. (2012). Revisiting the role of cultural capital in East Asian educational systems: The case of South Korea. Sociology of Education, 85, 219-239.
- 13. Kim, J. (2011). Aspiration for global cultural capital in the stratified realm of global higher education: Why do Korean students go to US graduate schools? British Journal of Sociology of Education, 32(1), 109-126.

Other	additional	course	information	

Nil