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Using technology to pair cognitive demand of tasks to its appropriate community in a math classroom.

Hammond, Tracy (ed.) et al., The impact of pen and touch technology on education. Cham: Springer (ISBN 978-3-319-15593-7/hbk; 978-3-319-15594-4/ebook). Human-Computer Interaction Series, 209-213 (2015).

Summary: How is the mathematics teacher to best utilize the latest accessible advancements in technology to motivate and foster perseverance and tenacity in students? Pedagogically, which approaches will yield the most fruitful dynamic as regards the balance between class time (community) and homework (individual), given that many students benefit more from the struggle within a community of learners when first facing new, incrementally more difficult material, and when the normal amounts of conventional class time allotted are rarely adequate? To what degree can the integration of technology as such enhance learning? Would a given teacher's individually created multimedia (e.g., videos with pen and tablet technology, screen casting, and reflective questionnaires within Google forms) effectively create more time such that the students can address higher cognitive tasks more often while in the classroom community?

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