

Kurslitteratur

Avancerad nivå

Forskningsmetoder i matematikämnets och naturvetenskapsämnenas didaktik B, 7,5 hp

Kurskod: UM8046

Gäller från: HT 2021

Fastställd: 20210330

Institution: Institutionen för matematikämnets och naturvetenskapsämnenas didaktik

Obligatorisk litteratur

Bryman, A. (2018). Samhällsvetenskapliga metoder (Upplaga 3 ed.). Stockholm: Liber AB (200 sidor valda delar)

Valbar litteratur

Bertram, C., & Christiansen, I. M. (2014). *Understanding research: An introduction to reading research*. Pretoria, South Africa: van Schaik. (utdrag, inkl utdrag av opublicerat 2:e utg).

Biesta, G. (2007). Why 'what works' won't work: Evidence-based practice and the democratic deficit in educational research. *Educational Theory*, 57(1), 1-22. (22s)

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77 - 101.

Bryman, A. (1984). The debate about quantitative and qualitative research: A question of method or epistemology? *The British Journal of Sociology*, 35, 75-92. (18s)

Caiman, C., & Lundegård, I. (2015). Barns meningsskapande i ett projekt om biologisk mångfald och ekologi Children's meaning making in biodiversity and ecology. *Nordic Studies in Science Education*, 11(1), 73-87.

Christiansen, I. M. (2016). *Critical reading of research publications*. Unpublished notes, MND, SU. (18s)

Gustafsson, B., Hermerén, G., & Peterson, B. (2004). *Vad är god forskningssed? Synpunkter, riktlinjer och exempel*. Stockholm: Vetenskapsrådet. Finns som elektronisk resurs. (88s)

Gustafsson, J.-E., Nilsen, T., & Hansen, K. Y. (2018). School characteristics moderating the relation between student socio-economic status and mathematics achievement in grade 8. Evidence from 50 countries in TIMSS 2011. *Studies in Educational Evaluation*, 57, 16-30.

Harris, D., & Williams, J. (2012). The association of classroom interactions, year group and social class. *British Educational Research Journal*, 38(3), 373-397.

le Roux, K., & Adler, J. (2016). A critical discourse analysis of practical problems in a foundation mathematics course at a South African university. *Educational Studies in Mathematics*, 91, 227-246.

Lundegård, I. and Hamza, K. M. (2014), Putting the Cart Before the Horse: The Creation of Essences out of Processes in Science Education Research. *Science Education*, 98: 127–142.

Maxwell, J.A., & Mittapalli, K. (2010). Realism as a stance for mixed methods research. In A. Tashakkori, & C. Teddlie (Eds.), *SAGE Handbook of mixed methods in social and behavioral research, 2nd ed.* (pp. 145-167). Thousand Oaks: Sage Publications. Finns som elektronisk resurs. (23s)

Mayring, P. (2000). Qualitative content analysis. *Forum Qualitative Sozialforschung*, 1(2), Article 20. (9s).

Norén, E. & Svensson Källberg (2018). Fabrication of newly arrived students as mathematical learners. *Nordisk matematikkdidaktikk*, 23(3-4), 15-37.

Redman, A., Wiek, A., & Barth, M. (2021). Current practices of assessing students sustainability competencies: a review of tools. *Sustainability Science*, (16), 117-135

Rundgren, C.-J., Chang Rundgren, S.-N., Tseng, Y. H., Lin, P-L, & Chang, C-Y (2012). Are you SLiM? Developing an instrument for civic scientific literacy measurement (SLiM) based on media coverage. *Public Understanding of Science*, 21(6), 759-773.

Shalem, Y. (2014). What binds professional judgement? The case of teaching. In M. Young, & J. Muller (Eds.), *Knowledge, expertise and the professions* (pp. 93-105). Oxon: Routledge. Finns som elektronisk resurs.

Silver, E. A., & Herbst, P. (2007). Theory in Mathematics Education Scholarship. In F. Lester (Ed.), *Second Handbook of Research on Mathematics Teaching and Learning* (pp. 39–67). New York: IAP. (29 s) Finns som elektronisk resurs.

Sjöberg, M., Ingerman, Å, & Nyberg, E. (20018). Kvalitativa skillnader i lärares samtal om bedömning och elevers kunnande i naturvetenskap. *Nordic Studies in Science Education* 14(1), 54-67.

Svennevig, J. (2001). Abduction as a methodological approach to the study of spoken interaction. *Norskript*, 103, 1-22.

Wickman, P.-O., & Östman, L. (2002a). Induction as an empirical problem: how students generalize during practical work. *International Journal of Science Education*, 24, 465-486.

Wickman, P.-O., & Östman, L. (2002b). Learning as discourse change: a sociocultural mechanism. *Science Education*, 86, 601-623.

Wickman, P-O., Hamza, K & Lundegård, I. (2018) Didaktik och didaktiska modeller för undervisning i naturvetenskapliga ämnen. *Nordina*, 14(3), 239-249