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Constraints, competency and creativity in the classroom.

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Summary: Constraints define domains, specifying goal criteria and accepted means of meeting them. Competency, the ability to problem solve in a domain, depends on mastering basic constraints. Creativity follows competency, as the product called creative must be both novel and appropriate to its domain. In this chapter, we discuss and demonstrate how different kinds of constraints affect early competency in mathematics and later creativity in composition. Applications of our constraint model to other domains are also suggested.

Classification: C40 D30

Keywords: creativity; constraints; competency

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