Representations of creative mathematical thinking in collaborative designs of c-book units

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Abstract: The study presented here focuses on the representations of creative mathematical thinking (CMT) held by two Communities of Interest (CoI) before and after designing educational resources with an innovative tool affording diverse expressive media for creativity in classrooms. Our analysis revealed similarities but also distinct differences in the way these communities operationalized their CMT representations in their products. Both CoI (Greek and Spanish) appreciated the novel affordance of diverse expressive media to foster CMT in students through open, real life, interdisciplinary problems amenable to multiple solutions. However, the CMT affordances appreciated by the CoI members were distinctly different with respect to contextual factors involving personal and schooling issues as well as influences by the research culture of the two corresponding teams.

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