Cover Page



Universiteit Leiden



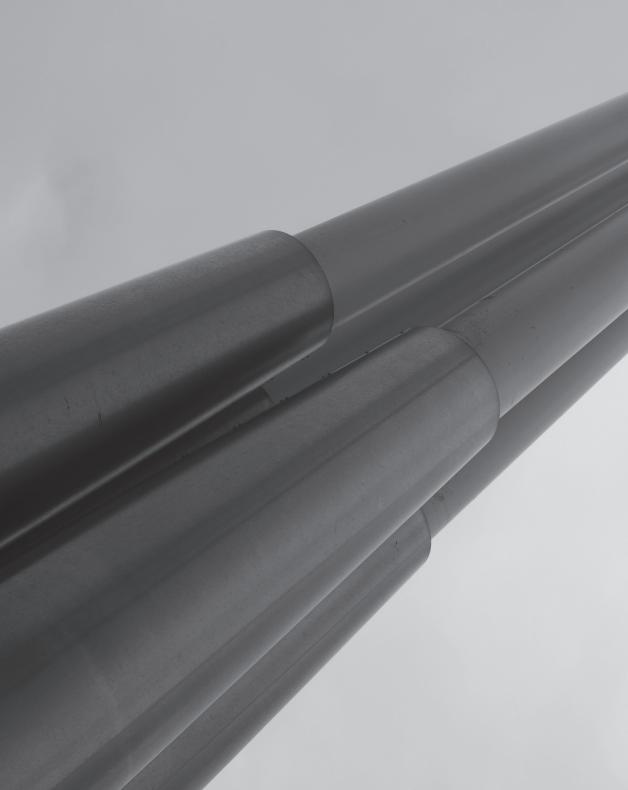
The handle http://hdl.handle.net/1887/62353 holds various files of this Leiden University dissertation.

Author: Vereijken, M.W.C.

Title: Student engagement in research in medical education

Issue Date: 2018-05-22

References



References

- Abelson, R. (1979). Differences between belief systems and knowledge systems. *Cognitive Science*, *3*, 355-366.
- Ahmed, R., Farooq, A., Storie, D., Hartling, L., & Oswald, A. (2016). Building capacity for education research among clinical educators in the health professions: A BEME (Best Evidence Medical Education) Systematic Review of the outcomes of interventions: BEME Guide No. 34. *Medical Teacher*, 38(2), 123-136.
- Amundsen, C., & McAlpine, L. (2009). 'Learning supervision': Trial by fire. *Innovations in Education and Teaching International*, 46(3), 331-342.
- Anderson, C., Day, K., & McLaughlin, P. (2008). Student perspectives on the dissertation process in a masters degree concerned with professional practice. *Studies in Continuing Education*, 30(1), 33-49.
- Ashwin, P. (2012). Analysing teaching-learning interactions in higher education. Accounting for structure and agency. London: Continuum International Publishing Group.
- Ashwin, P., & Trigwell, K. (2012). Evoked prior experiences in first-year university student learning. *Higher Education Research and Development*, 31(4), 449-463.
- Association of American Medical Colleges (AAMC). (1998). Learning objectives for medical student education: Guidelines for medical schools. Retrieved 07-09-2016 from https://members.aamc.org/eweb/upload/Learning%20Objectives%20for%20Medical%20 Student%20Educ%20Report%20I.pdf
- Barab, S. A., & Duffy, T. M. (2000). From practice fields to communities of practice. In: D. H. Jonassen & S. M. Land (Eds.), *Theoretical foundations of learning environments*, pp. 25-55. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Barnhart, T., & van Es, E. A. (2015). Studying teacher noticing: Examining the relationship among pre-service science teachers' ability to attend, analyze and respond to student thinking. *Teaching and Teacher Education, 45,* 83-93.
- Becher, T., & Trowler, P. (2001). Academic tribes and territories: Intellectual enquiry and the culture of disciplines (2nd ed.). Buckingham, UK: Society for Research into Higher Education & Open University Press.
- Bierer, S. B., Prayson, R., & Dannefer, E. (2015). Association of research self-efficacy with medical student career interests, specialization, and scholarship: A case study. *Advances in Health Sciences Education*, 1-16.
- Biggs, J. B. (1985). The role of metalearning in study processes. *British Journal of Educational Psychology Review*, 55, 185-212.
- Biglan, A. (1973). Characteristics of subject matter in different academic areas. *Journal of Applied Psychology*, 57, 195-203.
- Boud, D., & Lee, A. (2005). 'Peer learning' as pedagogic discourse for research education. *Studies in Higher Education*, 30(5), 501-516.
- Bowen, G. A. (2006). Grounded theory and sensitizing concepts. *International Journal of Qualitative Methods*, 5(3), 1-9.
- Boyer Commission. (1998). Reinventing undergraduate education: A blueprint for America's research universities. Stony Brook, NY: Carnegie Foundation for the Advancement of Teaching.
- Breen, R., & Lindsay, R. (1999). Academic research and student motivation. *Studies in Higher Education*, 24, 75-93.

- Brew, A. (2001). Conceptions of research: A phenomenographic study. Studies in Higher Education, 26(3), 271-285.
- Brew, A. (2003). Teaching and research: New relationships and their implications for inquiry-based teaching and learning in higher education. *Higher Education Research & Development*, 22(1), 3-18.
- Brew, A. (2010). Imperatives and challenges in integrating teaching and research. *Higher Education Research & Development*, 29(2), 139-150.
- Brew, A., & Ginns, P. (2008). The relationship between engagement in the scholarship of research and teaching and learning and students' course experiences. *Assessment & Evaluation in Higher Education*, 33(5), 535-545.
- Brew, A., & Mantai, L. (2017). Academics' perceptions of the challenges and barriers to implementing research-based experiences for undergraduates. *Teaching in Higher Education*, 22(5), 551-568.
- Bruce, C., & Stoodley, I. (2013). Experiencing higher degree research supervision as teaching. *Studies in Higher Education*, 38(2), 226-241.
- Bryson, C., & Hand, L. (2008). An introduction to student engagement. In L. Hand & C. Bryson (Eds.), SEDA special 22: Aspects of student engagement (pp. 5-13). Nottingham, UK: Staff and Educational Development Association.
- Burgoyne, L., O'Flynn, S., & Boylan, G. (2010). Undergraduate medical research: The student perspective. *Medical Education Online*, 15, 5212.
- CanMEDS (2015). Physician competency framework. Retrieved 06-09-2017 from http://canmeds.royalcollege.ca/uploads/en/framework/CanMEDS%202015%20Framework_EN_Reduced.pdf
- Chang, Y., & Ramnanan, C. J. (2015). A review of literature on medical students and scholarly research: Experiences, attitudes, and outcomes. *Academic Medicine*, 90(8), 1162-1173.
- Clark, B. R. (1997). The modern integration of research activities with teaching and learning. *Journal of Higher Education*, 68(3), 241-255.
- Coate, K., Barnett, R., & Williams, G. (2001). Relationships between teaching and research in higher education in England. *Higher Education Quarterly*, 55(2), 158-174.
- Coates, H. (2005). The value of student engagement for higher education quality assurance. *Quality in Higher Education*, 11(1), 25-36.
- Coates, H. (2010). Development of the Australasian Council for Educational Research (AUSSE). *Higher Education*, 60(1), 1-17.
- Cohen, J. C. (1998). Statistical power analysis for the behavioural sciences (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Colbeck, C. (1998). Merging in a seemless blend. How faculty integrate research and teaching. *The Journal of Higher Education*, 69(6), 647-671.
- Cook, D. A., & Hatala, R. Validation of educational assessments: A primer for simulation and beyond. *Advances in Simulation*, 7(1), 31.
- Crawford, B. (2015). Authentic science. In R. Gunstone (Ed.), *Encyclopedia of Science Education* (pp. 113-115). Dordrecht: Springer.
- de Beaufort, A. J., & de Goeij, A. F. P. M. (2013). Academic and scientific education in medical curricula in the Netherlands: A programme director's view. *Perspectives on Medical Education*, 2(4), 225-229.

- de Brouwer, C. P. M., Mommers, M. A. H., van Gool, C. J. A. W., Ferreira, I., & Kant, IJ. (2009). Critical appraisal of a topic. An indispensable manual in the era of Evidence Based Medicine. Maastricht, the Netherlands: Mediview.
- Deem, R., & Lucas, L. (2007). Research and teaching cultures in two contrasting UK policy contexts: Academic life in education departments in five English and Scottish universities. *Higher Education*, 54(1), 115-133.
- Dekker, F. W., Halbesma, N., Zeestraten, E. A., Vogelpoel, E. M., Blees, M. T., & de Jong, P. G. M. (2009). Scientific training in the Leiden medical school preclinical curriculum to prepare students for their research projects. *Journal of the International Association for Medical Science Education*, 19, 2-6.
- de Kleijn, R. A. M., Meijer, P. C., Brekelmans, M., & Pilot, A. (2015). Adaptive research supervision: Exploring expert thesis supervisors' practical knowledge. *Higher Education Research and Development*, 34(1), 117-130.
- de Kleijn, R. A. M., Meijer, P. C., Pilot, A., & Brekelmans, M. (2014). The relation between feedback perceptions and the supervisor–student relationship in master's thesis projects. *Teaching in Higher Education*, 19(4), 336-349.
- Dempsey, N. (2010). Stimulated recall interviews in etnography. *Qualitative Sociology*, 33(3), 349-367.
- de Oliveira, N. A., Luz, M. R., Saraiva, R. M., & Alves, L. A. (2011). Student views of research training programmemes in medical schools. *Medical Education*, 45(7), 748-755.
- Diamond, S., Middleton, A., & Mather, R. (2011). A cross-faculty simulation model for authentic learning. *Innovations in Education and Teaching International*, 48(1), 25-35.
- Dixon, K., & Hanks, H. (2010). From poster to PhD. In M. Walker & P. Thomson (Eds.), *The Routledge Doctoral Supervisor's Companion* (pp. 51-65). Abingdon, UK: Routledge.
- Durning, B., & Jenkins, A. (2005). Teaching-research relations in departments: The perspectives of built environment academics. *Studies in Higher Education*, 30(4), 407-426.
- Elen, J., & Verburgh, A. (2008). Bologna in research-intensive universities: Implications for bachelor and masters programmes. Antwerpen: Garant.
- Elton, L. (2001). Research and teaching: What are the real relationships? *Teaching in Higher Education*, 6(1), 43-56.
- Emilsson, U., & Johnsson, E. (2007). Supervision of supervisors: On developing supervision in postgraduate education. *Higher Education Research and Development*, 26 (2), 163-179.
- Erickson, F. (2011). On noticing teacher noticing. In M. Sherin, V. Jacobs, & R. Philipp (Eds.), *Mathematics teacher noticing: Seeing through teachers' eyes* (pp. 17–34). New York, NY: Routledge.
- Esteban, F. (2016). Standing at hinge of history: What today's universities can learn from past philosophies of higher education. *The Australian Educational Researcher*, 43(5), 629-641.
- Fleiss, J. L. (1981). Statistical methods for rates and proportion. (2nd ed). New York, NY: John Wilev.
- Fransson, G., & Grannäs, J. (2013). Dilemmatic spaces in educational contexts towards a conceptual framework for dilemmas in teachers work. *Teachers and Teaching*, 19(1), 4-17.
- Fung, D. (2017). *A connected curriculum for higher education*. Retrieved on 06-09-2017 from http://discovery.ucl.ac.uk/1558776/1/A-Connected-Curriculum-for-Higher-Education. pdf

- Fung, D., Besters-Dilger, J., & van der Vaart, R. (2017). Excellent education in research-rich universities (LERU report). Retrieved from http://www.leru.org/files/publications/LERU_Position Paper Excellent Education.pdf
- Funston, G., Piper, R. J., Connell, C., Foden, P., Young, A. M. H., & O'Neill P. (2016). Medical student perceptions of research and research-orientated careers: An international questionnaire study. *Medical Teacher*, 23, 1-8.
- Gardner, G. E., Forrester, J. H., Jeffrey, P. S., Ferzli, M., & Shea, D. (2015). Authentic science research opportunities: How do undergraduate students begin integration into a science community of practice? *Journal of College Science Teaching*, 44(4), 61-65.
- General Medical Council. (2015). The doctor as scholar and scientist. Retrieved 06-09-2017 from http://www.gmc-uk.org/education/undergraduate/undergrad_outcomes.asp
- Grant, B. (2003). Mapping the pleasures and risks of supervision. *Discourse: Studies in the Cultural Politics of Education*, 24(2), 175-190.
- Griffioen, D. M., & de Jong, U. (2015). Implementing research in professional higher education. *Educational Management Administration & Leadership*, 43(4), 626-645.
- Griffiths, R. (2004). Knowledge production and the research–teaching nexus: The case of the built environment disciplines. *Studies in Higher Education*, 29(6), 709-726.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59-82.
- Guyatt, G., Cook, D., Devereaux, P. J., Meade, M., & Strauss, S. (2002). Therapy. In G. Guyatt & D. Rennie (Eds.), *Users' Guide to the Medical Literature* (pp. 55-79). Chicago, IL: AMA Press.
- Halse, C. (2011). 'Becoming a supervisor: The impact of doctoral supervision on supervisors' learning. *Studies in Higher Education*, *36*(5), 377-392.
- Halse, C., Deane, E., Hobson, J., & Jones, G. (2007). The research–teaching nexus: What do national teaching awards tell us? *Studies in Higher Education*, 32(6), 727-746.
- Harden, R. M. (2000). The integration ladder: A tool for curriculum planning and evaluation. *Medical Education*, *34*, 551-557.
- Harden, R. M., & Laidlaw, J. M. (2012). Using an integrated and inter-professional approach. In R. M. Harden & J. M. Laidlaw (Eds.), *Essential skills for a medical teacher* (pp. 91-98). Edinburgh, UK: Elsevier Churchill Livingstone.
- Harwood, N., & Petrić, B. (2017). Experiencing Master's Supervision. Perspectives of international students and their supervisors. Abindon, UK: Routledge.
- Hattie, J., & Marsh, H. W. (1996). The relationship between research and teaching: A meta-Analysis. *Review of Educational Research*, 66(4), 507-542.
- Healey, M. (2005). Linking research and teaching: Exploring disciplinary spaces and the role of inquiry-based learning. In R. Barnett (Ed.), Maidenhead, UK: The Society for Research into Higher Education & Open University Press.
- Healey, M., & Jenkins, A. (2009). *Developing undergraduate research and inquiry*. York, UK: Higher Education Academy.
- Healey, M., Jordan, F., Pell, B., & Short, C. (2010). The research-teaching nexus: A case study of students' awareness, experiences and perceptions of research. *Innovations in Education & Teaching International*, 47(2), 235-246.
- Herrington, A., & Herrington, J. (2006). What is an authentic learning environment? In A. Herrington & J. Herrington (Eds.), *Authentic Learning Environments in Higher Education* (pp. 1-13). London: Information Science Publishing.

- Hodson, D. (1992). In search of a meaningful relationship: An exploration of some issues relating to integration in science and science education. *International Journal of Science Education*, 14, 541-562.
- Howitt, S. & Wilson, A. (2016). Scaffolded reflection as a tool for surfacing complex learning in undergraduate research projects. *Council on Undergraduate Research*, 36(4), 34-39.
- Hu, Y., van der Rijst, R. M., van Veen, K., & Verloop, N. (2014). 'And never the two shall meet'? Comparing Chinese and Dutch university teachers about the role of research in teaching. *Higher Education*, 68(4), 607-622.
- Hu, Y., van der Rijst, R. M., van Veen, K., & Verloop, N. (2014). The role of research in teaching: A comparison of teachers from research universities and those from universities of applied sciences. *Higher Education Policy*, 28(4), 535-554.
- Hu, Y., van der Rijst, R. M., van Veen, K., & Verloop, N. (2016). The purposes and processes of master's thesis supervision: a comparison of Chinese and Dutch supervisors. *Higher Education Research & Development*, 35(5), 910-924.
- Isaac, C., Byars-Winston, A., McSorley, R., Schultz, A., Kaatz, A., & Carnes, M. L. (2014). A qualitative study of work-life choices in academic internal medicine. Advances in Health Sciences Education, 19(1), 29-41.
- Janmaat, V. T., Kortekaas, K. E., Moerland, T. M., Vereijken, M. W. C., Schoones, J. W., van Hylckama Vlieg, A., & Dekker, F. W. (2013). Research-tutored learning: An effective way for students to benefit research by critical appraisal. *Medical Science Educator*, 23(2), 269-277.
- Jenkins, A. (2004). *Guide to the research evidence on teaching-research relations*. York: The Higher Education Academy.
- Jenkins, A., Blackman, T., Lindsay, R., & Paton-Saltzberg, R. (1998). Teaching and research: Student perspectives and policy implications. *Studies in Higher Education*, 23(2), 127-141.
- Jonasson, C., Mäkitalo, Å., & Nielsen, K. (2015). Teachers' dilemmatic decision-making: Reconciling coexisting policies of increased student retention and performance. *Teachers and Teaching*, 21(7), 831-842.
- Kahu, E. R. (2013). Framing student engagement in higher education. *Studies in Higher Education*, 38(5), 758-773.
- Kandiko, C. B., & Kinchin, I. M. (2012). What is a doctorate? A concept-mapped analysis of process versus product in lab-based PhD's. *Educational Research*, 54(1), 3-16.
- Kandlbinder, P. (2013). Signature concepts of key researchers in higher education teaching and learning. *Teaching in Higher Education*, *18*(1), 1-12.
- Kelly, A. V. (2004). Assessment, evaluation, appraisal and accountability. In A. V. Kelly (Ed.), *The curriculum. Theory and practice* (pp. 126-160). London: Sage Publications.
- Kluijtmans, M., de Haan, E., Akkerman, S., & van Tartwijk (2017). Professional identity in clinician-scientists: Brokers between care and science. *Medical Education*, *51*, 645-655.
- Kuh, G. D. (2009). What student affairs professionals need to know about student engagement. *Journal of College Student Development*, 50(6), 683-706.
- Kuh, G. D., Cruce, T. M., Shoup, R., Kinzie, J., & Gonyea, R. M. (2008). Unmasking the effects of student engagement on first-year college grades and persistence. *Journal of Higher Education*, 79(5), 540-563.
- Kuh, G.D., Kinzie, J., Schuh, J.H. & Whitt, E.J. (2005). Never let it rest: Lessons about student success from high-performing colleges and universities. *Change: The Magazine of Higher Learning*, 37(4), 44–51.

- Kwakman, C. H. E. (2003). Factors affecting teachers' participation in professional learning activities. *Teaching and Teacher Education*, 19(2), 149-170.
- Laidlaw, A., Aiton, J., Struthers, J., & Guild, S. (2012). Developing research skills in medical students. AMEE Guide No. 69. *Medical Teacher*, 34, 754-771.
- Laursen, S. L. (2015). Assessing undergraduate research in the sciences: The next generation. *Council of Undergraduate Research*, 35(3), 9-14.
- Law, M., Wright, S., & Mylopoulos, M. (2016). Exploring community faculty members' engagement in educational scholarship. *Canadian Familiy Physician*, 62(9), e524-e530.
- Lee, A. (2008). How are doctoral students supervised? Concepts of doctoral research supervision. *Studies in Higher Education*, 33(3), 267-281.
- Leiden University Medical Center (LUMC). (2017). e-Prospectus Academische en Wetenschappelijke Vorming. [In English: Study guide Academic and Scientific Training]. Retrieved 14-06-2017 from https://studiegids.leidenuniv.nl/en/courses/show/72979/lijn-academische-enwetenschappelijke-vorming
- Levy, P., & Petrulis, R. (2012). How do first-year university students experience inquiry and research, and what are the implications for the practice of inquiry-based learning? *Studies in Higher Education*, 37(1), 85-101.
- Lindsay, R., Breen, R., & Jenkins, A. (2002). Academic research and teaching Quality: The views of undergraduate and postgraduate students. *Studies in Higher Education*, 27(3), 309-327.
- Lizzio, A., & Wilson, K. (2004). Action learning in higher education: An investigation of its potential to develop professional capacity. *Studies in Higher Education*, 29(4), 469-488.
- Lizzio, A., Wilson, K., & Simons, R. (2002). University students' perceptions of the learning environment and academic outcomes: Implications for theory and practice. *Studies in Higher Education*, 27(1), 27-52.
- MacIntyre, A. C. (2007). *After Virtue: A Study in Moral Theory* (3rd ed.). Notre Dame: University of Notre Dame Press.
- Mainhard, M. T., van der Rijst, R. M., van Tartwijk, J., & Wubbels, T. (2009). A model for the supervisor-doctoral student relationship. *Higher Education*, 58, 359-373.
- Malcolm, M. (2011). Examining the implications of learner and supervisor perceptions of undergraduate dissertation research in Business and Management. *Teaching in Higher Education*, 17(5), 565-576.
- Malcolm, M. (2014). A critical evaluation of recent progress in understanding the role of the research-teaching link in higher education. *Higher Education*, 67(3), 289-301.
- Manathunga, C., Lant, P., & Mellick, G. (2006). Imagining an interdisciplinary doctoral pedagogy. *Teaching in Higher Education*, 11(3), 365-379.
- Marsh, H. W., & Roche, L. A. (1997). Making students' evaluations of teaching effectiveness effective. *American Psychologist*, 52, 1187–1197.
- Marsh, C. J., & Willis, G. (2007). Curriculum evaluation and student assessment. In C. J. Marsh & G. Willis (Eds.), *Curriculum. Alternative approaches, ongoing issues* (pp. 249-303). Saddle River, NJ: Pearson Education.
- Maxwell, T. W., & Smyth, R. (2011). Higher degree research supervision: From practice toward theory. *Higher Education Research & Development*, 30(2), 219-231.
- McCulloch, A., & Loeser, C. (2016). Does research degree supervisor training work? The impact of a professional development instruction workshop on supervision practice. *Higher Education Research and Development*, 35(5), 968-982.

- McHarg, J., Bradley, P., Chamberlan, S., Ricketts, C. Searly, J., & McLachlan, J. (2005). Assessment of progress test. *Medical Education*, 39, 221-227.
- Mezirow, J. (1997). Transformative learning: Theory to practice. *New Direction for Adult Continuing Education*, 74, 5-12.
- Mezirow, J., & Associates. (2000). *Learning as transformation: Critical perspectives on a theory in progress.* San Francisco, CA: Jossey Bass.
- Miles, M. B., & Huberman, M. (1994). *Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Muijtjens, A. M. M., Schuwirth, L. W. T., Cohen-Schotanus, J., Thoben, A. J. N. M., & van der Vleuten, C. P. M. (2008). Benchmarking by cross-institutional comparison of student achievement in a progress test. *Medical Education*, 42, 82-88.
- Muijtjens, A. M. M., Mameren, H. V., Hoogenboom, R.J., Evers, J.L., & van der Vleuten C.P. (1999). The effect of a 'don't know' option on test scores: Number-right and formula scoring compared. *Medical Education*, 33(4), 267–275.
- Mullan, J. R., Weston, K. M., Rich, W. C., & McLennan, P. L. (2014). Investigating the impact of a research-based integrated curriculum on self-perceived research experiences of medical student in community placements: A pre- and post-test analysis of three student cohorts. *BMC Medical Education*, 14, 161.
- Murdoch-Eaton, D., Drewery, S., Elton, S., Emmerson, C., Marshall, M., Smith, J., Stark, P., & Whittle, S. (2010). What do medical students understand by research and research skills? Identifying research opportunities within undergraduate projects. *Medical Teacher*, 32, e152-e160.
- Nederlandse Federatie van Universitair Medische Centra (NFU). (2009). *Raamplan Artsopleiding* 2009. Retrieved 06-09-2017 from http://www.nfu.nl/img/pdf/Raamplan_Artsopleiding 2009.pdf
- Neumann, R. (1992). Perceptions of the teaching-research nexus: A framework for analysis. *Higher Education*, 23(2), 159-171.
- Neumann, R. (1994). The teaching-research nexus: Applying a framework to university students' learning experiences. *European Journal of Education*, 29(3).
- Newmann, F. M., & Wehlage, G. G. (1993). Five standards of authentic instruction. *Authentic Learning*, 50(7), 8-12.
- Oliveira, C., de Souza, R., Abe, E. H., Silva Moz, L., de Carvalho, L., & Domingues, M. (2013). Undergraduate research in medical education: A descriptive study of students' views. *BMC Medical Education*. 14. 51.
- Pajares, M. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62(3), 307-322.
- Pascarella, E. T., Seifert, T. A., & Blaich, C. (2010). How effective are the NSSE Benchmarks in predicting important educational Outcomes? *Change: The Magazine of Higher Learning*, 42(1), 16–22.
- Pascarella, E. T., & Terenzini, P. T. (2005). How college affects students: A third decade of research. Volume 2. San Francisco, CA: Jossey-Bass.
- Patrício, M., & Harden, R. M. (2010). The Bologna Process A global vision for the future of medical education. *Medical Teacher*, 32, 305-315.
- Pearson, M., & Brew, A. (2002). Research training and supervision development. *Studies in Higher Education*, 27(2), 135-150.

- Prosser, M., & Trigwell, K. (1999). *Understanding learning and teaching. The experience in higher education*. Buckingham, UK: SRHE & Open University Press.
- Prosser, M., & Trigwell, K. (2014). Qualitative variation in approaches to university teaching and learning in large first-year classes. *Higher Education*, 67(6), 783-795.
- Pruskil, S., Burgwinkel, P., Georg, W., Keil, T., & Kiessling, C. (2009). Medical students' attitudes towards science and involvement in research activities: A comparative study with students from a reformed and a traditional curriculum. *Medical Teacher*, 31, e254-e259.
- Radinsky, J., Bouillion, L., Leton, E. M., & Gomez, L. M. (2001). Mutual benefit partnership: A curricular design for authenticity. *Journal of Curriculum Studies*, 33(4), 405-430.
- Ramsden, P. (1991). A performance indicator of teaching quality in higher education: The course experience questionnaire. *Studies in Higher Education*, *16*, 129–150.
- Ramsden, P. (2002). Learning to Teach in Higher Education (2nd ed.). London: Routledge.
- Ramsden, P., & Moses, I. (1992). Associations between research and teaching in Australian higher education, *Higher Education*, 23(3), 273-295.
- Renzulli, J. S., Gentry, M., & Reis, S. M. (2004). A time and place for authentic learning. *Educational Leadership*, 62(1), 73-77.
- Ribeiro, L., Severo, M., Pereira, M., & Ferreira, M. A. (2015). Scientific skills as core competencies in the medical curriculum: What do medical students think? *International Journal of Science Education*, 37(12), 1875-1885.
- Roberts, S. F., Fischhoff, M. A., Sakowski, S. A., & Feldman, E. L. (2012). Perspective: Transforming science into medicine: How clinician-scientists can build bridges across research's 'valley of death'. *Academic Medicine*, 87(3), 266-270.
- Robertson, J., & Blackler, G. (2006). Students' experiences of learning in a research environment. Higher Education Research & Development, 25(3), 215-229.
- Robertson, J., & Bond, C. (2001). Experiences of the relation between teaching and research: What do academics value? *Higher Education Research & Development*, 20, 5-19.
- Robertson, J., & Bond, C. (2005). The research/teaching relation: A view from the edge. *Higher Education*, 50(3), 509-535.
- Roseaux, B., Verachtert, I., Spooren, P., van Petegem, P., & De Schepper, A. (2016). De ontwikkeling en validering van een meetinstrument voor de nexus onderwijs-onderzoek in het hoger onderwijs [Development and validation of an instrument for the research-teaching nexus in higher education]. *Tijdschrift voor Hoger Onderwijs*, 34(2), 26-42.
- Rowe, C., & Okell, E. (2009). The 'research-teaching nexus' and the learning-teaching relationship: Who's in charge? *Arts and Humanities in Higher Education*, 8(2), 180-190.
- Rule, A. C. (2006). Editorial: The components of authentic learning. *Journal of Authentic Learning*, 3(1), 1-10.
- Sadler, T. D., Burgin, S., McKinney, L., & Ponjuan, L. (2010). Learning science through research apprenticeships: A critical review of the literature. *Journal of Research in Science Teaching*, 47(3), 235-256.
- Savin-Baden, M. (2000). *Problem-based learning in higher education: Untold stories*. Buckingham, UK: Society for Research into Higher Education & Open University Press.
- Scager, K., Akkerman, S. F., Pilot, A., & Wubbels, T. (2017). Teacher dilemmas in challenging students in higher education. *Teaching in Higher Education*, 22(3), 318-355.
- Schouteden, W., Verburgh, A., & Elen, J. (2014). Teachers' general and contextualised research conceptions. *Studies in Higher Education*, 41(1), 79-94.

- Schön, D. A. (1983). *The reflective practitioner. How reflective practitioners think in action.* London: Temple Smith.
- Schuwirth, L., & van der Vleuten, C. P. M. (2012). The use of progress testing. *Perspectives on Medical Education*, 1, 24-30.
- Scott, P. (2010). Higher education: An overview. In P. Peterson, E. Baker, & B. McGaw (Eds.), *International encyclopedia of education* (3rd ed., pp. 217-228). Oxford, UK: Elsevier.
- Seltman, H. J. (2015). Mixed models. A flexible approach to correlated data. In: *Experimental designs and analysis* (pp. 357-377). Retrieved 12-4-2017 from: http://www.stat.cmu.edu/~hseltman/309/Book/Chapter15.pdf
- Shah, J. Y., & Kruglanski, A. W. (2008). Structural dynamics. The challenge of change in goal systems. In J. Y. Shah & W. L. Gardner (Eds.), *Handbook of motivation science* (pp. 217-229). New York, NY: The Guilford Press.
- Shrout, P. E., & Fleiss, J. L. (1979). Intraclass correlations: Uses in assessing rater reliability. *Psychological Bulletin*, 86(2), 420-428.
- Siemens, D. R., Punnen, S., Wong, J., & Kanji, N. (2010). A survey on the attitudes towards research in medical school. *BMC Medical Education*, 10, 1-7.
- Simon, H. A. (1957). *Models of Man. Mathematical Essays on Rational Human Behavior in a Social Setting.* New York, NY: John Wiley and Sons, Inc.
- Simons, M., & Elen, J. (2007). The 'research-teaching nexus' and 'education through research': An exploration of ambivalences. *Studies in Higher Education*, 32(5), 617-631.
- Smeby, J. (2000). Disciplinary differences in Norwegian graduate education. *Studies in Higher Education*, 25(1), 53–67.
- Smith, P., & Rust, C. (2007). Students' expectations of a research-based curriculum: Results from an online survey of first year undergraduates at Oxford Brookes University. *Brookes eJournal of Learning and Teaching*. Retrieved 08-09-2017 from https://www.brookes.ac.uk/OCSLD/Conferences/Brookes-Learning-and-Teaching-Conference/2007/Smith/
- Spooren, P., Brockx, B., & Mortelmans, D. (2013). On the validity of student evaluation of teaching. The state of the art. *Review of Educational Research*, 83, 598-642.
- Spronken-Smith, R., Walker, R., Batchelor, J., & O'Steen, B., & Angelo, T. (2012). Evaluating student perceptions of learning processes and intended learning outcomes under inquiry approaches. Assessment & Evaluation in Higher Education, 37(1), 57-72.
- Spronken-Smith, R., Mirosa, R., & Darrou, M. (2014). 'Learning is an endless journey for anyone': Undergraduate awareness, experiences and perceptions of the research culture in a research-intensive university. *Higher Education Research & Development*, 33(2), 355-371.
- Star, S. L. (2010). This is not a boundary object: Reflections on the origin of a concept. *Science, Technology & Human Values, 35,* 601-617.
- Steinert, Y., McLeod, P., Boillat, M., Meterissian, S., Elizov, M., & Macdonald, M. E. (2008). Faculty development: A 'field of dreams? *Medical Education*, 43(1), 42-49.
- Streiner, D. L., & Norman, G. R. (1995). *Health measurement scales: A practical guide to their* development and use (3rd ed.) Oxford, UK: Oxford University Press.
- Suwanwela, C. (1995). A vision of quality in medical education. Academic Medicine, 70, S32-S37.
- Talanquer, V., Tomanek, D., & Novodvorsky, I. (2007). Revealing student teachers' thinking through dilemma analysis. *Journal of Science Teacher Education*, 18(3), 399-421.
- Tawney, D. (1973). *Evaluation in curriculum development: Twelve case studies*. London: Macmillan Education for the Schools Council.

- Taylor, J. (2007). The teaching:research nexus: A model for institutional management. *Higher Education*, 54(6), 867-884.
- Tight, M. (2014). Discipline and theory in higher education research. Research Papers in Education, 29(1), 93-110.
- Trowler, V. (2010). Student engagement literature review. York, UK: The Higher Education Academy.
- Todd, M., Smith, K., & Bannister, P. (2006). Supervising a social science undergraduate dissertation: Staff experiences and perceptions. *Teaching in Higher Education*, 11(2), 161-173.
- Turner, G. (2015). Learning to supervise: Four journeys. *Innovations in Education and Teaching International*, 52(1), 86-98.
- Turner, N., Wuetherick, B., & Healey, M. (2008). International perspectives on student awareness, experiences and perceptions of research: Implications for academic developers in implementing research-based teaching and learning. *International Journal for Academic Development*, 13(3), 199-211.
- van den Akker, J. (2003). Curriculum perspectives: An introduction. In J. van den Akker, W. Kuiper & U. Hameyer (Eds.), *Curriculum landscape and trends*. Dordrecht: Kluwer Academic Publishers.
- van den Bogert, N., van Bruggen, J., Kostons, D., & Jochems, W. (2014). Investigating differences between novice and expert teachers in classroom event detection. *Teaching and Teacher Education*, 37, 208-216.
- van der Rijst, R. M. (2017). The transformative nature of research-based education: A thematic overview of the literature. In E. Bastiaens, J. van Tilburg, & J. van Merriënboer (Eds.), Research-based learning: Case studies from Maastricht University (pp. 3-21). Cham, Switzerland: Springer International Publishing AG.
- van der Rijst, R. M., Visser-Wijnveen, G. J., Verloop, N., & van Driel, J. H. (2013). Undergraduate science coursework: Teachers' goal statements and how students experience research. *Innovations in Education and Teaching International*, 50(2), 178-190.
- van der Rijst, R. M., Visser-Wijnveen, G., Verstelle, T., & van Driel, J. H. (2009). Studentbeleving van de onderzoeksintensiviteit van universitaire onderwijsomgevingen. [In Dutch: Student experience of the research intensiveness of learning environments at universities] *Pedagogische Studiën*, 86, 214-229.
- van der Velden, L. F. J., Hingstman, L., Heiligers, P. J. M., & Hansen, J. (2008). Toenemend percentage vrouwen in de geneeskunde: verleden, heden en toekomst. [In Dutch: Increasing percentage of women in medicine: The past, present and future]. *Nederlands Tijdschrift voor Geneeskunde*, 152(40), 2165-2171.
- van Es, E. A., & Sherin, M. G. (2008). Mathematics teachers' 'learning to notice' in the context of a video club. *Teaching and Teacher Education*, 24(2), 244-276.
- van Lankveld, T., Schoonenboom, J., Kusurkar, R. A., Volman, M., Beishuizen, J., & Croiset, G. (2017). Integrating the teaching role into one's identity: A qualitative study of beginning undergraduate medical teachers. *Advances in Health Sciences Education*, 22(3), 601-622.
- Verburgh, A. L., & Elen, J. (2011). The role of experienced research integration into teaching upon students' appreciation of research aspects in the learning environment. *International Journal of University Teaching and Faculty Development*, 1, 1–14.
- Verburgh, A. L., Francois, S., Elen, J., & Janssen, R. (2013). The assessment of critical thinking critically assessed in higher education: A validation study of the CCTT and HCTA. *Educational Research International*, 13.

- Verburgh, A. L., Schouteden, A., & Elen, J. (2013). Patterns in the prevalence of research-related goals in higher education programmemes. *Teaching in Higher Education*, 18(3), 298-310.
- Vereijken, M. W. C., van der Rijst, R. M., de Beaufort, A. J., van Driel, J. H., & Dekker, F. W. (2016). Fostering first-year student learning through research integration into teaching: Student perceptions, beliefs regarding the value of research and student achievement. Innovations in Education and Teaching International. Advance online publication. doi: 10.1080/14703297.2016.1260490
- Vereijken, M.W.C., van der Rijst, R.M., van Driel, J.H., & Dekker, F.W. (2017). Novice supervisors' practices and dilemmatic space in supervision of students' research projects. Teaching in Higher Education. Advance online publication. doi: 10.1080/13562517.2017.1414791
- Vereijken, M. W. C., van der Rijst, R. M., van Driel, J. H., & Dekker, F. W. (2017). Student learning outcomes, perceptions and beliefs in the context of strengthening research integration into the first year of medical school. *Advances in Health Science Education*. Advance online publication. doi: 10.1007/s10459-017-9803-0
- Verloop, N. (1989). Interactive cognitions of student-teachers. An intervention study (Doctoral dissertation).
- Visser-Wijnveen, G. J. (2009). The research-teaching nexus in the humanities. Variation among academics (Doctoral dissertation).
- Visser-Wijnveen, G. J. (2013). Vormen van de integratie van onderzoek en onderwijs [In Dutch: Forms of the integration of research and teaching]. In D. M. E. Griffioen, G. J. Visser-Wijnveen; & J. H. M. Willems (Eds.), *Integratie van onderzoek in het hoger onderwijs: Effectieve inbedding van onderzoek in curricula* (pp. 61-74). Groningen: Noordhoff Uitgevers.
- Visser-Wijnveen, G. J., van der Rijst, R. M., & van Driel, J. H. (2016). A questionnaire to capture students' perceptions of research integration in their courses. *Higher Education*, 71, 473-488.
- Visser-Wijnveen, G. J., van Driel, J. H., van der Rijst, R. M., Verloop, N., & Visser, A. (2010). The ideal research-teaching nexus in the eyes of academics: Building profiles. *Higher Education Research and Development*, 29(2), 195-210.
- Visser-Wijnveen, G. J., van Driel, J. H., van der Rijst, R. M., Visser, A., & Verloop, N. (2012). Relating academics' ways of integrating research and teaching to their students' perceptions. *Studies in Higher Education*, 37(2), 219-234.
- Vos, P. (2011). What is 'authentic' in the teaching and learning of mathematical modelling? In G. Kaiser, W. Blum, R. Borromeo Ferri & G. Stillman (Eds.), *Trends in teaching and learning of mathematical modelling* (pp. 713-722). Dordrecht: Springer.
- Wald, N., & Harland, T. (2017). A framework for authenticity in designing a research-based curriculum. *Teaching in Higher Education*, 22(7), 751-765.
- Walker, M., & Thomson, P. (2010). The Routledge doctoral supervisor's companion: Supporting effective research in education and the social sciences. London: Routledge.
- Webster, D.S. (1985). Does research productivity enhance teaching? *Educational Record*, 66, 60-63.
- Wichmann-Hansen, G., Thomsen, R., & Nordentoft, H. M. (2014). Challenges in collective academic supervision: Supervisors' experiences from a master programmeme in guidance and counselling. *Higher Education*, 70(1), 19-33.
- Wiggins, S., Gordon-Finlayson, A., Becker, S. & Sullivan, C. (2016). Qualitative undergraduate project supervision in psychology: Current practices and support needs of supervisors across North East England and Scotland. *Qualitative Research in Psychology*, 13(1), 1-19.

- Willison, J. W. (2012). When academics integrate research skill development in the curriculum. *Higher Education Research and Development*, 31(6), 905-916.
- Zamorski, B. (2002). Research-led teaching and learning in higher education: A case. *Teaching in Higher Education*, 7(4), 411-427.
- Zimbardi, K., & Myatt, P. (2014). Embedding undergraduate research experiences within the curriculum: A cross-disciplinary study of the key characteristics guiding implementation. *Studies in Higher Education*, 39(2), 233-250.