

## Course Description

### **MEDD8669 Teacher and Classroom Predictors of Students' Academic Achievement**

<b>Course description</b>
<p>This course examines the research to-date on key teacher and classroom predictors of students' academic achievement. The design of the course is premised on the philosophy that first, educators should be aware of the importance of classroom compositional and within-class socio-emotional factors that may appear to be distally related to, but have been found to have a substantive impact on student achievement. The course is also designed with the belief that empowered 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 (academic and non-academic) to complement their teaching in the school. The predictors that will be discussed in the course include teachers' expectations, teacher-student relationships; students' peer influences, school socioeconomic status, ability grouping, class size, computer-enabled teaching-learning, and IT integration in schools. Throughout the course, course participants will be acquainted with results of published meta-analyses interrogating how these variables predicted student achievement.</p>
<b>Course learning outcomes</b>
<ol style="list-style-type: none"><li>1. Understand the different ways in which school, teachers, and classroom factors impact student learning;</li><li>2. Appreciate that effective teaching and learning could only take place with a good understanding of the myriad teacher, compositional, and classroom socio-emotional influences, beyond core teaching and learning processes, that simultaneously impinge on student achievement; and</li><li>3. Critically evaluate the substantive and methodological aspects of published research examining how specific teacher and classroom variables may influence student achievement.</li></ol>
<b>Course assessment methods</b>
<ul style="list-style-type: none"><li>• Moodle tasks</li><li>• Group presentation</li><li>• Individual presentation reflection</li><li>• Essay</li></ul>
<b>Course content and topics</b>
<ul style="list-style-type: none"><li>• Course introduction, school effectiveness, school leadership and processes</li><li>• Teachers' expectations and teacher-student relationships</li><li>• Student peer influences and school socioeconomic status</li><li>• Ability grouping and class size</li><li>• Computer-enabled teaching-learning and IT integration in schools</li></ul>
<b>Required / recommended readings and online materials</b>
<p><u>Required:</u></p> <ol style="list-style-type: none"><li>1. Hattie, J. (2023). Visible learning: The sequel – A synthesis of over 2,100 meta-analyses relating to achievement. Routledge (Chapters 7, 8, 9, and 14)</li><li>2. Hattie, J. (2009). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. London &amp; New York, NY: Routledge. (Chapters 1 to 5)</li><li>3. Reynolds, D., Sammons, P., de Fraine, B., van Damme, J., Townsend, T., Teddlie, C., &amp; Stringfield, S. (2014). Educational effectiveness research (EER): A state-of-the-art review. School Effectiveness and School Improvement, 25(2), 197-230.</li><li>4. Holzberger, D., Reinhold, S., Lüdtke, O., &amp; Seidel, T. (2020). A meta-analysis on the relationship between school characteristics and student outcomes in science and maths -evidence from large-scale studies. Studies in Science Education, 56(1), 1-34.</li></ol>

5. Tan, C. Y., Dimmock, C., & Walker, A. (2021). How school leadership practices relate to student outcomes: Insights from a three-level meta-analysis. *Educational Management Administration & Leadership*. doi: 10.1177/17411432211061445

**Recommended:**

1. Chiu, M. M. (2010). Effects of inequality, family and school on mathematics achievement: Country and student differences. *Social Forces*, 88(4), 1645-1676.
2. 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.
3. Heyneman, S. (2015). The Heyneman/Loxley effect: Three decades of debate. In S. A. McGrath & Q. Gu (Ed.), *Routledge Handbook of International Education and Development* (pp. 150-167). London: Routledge.
4. Kingston, P. W., Hubbard, R., Lapp, B., Schroeder, P., & Wilson, J. (2003). Why education matters. *Sociology of Education*, 76(1), 53-70.
5. Lucas, S. R., & Beresford, L. (2010). Naming and classifying: Theory, evidence, and equity in education. *Review of Research in Education*, 34, 25-84.
6. Schleicher, A. (2009). Securing quality and equity in education: Lessons from PISA, *Prospects*, 39, 251-263.

**Other additional course information**

Nil