

Educational and Developmental Psychology – University of Freiburg (Germany)

Publications – Last 10 years (February 2018)

in press

- Glogger-Frey, I., Ampatziadis, Y., Ohst, A. & Renkl, A. (in press). Future teachers' knowledge about learning strategies: Misconcepts and knowledge-in-pieces. *Thinking Skills and Creativity*. doi:10.1016/j.tsc.2018.02.001
- Glogger-Frey, I., Deutscher, M., & Renkl, A. (in press). Student teachers' prior knowledge as prerequisite to learn how to assess pupils' learning strategies. *Teaching and Teacher Education*.
- Hoogerheide, V., Renkl, A., Fiorella, L., Paas, F., & van Gog, T. (in press). Enhancing example-based learning: Teaching on video increases arousal and improves problem-solving performance. *Journal of Educational Psychology*.
- Harr, N., Eichler, A., & Renkl, A., (in press). Lehrexpertise – Integration und Förderung von pädagogischem und psychologischem Wissen. In T. Leuders, M. Nückles, S. Mikelskis-Seifert, & K. Philipp (Eds.), *Pädagogische Professionalität in Mathematik und Naturwissenschaften*. Berlin: Springer.
- Heftner, M. H., Renkl, A., Riess, W., Schmid, S., Fries, S., & Berthold, K. (in press). Training interventions to foster skill and will of argumentative thinking. *Journal of Experimental Education*. doi:10.1080/00220973.2017.1363689.
- Herppich, S., Praetorius, A.-K., Förster, N., Glogger-Frey, I., Karst, K., Leutner, D., ... Südkamp, A. (in press). Teachers' assessment competence: Integrating knowledge-, process-, and product-oriented approaches into a competence-oriented conceptual model. *Journal of Teaching and Teacher Education*. doi:10.1016/j.tate.2017.12.001
- Leber, J., Renkl, A., Nückles, M., & Wäschle, K. (in press). When the type of assessment counteracts teaching for understanding. *Learning: Research & Practice*. doi: 10.1080/23735082.2017.1285422
- Lindner, M. A., Eitel, A., Barenthien, J., & Köller, O. (in press). An integrative study on learning and testing with multimedia: Effects on students' performance and metacognition. *Learning and Instruction*.
- Ohst, A., Fondu, B. M. E., Nückles, M., Renkl, A. (in press). Erleichterung der Anwendbarkeit von Wissen aus einem Vortraining durch eine Prozeduralisierungshilfe. In T. Leuders, M. Nückles, S. Mikelskis-Seifert, & K. Philipp (Eds.), *Pädagogische Professionalität in Mathematik und Naturwissenschaften*. Berlin: Springer.
- Renkl, A. (in press). Scientific reasoning and argumentation: Is there an over-emphasis on discipline specificity? In F. Fischer, C. Chinn, K. Engelmann, & J. J. Osborne (Eds.), *Interplay of domain-specific and domain-general aspects of scientific reasoning and argumentation skills*. Oxford, UK: Taylor & Francis.
- Renkl, A. & Eitel, A. (in press). Self-explaining: Learning about principles and their application. In J. Dunlosky & K. Rawson (Eds.), *Cambridge handbook of cognition and education*. New York, NY: Cambridge University Press.
- Richter, J., Scheiter, K., & Eitel, A. (in press). Signaling text-picture relations in multimedia learning: The influence of prior knowledge. *Journal of Educational Psychology*.
- Scheiter, K., Richter, J., & Renkl, A. (in press). Multimediales Lernen: Lehren und Lernen mit Texten und Bildern. In H. Niegemann & A. Weinberger (Hrsg.), *Handbuch Bildungstechnologie*. Heidelberg: Springer.
- Skuballa, I. T., Dammert, A., & Renkl, A. (in press). Two kinds of meaningful multimedia learning: Is cognitive activity alone as good as combined behavioral and cognitive activity? *Learning & Instruction*.

Van Gog, T., Rummel, N., & Renkl, A. (in press). Learning how to solve problems by studying examples. In J. Dunlosky & K. Rawson (Eds.), *Cambridge handbook and cognition and education*. New York, NY: Cambridge University Press.

Scheiter, K., Richter, J., & Renkl, A. (in press). Multimediales Lernen: Lehren und Lernen mit Texten und Bildern. In H. Niegemann & A. Weinberger (Hrsg.), *Handbuch Bildungstechnologie*. Heidelberg: Springer.

2018

Schmidgall, S. P., Eitel, A., & Scheiter, K. (2018). Why do learners who draw perform well? Investigating the role of visualization, generation and externalization in learner-generated drawing. *Learning and Instruction*. doi:10.1016/j.learninstruc.2018.01.006

2017

Bauer, J., Berthold, K., Heftner, M. H., Prenzel, M., & Renkl, A. (2017). Wie können Lehrkräfte und ihre Schülerinnen und Schüler lernen, fragile Evidenz zu verstehen und zu nutzen? *Psychologische Rundschau*, 68, 188–192.

Behrmann, L. & Glogger-Frey, I. (2017). *Produkt- und Prozessindikatoren diagnostischer Kompetenz*. In A. Südkamp & A.-K. Praetorius (Hrsg.), Diagnostische Kompetenz von Lehrkräften. Theoretische und methodische Weiterentwicklungen. Münster: Waxmann.

Eitel, A. Martin Benito, S., & Scheiter, K. (2017). Do it twice! Test-taking fosters repeated but not initial study of multimedia instruction. *Learning and Instruction*, 52, 36-45. doi: [10.1016/j.learninstruc.2017.04.003](https://doi.org/10.1016/j.learninstruc.2017.04.003)

Endres, T., Carpenter, S., Martin, A., & Renkl, A. (2017). Enhancing learning by retrieval: Enriching free recall with elaborative prompting. *Learning & Instruction*, 49, 13-20. doi: 10.1016/j.learninstruc.2016.11.010

Glogger-Frey, I. & Herppich, S. (2017). *Formative Diagnostik als Teilaспект diagnostischer Kompetenz*. In A. Südkamp & A.-K. Praetorius (Hrsg.), Diagnostische Kompetenz von Lehrkräften. Theoretische und methodische Weiterentwicklungen. Münster: Waxmann.

Glogger-Frey, I., & Renkl, A. (2017). Diagnostische Kompetenz fördern – Vorwissen aufgreifende Methoden in Kombination mit beispielbasiertem Kurztraining. In A. Südkamp & A.-K. Praetorius (Hrsg.), *Diagnostische Kompetenz von Lehrkräften. Theoretische und methodische Weiterentwicklungen*. (pp. 217-222). Münster: Waxmann.

Glogger-Frey, I., Gaus, K., & Renkl, A. (2017). Learning from direct instruction: Best prepared by several self-regulated or guided invention activities? *Learning & Instruction*, 51, 26-35.. doi: 10.1016/j.learninstruc.2016.11.002

Herppich, S., Praetorius, A.-K., Hetmanek, A., Glogger-Frey, I., Ufer, S., Leutner, D. et al. (2017). *Ein Arbeitsmodell für die empirische Erforschung der diagnostischen Kompetenz von Lehrkräften*. In A. Südkamp & A.-K. Praetorius (Hrsg.), Diagnostische Kompetenz von Lehrkräften. Theoretische und methodische Weiterentwicklungen. Münster: Waxmann.

Lindner, M. A., Eitel, A., Strobel, B., & Köller, O. (2017). Identifying processes underlying the multimedia effect in testing: An eye-movement analysis. *Learning and Instruction*, 47, 91-102. doi:[10.1016/j.learninstruc.2016.10.007](https://doi.org/10.1016/j.learninstruc.2016.10.007)

Renkl, A. (2017). Instruction based on examples. In R. E. Mayer & P. A. Alexander (Eds.), *Handbook of research on learning and instruction* (pp. 325-348, 2nd ed.). New York, NY: Routledge.

- Renkl, A. (2017). Learning from worked examples in mathematics: Students relate procedures to principles. *ZDM Mathematics Education*, 49, 571–584. doi: 10.1007/s11858-017-0859-3
- Renkl, A., & Scheiter, K. (2017). Studying visual displays: How to instructionally support learning. *Educational Psychology Review*, 29, 599-621. doi: 10.1007/s10648-015-9340-4
- Scheiter, K., Fillisch, B., Krebs, M.-C., Leber, J., Ploetzner, R., Renkl, A., Schmidt, H., Schüller, A., & Zimmermann, G. (2017). How to design adaptive information environments to support self-regulated learning with multimedia. In J. Buder & F. W. Hesse (Eds.), *Informational Environments - Effects of use, effective designs* (pp.203-224). New York, NY: Springer.
- Schleinschok, K., Eitel, A., & Scheiter, K. (2017). Do drawing tasks improve monitoring and control during learning from text? *Learning and Instruction*, 51, 10-25. doi: [10.1016/j.learninstruc.2017.02.002](https://doi.org/10.1016/j.learninstruc.2017.02.002)
- Wischgoll, A. (2017). Improving undergraduates' and postgraduates' academic writing skills with strategy training and feedback. *Frontiers in Education*, 2:33. doi: [10.3389/feduc.2017.00033](https://doi.org/10.3389/feduc.2017.00033)

2016

- Eitel, A. (2016). How repeated studying and testing affects multimedia learning: Evidence for adaptation to task demands. *Learning and Instruction*, 41, 70-84. doi: [10.1016/j.learninstruc.2015.10.003](https://doi.org/10.1016/j.learninstruc.2015.10.003)
- Eitel, A., & Kühl, T. (2016). Effects of disfluency and test expectancy on learning with text. *Metacognition and Learning*, 1, 107-121. doi: [10.1007/s11409-015-9145-3](https://doi.org/10.1007/s11409-015-9145-3)
- Hancock-Niemic, M. A., Lin, L., Atkinson, R. K., Renkl, A., & Wittwer, J. (2016). Example-based learning: Exploring the use of matrices and problem variability. *Educational Technology Research & Development* 64, 115–136. doi: 10.1007/s11423-015-9403-8
- Herppich, S., Wittwer, J., Nückles, M., & Renkl, A. (2016). Expertise amiss: Interactivity fosters learning but expert tutors are less interactive than novice tutors. *Instructional Science*, 44, 205-219. DOI 10.1007/s11251-015-9363-8
- Kühl, T., & Eitel, A. (2016). Editorial: Effects of disfluency on cognitive and metacognitive processes and outcomes. *Metacognition and Learning*, 1, 1-13. doi: [10.1007/s11409-016-9154-x](https://doi.org/10.1007/s11409-016-9154-x)
- Magner, U. I. E., Glogger, I., & Renkl, A. (2016). Which features make illustrations in multimedia learning interesting? *Educational Psychology*, 36, 1603-1620. doi: 10.1080/01443410.2014.933177
- Renkl, A. (2016). Vergleiche anregen. Eine produktive Komponente beim Üben. *PM – Praxis der Mathematik in der Schule*, 67, 17-20.
- Richter, J., Scheiter, K., & Eitel, A. (2016). Signaling text-picture relations in multimedia learning: A comprehensive meta-analysis. *Educational Research Review*, 17, 19-36. doi: [10.1016/j.edurev.2015.12.003](https://doi.org/10.1016/j.edurev.2015.12.003).
- Renkl, A. (2016). Bildungsforschung: Die Perspektive der Forschung zu Lernen und Instruktion. In R. Tippelt & B. Schmidt-Hertha (Eds.), *Handbuch Bildungsforschung* (pp 1-21; living reference work entry). Cham, CH: Springer.
- Renkl, A. (Ed.). (2016). Multiple Ziele in Unterricht und Lernumgebungen (Special Section). *Unterrichtswissenschaft*, 44, 206-266.
- Renkl, A. (2016). Multiple Ziele in Unterricht und Lernumgebungen: Einführung in den Thementeil. *Unterrichtswissenschaft*, 44, 206-210.
- Renkl, A. (2016). Multiple Ziele: Warum Lernende oft (zu) viel beachten müssen und wie Lehrende damit umgehen könnten. *Unterrichtswissenschaft*, 44, 239-251.

- Renkl, A. (2016). Vergleiche anregen. Eine produktive Komponente beim Üben. *PM – Praxis der Mathematik in der Schule*, 67, 17-20.
- Scheiter, K., Eitel, A., & Schüler, A. (2016). Lernen mit Texten und Bildern: Die frühzeitige wechselseitige Beeinflussung kognitiver Prozesse bei der Konstruktion eines integrierten mentalen Modells. *Psychologische Rundschau*, 67, 87-103. dx.doi.org/10.1026/0033-3042/a000300
- Richter, J., Scheiter, K., & Eitel, A. (2016). Signaling text-picture relations in multimedia learning: A comprehensive meta-analysis. *Educational Research Review*, 17, 19-36. doi:[10.1016/j.edurev.2015.12.003](https://doi.org/10.1016/j.edurev.2015.12.003).
- Skuballa, I. T., Leber, J., Schmidt, H., Zimmermann, G., & Renkl, A. (2016). Using online eye-movement analyses in an adaptive learning environment. In L. Lin & R. K. Atkinson (Eds.), *Educational technologies: Challenges, applications, and learning outcomes* (pp. 115-142). Hauppauge, NY: Nova Science. doi:[10.1007/978-3-531-20002-6_40-1](https://doi.org/10.1007/978-3-531-20002-6_40-1)
- Wischgoll, A. (2016). Combined Training of One Cognitive and One Metacognitive Strategy Improves Academic Writing Skills. *Frontiers in Psychology*, 7:187. doi: [10.3389/fpsyg.2016.00187](https://doi.org/10.3389/fpsyg.2016.00187)

2015

- Bauer, J., Prenzel, M., & Renkl, A. (2015). Evidenzbasierten Praxis – Im Lehrerberuf?! Einführung in den Thementeil. *Unterrichtswissenschaft*, 43, 188-192.
- Bauer, J., Prenzel, M., & Renkl, A. (Eds.). (2015). Evidenzbasierte Praxis – im Lehrerberuf?! (Special Section). *Unterrichtswissenschaft*, 43, 188-262.
- Eitel, A., & Scheiter, K. (2015). Picture or text first? Explaining sequence effects when learning with pictures and text. *Educational Psychology Review*, 27, 153-180. doi:[10.1007/s10648-014-9264-4](https://doi.org/10.1007/s10648-014-9264-4)
- Endres, T., & Renkl, A. (2015). Mechanisms behind the testing effect - an empirical investigation of retrieval practice in meaningful learning. *Frontiers in Psychology*. 6:1054. doi: [10.3389/fpsyg.2015.01054](https://doi.org/10.3389/fpsyg.2015.01054)
- Gloger-Frey, I., Fleischer, C., Grüny, L., Kappich, J. & Renkl, A. (2015). Inventing a solution and studying a worked solution prepare differently for learning from direct instruction. *Learning & Instruction*, 39, 72-87. doi:[10.1016/j.learninstruc.2015.05.001](https://doi.org/10.1016/j.learninstruc.2015.05.001)
- Gloger-Frey, I., Kappich, J., Schwonke, R., Holzapfel, L., Nückles, M., & Renkl, A. (2015). Inventing motivates and prepares student teachers for computer-based learning. *Journal of Computer-Assisted Learning*, 31, 546–561. doi: [10.1111/jcal.12097](https://doi.org/10.1111/jcal.12097)
- Harr, N., Eichler, A., & Renkl, A. (2015). Integrated learning: Ways of fostering the applicability of teachers' pedagogical and psychological knowledge. *Frontiers in Psychology*. 6:738. doi: [10.3389/fpsyg.2015.00738](https://doi.org/10.3389/fpsyg.2015.00738)
- Heftner, M. H., Renkl, A., Riess, W., Schmid, S., Fries, S., & Berthold, K. (2015). Effects of a training intervention to foster precursors of evaluativist epistemological understanding and intellectual values. *Learning & Instruction*, 39, 11-22. doi: [10.1016/j.learninstruc.2015.05.002](https://doi.org/10.1016/j.learninstruc.2015.05.002)
- Ohst, A., Gloger, I., Nückles, M., & Renkl, A. (2015). Helping preservice teachers with inaccurate and fragmentary prior knowledge to acquire conceptual understanding of psychological principles. *Psychology Learning & Teaching*, 14, 5-25. doi: [10.1177/1475725714564925](https://doi.org/10.1177/1475725714564925)
- Renkl, A. (2015). Der Kluge lernt aus den Fehlern der anderen: Wie angehende Lehrkräfte produktiv aus Fehlern von Dritten lernen können. *Seminar*, 4/2015, 46-55.
- Renkl, A. (2015). Different roads lead to Rome: The case of principle-based cognitive skills. *Learning: Research & Practice*, 1, 79-90. doi:[10.1080/23735082.2015.994255](https://doi.org/10.1080/23735082.2015.994255)

- Renkl, A. (2015). Drei Dogmen guten Lehrens: Warum sie falsch sind. *Psychologische Rundschau*, 66, 211-220. DOI: 10.1026/0033-3042/a000274
- Renkl, A. (2015). *Lernen in Gruppen: Ein Minihandbuch* (2. erweiterte und leicht modifizierte Auflage). Landau: Verlag Empirische Pädagogik.
- Renkl, A. (2015). Wissenserwerb. In E. Wild & J. Möller (Eds.), *Pädagogische Psychologie* (2. überarbeitete Auflage) (pp. 3-24). Berlin: Springer.
- Renkl, A. (2015). Zu eng und nix Neues? Oder einfach nur fokussiert und lediglich auf einen ersten Blick trivial? Eine Antwort auf Bromme, Gräsel, Stern und Terhart. *Psychologische Rundschau*, 66, 231-233. DOI: 10.1026/0033-3042/a000280
- Renkl, A., Skuballa, I. T., Schwonke, R., Harr, N., & Leber, J. (2015). The effects of rapid assessments and adaptive restudy prompts in multimedia learning. *Educational Technology & Society*, 18, 185–198.
- Scheiter, K., & Eitel, A. (2015). Signals foster multimedia learning by supporting integration of highlighted text and diagram elements. *Learning and Instruction*, 36, 11-26. doi:[10.1016/j.learninstruc.2014.11.002](https://doi.org/10.1016/j.learninstruc.2014.11.002)
- Schweppé, J., Eitel, A., & Rummer, R. (2015). The multimedia effect and its stability over time. *Learning and Instruction*, 38, 24-33. doi:[10.1016/j.learninstruc.2015.03.001](https://doi.org/10.1016/j.learninstruc.2015.03.001)
- Schwonke, R. (2015). Metacognitive load – useful or extraneous concept? Metacognitive and self-regulatory demands in computer-based learning. *Journal of Educational Technology & Society*, 18, 172-184.
- Skuballa, I. T., Fortunski, C., & Renkl, A. (2015). An eye movement pre-training fosters the comprehension of processes and functions in technical systems. *Frontiers in Psychology*. 6:598. doi: 10.3389/fpsyg.2015.00598

2014

- Blomberg, G., Sherin, M. G., Renkl, A., Glogger, I., & Seidel, T. (2014). Understanding video as a tool for teacher education: Investigating instructional strategies to promote reflection. *Instructional Science*, 42, 443-463. doi 10.1007/s11251-013-9281-6
- Harr, N., Eichler, A., & Renkl, A. (2014). Integrating pedagogical content knowledge and pedagogical/psychological knowledge in mathematics. *Frontiers in Psychology*. 5:924. doi 10.3389/fpsyg.2014.00924
- Heftner, M. H., Berthold, K., Renkl, A., Riess, W., Schmid, S., & Fries, S. (2014). Effects of a training intervention to foster argumentation skills while processing conflicting scientific positions. *Instructional Science*, 42, 929-947. doi:10.1007/s11251-014-9320-y
- Herppich, S., Wittwer, J., Nückles, M., & Renkl, A. (2014). Addressing knowledge deficits in tutoring and the role of teaching experience: Benefits for learning and summative assessment. *Journal of Educational Psychology*, 106, 934-945. doi 10.1037/a0036076
- Leber, J., & Skuballa, I. T. (2014). Lernräume adaptiv gestalten. Ein blickbewegungsbasierter Ansatz. In K. Rummler (Ed.), *Lernräume gestalten - Bildungskontexte vielfältig denken* (pp. S. 579-591). Münster, D: Waxmann.
- Magner, U. I. E., Schwonke, R., Aleven, V., Popescu, O., & Renkl, A. (2014). Triggering situational interest by decorative illustrations both fosters and hinders learning in computer-based learning environments. *Learning & Instruction*, 29, 141-152. doi:<http://dx.doi.org/10.1016/j.learninstruc.2012.07.002>
- Ohst, A., Fondu, B. M., Glogger, I., Nückles, M., & Renkl, A. (2014). Preparing learners with partly incorrect intuitive prior knowledge for learning. *Frontiers in Psychology*. 5:664. doi 10.3389/fpsyg.2014.00664
- Otieno, C., Spada, H., Liebler, K., Ludemann, T., Deil, U., & Renkl, A. (2014). Informing about climate change and invasive species: How the presentation of information

- affects perception of risk, emotions, and learning. *Environmental Education Research*, 20, 612-638. doi 10.1080/13504622.2013.833589
- Renkl, A. (2014). Learning from worked examples: How to prepare students for meaningful problem solving. In V. A. Benassi, C. E. Overson, & C. M. Hakala (Eds.), *Applying the Science of Learning in Education: Infusing psychological science into the curriculum*. Retrieved from the Society for the Teaching of Psychology web site: <http://teachpsych.org/ebooks/asle2014/index.php>
- Renkl, A. (2014). Lernaufgaben zum Erwerb prinzipienbasierter Fertigkeiten: Lernende nicht nur aktivieren, sondern aufs Wesentliche fokussieren. In B. Ralle, S. Prediger, M. Hammann, & M. Rothgangel (Eds.). *Lernaufgaben entwickeln, bearbeiten und überprüfen. Ergebnisse und Perspektiven fachdidaktischer Forschung* (pp. 12-22). Münster. D: Waxmann.
- Renkl, A. (Ed.). (2014). Lernen aus multiplen Internetdokumenten. *Unterrichtswissenschaft*, 42, 3-86.
- Renkl, A. (2014). Theoretische Konzepte und Prinzipien auf den Schulalltag beziehen: Ein wenig Theorie and darauf begründete Vorschläge für die Referendariatsausbildung. *Seminar, 2/2014*, 9-16.
- Renkl, A. (2014). The worked-out-examples principle in multimedia learning. In R. Mayer (Ed.), *Cambridge Handbook of Multimedia Learning* (2nd revised ed., pp. 391-412). Cambridge, UK: Cambridge University Press.
- Renkl, A. (2014). Towards an instructionally-oriented theory of example-based learning. *Cognitive Science*, 38, 1-37. doi: 10.1111/cogs.12086
- Renkl, A. (2014). Wissenserwerb aus multiplen Internetdokumenten: Einführung in den Thementeil. *Unterrichtswissenschaft*, 42, 3-6.
- Roelle, J., Berthold, K., & Renkl, A. (2014). Two instructional aids to optimise processing and learning from instructional explanations. *Instructional Science*, 42, 207–228. doi 10.1007/s11251-013-9277-2
- Skuballa, I. T., & Renkl, A. (2014). A non-verbal pre-training based on eye movements to foster comprehension of static and dynamic learning environments. In P. Bello, M. Guarini, M. McShane, & B. Scassellati (Eds.) *Proceedings of the 36th Annual Conference of the Cognitive Science Society* (pp. 1443-1448). Austin, TX: Cognitive Science Society.

2013

- Blomberg, G., A. Renkl, A., Sherin, M. G. Borko, H., & Seidel, T., (2013). Five research-based heuristics for using video in pre-service teacher education. *Journal for Educational Research Online*, 5, 90-114.
- Gloger, I., Holzapfel, L., Kappich, J., Schwonke, R., Nückles, M., & Renkl, A. (2013). Development and evaluation of a computer-based learning environment for teachers: "Assessment of learning strategies in learning journals." *Education Research International*. 2013.
- Gloger, I., Kappich, J., Schwonke, R., Holzapfel, L., Nückles, M., & Renkl, A. (2013). Inventing prepares learning motivationally, but a worked-out solution enhances learning outcomes. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (2416-2421) Austin, TX: Cognitive Science Society.
- Herppich, S., Wittwer, J., Nückles, M., & Renkl, A. (2013). Benefits for processes cause decrements in outcomes: Training improves tutors' interactivity at the expense of assessment accuracy. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (pp.2530-2535). Austin, TX: Cognitive Science Society.

- Herppich, S., Wittwer, J., Nückles, M., & Renkl, A. (2013). Does it make a difference? Investigating the assessment accuracy of teacher tutors and student tutors. *Journal of Experimental Education*, 81, 242–260.
- Otieno C., Spada H., & Renkl A. (2013) Effects of news frames on perceived risk, emotions, and learning. *PLoS ONE* 8(11): e79696. doi:10.1371/journal.pone.0079696
- Otieno, C., Schwonke, R., Salden, R., & Renkl, A. (2013). Can help seeking behavior in intelligent tutoring systems be used as online measure for goal orientation? In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (pp.1103-1108) Austin, TX: Cognitive Science Society.
- Renkl, A. (2013). Instruktive Lehr-Lern-Methoden. *Schulmagazin 5-10, 10/2013*, 7-11.
- Renkl (2013). Why practice recommendations are important in use-inspired basic research and why too much caution is dysfunctional. *Educational Psychology Review*, 25, 317-324. doi: 10.1007/s10648-013-9236-0
- Renkl, A., Berthold, K., Große, C. S., & Schwonke, R. (2013). Making better use of multiple representations: How fostering metacognition can help. In R. Azevedo & V. Aleven (Eds.), *International handbook of metacognition and learning technologies* (pp. 397-408). New York, NY: Springer.
- Renkl, A., & Schwonke, R. (2013). Static visual displays for deeper understanding: How to support learners to make use of them. In G. Schraw, M. McCrudden & D. Robinson (Eds.), *Learning through visual displays* (pp. 165-185). Charlotte, NC: Information Age Publishing.
- Renkl, A., Solymosi, J., Erdmann, M., & Aleven, V. (2013). Training principle-based self-explanations: Transfer to new learning contents. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (pp.1205-1210). Austin, TX: Cognitive Science Society.
- Schwonke, R., Ertelt, A., Otieno, C., Renkl, A., Aleven, V., & Salden, R (2013). Metacognitive support promotes an effective use of instructional resources in intelligent tutoring. *Learning & Instruction*, 23, 136-150.
- Seidel, T., Blomberg, G., & Renkl, A. (2013). Instructional strategies for using video in teacher education. *Teaching and Teacher Education*, 34, 56-65.

2012

- Glogger, I., Schwonke, R., Holzapfel, L., Nückles, M., & Renkl, A. (2012). Learning strategies assessed by journal writing: Prediction of learning outcomes by quantity, quality, and combinations of learning strategies. *Journal of Educational Psychology*, 104, 452-468. doi: 10.1037/a002668
- Holzapfel, L. Bernack, C., Leuders, T., & Renkl, A. (2012). Schreiben, forschen und reflektieren in der Mathematiklehrerausbildung: Veränderung mathematikbezogener Überzeugungen. In M. Kobarg, C. Fischer, I. M. Dalehefte, F. Trepke & M. Menk (Eds.), *Lehrerprofessionalisierung wissenschaftlich begleiten. Strategien und Methoden* (pp.15-34). Münster: Waxmann.
- Nückles, M., Hübner, S., & Renkl, A. (2012). Fostering self-regulated learning by journal writing: How should instructional support be designed to promote high-quality learning? In J. R. Kirby & M. J. Lawson (Eds.), *Enhancing the quality of learning. Dispositions, instruction, and learning processes* (pp. 178-200). New York, NY: Cambridge University Press.
- Renkl, A. (2012). Example-based learning. In N. M. Seel (Ed.), *Encyclopedia of the sciences of learning* (pp. 1197-1199). Heidelberg, Germany: Springer.
- Renkl, A. (2012). Guidance-fading effect. In N. M. Seel (Ed.), *Encyclopedia of the sciences of learning* (pp. 1400-1402). Heidelberg, Germany: Springer.

- Renkl, A. (2012). Modellierung von Kompetenzen oder von interindividuellen Kompetenzunterschieden: Ein unterschätzter Unterschied? *Psychologische Rundschau*, 63, 50–53. doi: 10.1026/0033-3042/a000110
- Skuballa, I. T., Schwonke, R., & Renkl, A. (2012). Learning from narrated animations with different support procedures: Working memory capacity matters. *Applied Cognitive Psychology*, 26, 840-847. doi: 10.1002/acp.2884
- Skuballa, I. T., Schwonke, R., & Renkl, A. (2012). When students don't benefit from attention guidance in animations: The role of working memory in learning from animations. In N. Miyake, D. Peebles, & R. P. Cooper (Eds.), *Proceedings of the 34th Annual Conference of the Cognitive Science Society* (pp. 2345-2350). Austin, TX: Cognitive Science Society.

2011

- Bernack, C., Holzäpfel, L., Leuders, T., & Renkl, A. (2011). Development of qualitative and quantitative instruments to measure beliefs of pre-service teachers of mathematics. In B. Ubuz (Ed.), *Proceedings of the 35th Conference of the International Group for the Psychology of Mathematics Education. Developing mathematical thinking* (Vol. 2, pp 145-152.) Ankara, Turkey: Middle East Technical University.
- Bernack, C., Holzäpfel, L., Leuders, T., & Renkl, A. (2011). Initiating change on pre-service teachers' beliefs in a reflexive problem solving course. In K. Kislenko (Ed.), *Current state of research on mathematical beliefs XVI* (pp. 27-42). Tallinn: Tallinn University of Applied Sciences.
- Bernack, C., Holzäpfel, L., Leuders, T. & Renkl, A. (2011). Veränderungen von Beliefs in der Lehrerausbildung? Forschungsstand und Zwischenergebnisse des BMBF-Projektes "Forschende MathematiklehrerInnen" (FORMAT). In R. Haug & L. Holzäpfel (Eds.), *Beiträge zum Mathematikunterricht 2011* (pp. 99-102). Münster: WTM Verlag.
- Berthold, K., Röder, H. Knörzer, D., Kessler, W., & Renkl, A. (2011). The double-edged effects of explanation prompts. *Computer in Human Behavior*, 27, 69-75. doi:10.1016/j.chb.2010.05.025
- Herppich, S., Wittwer, J., Nückles, M., & Renkl, A.(2011). Does teaching experience help? Differences in the assessment of tutees' understanding between teacher tutors and student tutors. In L. Carlson, C. Hölscher, & T. F. Shipley (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society* (pp. 78-83). Austin, TX: Cognitive Science Society.
- Otieno, C., Schwonke, R., Renkl, A., Aleven, V., & Salden, R. (2011). Measuring learning progress via self-explanations versus problem solving - A suggestion for optimizing adaptation in intelligent tutoring systems. In L. Carlson, C. Hölscher, & T. F. Shipley (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society* (pp. 84-89). Austin, TX: Cognitive Science Society.
- Renkl, A. (Ed.). (2011). Aktives Lernen [Themenheft]. *Unterrichtswissenschaft*, 39, 194-244.
- Renkl, A. (2011). Aktives Lernen = gutes Lernen? Reflektion zu einer (zu) einfachen Gleichung. *Unterrichtswissenschaft*, 39, 194-196.
- Renkl, A., (2011). Aktives Lernen in Mathematik: Von sinnvollen und weniger sinnvollen Konzeptionen aktiven Lernens. In R. Haug & L. Holzäpfel (Eds.), *Beiträge zum Mathematikunterricht 2011* (23-39). Münster: WTM Verlag.
- Renkl, A. (2011). Aktives Lernen: Von sinnvollen und weniger sinnvollen theoretischen Perspektiven zu einem schillernden Konstrukt. *Unterrichtswissenschaft*, 39, 197-212.
- Renkl, A. (2011). Instruction based on examples. In R. E. Mayer & P. A. Alexander (Eds.), *Handbook of research on learning and instruction* (pp. 272-295). New York, NY: Routledge.

Schwonke R., Renkl A., Salden, R., & Aleven, V. (2011). Effects of different ratios of worked solution steps and problem solving opportunities on cognitive load and learning outcomes. *Computers in Human Behavior*, 27, 58-62.
doi:10.1016/j.chb.2010.03.037

2010

- Bernack, C., Holzapfel, L., Leuders, T. & Renkl, A. (2010). Forschungshefte als Instrument der Professionalisierung von Mathematiklehrerinnen und Mathematiklehrern (ForMat). In A. Lindmeier & S. Ufer (Hrsg.), *Beiträge zum Mathematikunterricht 2010* (S. 153-156). Münster: WTM Verlag.
- Berthold, K., Große, C., & Renkl, A. (2010). Steunvragen voor zelfverklaringen bevorderen de integratie van multipele representaties. *Pedagogische Studien*, 87, 38-50.
- Berthold, K., & Renkl, A. (2010). How to foster active processing of explanations in instructional communication. *Educational Psychology Review*, 22, 25-40.
- Gurlitt, J., & Renkl, A. (2010). Prior knowledge activation: Different concept mapping tasks lead to substantial differences in cognitive processes, learning outcomes, and perceived self-efficacy. *Instructional Science*, 38, 417-433.
- Herppich, S., Wittwer, J., Nückles, M., & Renkl, A. (2010). Do tutors' content knowledge and beliefs about learning influence their assessment of tutees' understanding? In S. Ohlsson & R. Catrambone (Eds.), *Proceedings of the 32th Annual Conference of the Cognitive Science Society* (pp. 314-319). Austin, TX: Cognitive Science Society.
- Holzapfel, L., Glogger, I., Schwonke, R., Nückles, M., & Renkl, A. (2010). Lernen durch Schreiben?! Die Bedeutung des Einsatzes von Lernstrategien in Lerntagebüchern. *Die neue Schulpraxis*, 2010-5, 9-13.
- Holzapfel, L., & Renkl, A. (2010). In der Gruppe arbeiten (lassen). Phänomene bei der Gruppenarbeit und Gestaltungsideen. *PM – Praxis der Mathematik in der Schule*, 52 (35), 9-13.
- Holzapfel, L., Schwonke, R., Glogger, I., Nückles, M., & Renkl, A. (2010). Das Richtige diagnostizieren und richtig fördern. Zum Beispiel: Das Lerntagebuch. *Schulmagazin 5-10, 2010-1*, 55-58.
- Hübner, S., & Nückles, M., & Renkl, A. (2010). Writing learning journals: Instructional support to overcome learning-strategy deficits. *Learning & Instruction*, 20, 18-29.
- Kalyuga, S., & Renkl, A. (Eds.). (2010). Expertise reversal effect and its instructional implications [Special issue]. *Instructional Science*, 38, 209-323.
- Kalyuga, S., & Renkl, A. (2010). Expertise reversal effect and its instructional implications: Introduction to the special issue. *Instructional Science*, 38, 209-215.
- Kalyuga, S., Renkl, A., & Paas, F. (2010). Facilitating flexible problem solving: A cognitive load perspective. *Educational Psychology Review*. 22, 175–186.
- Magner, U., Schwonke, R., Renkl, A., Aleven, V., & Popescu, O. (2010). Pictorial illustrations in intelligent tutoring systems: Do they distract or elicit interest and engagement? In K. Gomez, L. Lyons, & J. Radinsky, J. (Eds.), *Learning in the Disciplines: Proceedings of the 9th International Conference of the Learning Sciences (ICLS 2010) - Volume 1, Full Papers*. International Society of the Learning Sciences: Chicago IL.
- Nückles, M., Hübner, S., Dümer, S., & Renkl, A. (2010). Expertise-reversal effects in writing-to-learn. *Instructional Science*, 38, 237-258.
- Nückles, M., Hübner, S., Glogger, I., Holzapfel, L., Schwonke, R., & Renkl, A. (2010). Selbstreguliert lernen durch Schreiben von Lerntagebüchern. In M. Gläser-Zikuda (Ed.), *Lerntagebuch und Portfolio auf dem Prüfstand* (S. 35-58). Landau: Verlag Empirische Pädagogik.

- Nückles, M., & Renkl, A. (2010). Das Lerntagebuch in der Hochschullehre: Ein hochschuldidaktischer Ansatz zur Förderung selbstgesteuerten Lernens. In C. Spiel, R., Reimann, B. Schober & P. Wagner (Eds.), *Bildungspsychologie* (pp. 319-323). Göttingen: Hogrefe.
- Renkl, A. (2010). Gründe und Wege einer Synthese aus Strukturierung und Aktivierung: Das Konzept „Lernen aus Lösungsbeispielen“. In T. Bohl, K. Kansteiner-Schänzlin, M. Kleinknecht, B. Kohler, & A. Nold (Eds.), *Selbstbestimmung und Classroom Management. Empirische Befunde und Entwicklungsstrategien guten Unterrichts* (pp. 191-205). Bad Heilbrunn: Klinkhardt.
- Renkl, A., & Atkinson, R. K. (2010). Learning from worked-out examples and problem solving. In J. Plass, R. Moreno, & R. Brünken (Eds.), *Cognitive load theory and research in educational psychology* (pp. 91-108). New York, NY: Cambridge University Press.
- Saldan, R., Aleven, V., Schwonke, R., & Renkl, A. (2010). The expertise-reversal effect and worked examples in tutored problem solving. *Instructional Science*, 38, 289-307.
- Saldan, R., Koedinger, K. R., Renkl, A., Aleven, V., & McLaren, B. M. (2010). Accounting for beneficial effects of worked examples in tutored problem solving. *Educational Psychology Review*, 22, 379-392.
- Wittwer, J., Nückles, M., Landmann, N., & Renkl, A. (2010). Can tutors be supported in giving effective explanations? *Journal of Educational Psychology*, 102, 74-89.
- Wittwer, J., Nückles, M., & Renkl, A. (2010). Using a diagnosis-based approach to individualize instructional explanations in computer-mediated communication. *Educational Psychology Review*, 22, 9-23.
- Wittwer, J., & Renkl, A. (2010). How effective are instructional explanations in example-based learning? A meta-analytic review. *Educational Psychology Review*, 22, 393-409.

2009

- Berthold, K., Eysink, T. H., & Renkl, A. (2009). Assisting self-explanation prompts are more effective than open prompts when learning with multiple representations. *Instructional Science*, 37, 345-363.
- Berthold, K., & Renkl, A. (2009). Instructional aids to support a conceptual understanding of multiple representations. *Journal of Educational Psychology*, 101, 70-87.
- Glogger, I., Schwonke, R., Holzapfel, L., Nückles, M., & Renkl, A. (2009). Activation of learning strategies in writing learning journals: The specificity of prompts matters. *Zeitschrift für Pädagogische Psychologie/German Journal of Educational Psychology*, 23, 95-104.
- Hilbert, T. S., & Renkl, A. (2009). Learning how to use a computer-based concept-mapping tool: Self-explaining examples helps. *Computers in Human Behavior*, 25, 267-274.
- Holzapfel, L., Glogger, I., Schwonke, R., Nückles, M., & Renkl, A. (2009). Lernstrategien beim Schreiben: Neue Anregungen für den Umgang mit dem Lerntagebuch. *mathematik lehren*, 156, 16-21.
- Holzapfel, L., Glogger, I., Schwonke, R., Nückles, M., & Renkl, A. (2009). Lerntagebücher im Mathematikunterricht: Diagnose und Förderung von Lernstrategien. In M. Neubrand (Ed.), *Beiträge zum Mathematikunterricht 2009* (pp. 659-662). Münster: WTM Verlag.
- Nückles, M., Hübner, S., & Renkl, A. (2009). Enhancing self-regulated learning by writing learning protocols. *Learning & Instruction*, 19, 259-271.
- Nückles, M., & Renkl, A. (2009). Lerntagebücher in der Aus- und Weiterbildung. Selbstgesteuertes Lernen durch Schreiben. *Weiterbildung. Zeitschrift für Grundlagen, Praxis und Trends*, 2009 (5), 22-25.

- Renkl, A. (2009). Lehren und Lernen. In R. Tippelt & B. Schmidt (Eds.), *Handbuch Bildungsforschung* (S. 737-751). Wiesbaden: VS Verlag für Sozialwissenschaften. (revidiert von 2002).
- Renkl, A. (2009). Why constructivists should not talk about constructivist learning environments – A commentary on Loyens and Gijbels (2008). *Instructional Science*, 37, 495-498.
- Renkl, A. (2009). Wissenserwerb. In E. Wild & J. Möller (Eds.), *Pädagogische Psychologie* (pp. 3-26). Berlin: Springer.
- Renkl, A., Hilbert, T., & Schworm, S. (2009). Example-based learning in heuristic domains: A cognitive load theory account. *Educational Psychology Review*, 21, 67-78.
- Salden, R., Aleven, V., Renkl, A., & Schwonke, R. (2009). Worked examples and tutored problem solving: Redundant or synergistic forms of support? *Topics in Cognitive Science*, 1, 203-213 (published as Best of Cognitive Science Conference 2008).
- Schwonke, R., Berthold, K., & Renkl, A. (2009). How multiple external representations are used and how they can be made more useful. *Applied Cognitive Psychology*, 23, 1227-1243.
- Schwonke, R., Renkl, A., Krieg, K., Wittwer, J., Aleven, V., & Salden, R. (2009). The worked-example effect: Not an artefact of lousy control conditions. *Computers in Human Behavior*, 25, 258-266.

2008

- Berthold, K., & Renkl, A. (2008). Wie kann eine aktive Verarbeitung von instruktionalen Erklärungen zu multiplen Repräsentationen gefördert werden? In E.-M. Lankes (Ed.), *Pädagogische Professionalität als Gegenstand empirischer Forschung* (pp. 177-188). Münster: Waxmann.
- Busch, C., Renkl, A., & Schworm, S. (2008). Towards a generic self-explanation training intervention for example-based learning. In P. A. Kirschner, F. Prins, V. Jonker, & G. Kanselaar (Eds.), *Proceedings of the 8th International Conference of the Learning Sciences 2008 (CD version only)*. Utrecht, NL: ICLS.
- Gurlitt, J., & Renkl, A. (2008). Are high-coherent concept maps better for prior knowledge activation? Differential effects of concept mapping tasks for high school versus university students. *Journal of Computer-Assisted Learning*, 24, 407-419.
- Hilbert, T. S., Nückles, M., Renkl, A., Minarik, C., Reich, A., & Ruhe, K. (2008). Concept Mapping zum Lernen aus Texten: Können Prompts den Wissens- und Strategieerwerb fördern? *Zeitschrift für Pädagogische Psychologie*, 22, 119-125.
- Hilbert, T. S., & Renkl, A. (2008). Beispielbasiertes Lehren beispielbasiert lernen. *Journal für lehrerinnen- und lehrerbildung*, 8(4), 15-21.
- Hilbert, T. S., & Renkl, A. (2008). Concept mapping as a follow-up strategy to learning from texts: What characterizes good and poor mappers? *Instructional Science*, 36, 53-73.
- Hilbert, T. S., Renkl, A., & Holzäpfel, L. (2008). Ach so rechnet man das! Üben mit Lösungsbeispielen. *mathematik lehren*, 147, 47-49.
- Hilbert, T. S., Renkl, A., Kessler, S., & Reiss, K. (2008). Learning to prove in geometry: Learning from heuristic examples and how it can be supported. *Learning & Instruction*, 18, 54-65.
- Hilbert, T. S., Renkl, A., Schworm, S., Kessler, S., & Reiss, K. (2008). Learning to teach with worked-out examples: A computer-based learning environment for teachers. *Journal of Computer-Assisted Learning*, 24, 316-332.
- Nückles, M., Hübner, S., & Renkl, A. (2008). Short-term versus long-term effects of cognitive and metacognitive prompts in writing-to-learn. In P. A. Kirschner, F. J. Prins, V. Jonker, & G. Kanselaar (Eds.), *Proceedings of the 8th International Conference of the Learning Sciences 2008* (Vol. 2, pp. 124-132). Utrecht, NL: ICLS.

- Reiss, K., Heinze, A., Renkl, A., & Groß, C. (2008). Reasoning and proof in geometry: Effects of a learning environment based on heuristic worked-out examples. *ZDM – The International Journal on Mathematics Education*, 40, 455–467.
- Renkl, A. (2008). Kooperatives Lernen. In W. Schneider & M. Hasselhorn (Eds.), *Handbuch Psychologie, Bd. Pädagogische Psychologie* (S. 84-94). Göttingen. Hogrefe.
- Renkl, A. (Ed.). (2008). *Lehrbuch Pädagogische Psychologie*. Bern: Huber.
- Renkl, A. (2008). Lehren und Lernen im Kontext der Schule. In A. Renkl (Ed.), *Lehrbuch Pädagogische Psychologie* (pp. 109-153). Bern: Huber.
- Saldan, R., Aleven, V., Schwonke, R., & Renkl, A. (2008). Worked examples and tutored problem solving: Redundant or synergistic forms of support? In B. C. Love, K. McRae, & V. M. Sloutsky (Eds.), *Proceedings of the 30th Annual Conference of the Cognitive Science Society* (pp. 64-70). Austin, TX: Cognitive Science Society. (awarded with the "Cognition and Student Learning (CaSL) Prize").
- Schworm, S., Bradler, P., & Renkl, A. (2008). Help design in a computer-based learning environment - teaching argumentation skills through the use of double-content examples. In In P. A. Kirschner, F. J. Prins G., V. Jonker, & Kanselaar (Eds.), *Proceedings of the 8th International Conference of the Learning Sciences 2008*. (Vol. 2, pp 319-326). Utrecht, NL: ICLS.
- Wittwer, J., Nückles, M., & Renkl, A. (2008). Is underestimation less detrimental than overestimation? The impact of experts' beliefs about a layperson's knowledge on learning and question asking. *Instructional Science*, 36, 27-52.
- Wittwer, J., & Renkl, A. (2008). Why instructional explanations often do not work: A framework for understanding the effectiveness of instructional explanations. *Educational Psychologist*, 43, 49-64.