Summary: This study investigates the impact of integrating conceptual clarifications as support in an educational math game, and explores the impact of adding this (internal vs. external) support on students’ game and mathematical performance, intrinsic motivation, and game perception. Three conditions are established: a condition in which internal support is offered, a condition in which (identical) external support is offered, and a control condition in which no support is added to the game. One hundred twenty-two vocational secondary education students participated in this study. The results of this study indicate that students benefit from playing with an educational game in order to enhance their proportional reasoning skills. Adding conceptual clarifications as instructional support in an intrinsically integrated game is not recommended. If the support is given to the students anyhow, it is advised to offer it externally because internally integrating this support leads to a decrease in performance and motivation. Hence, not only support as such, but also the way it is integrated in the game-based learning process, might be decisive for its effectivity. Obviously, further research is warranted in order to replicate these findings also for other types of support, other game-based learning environments and other target groups.

Classification: U50 U70

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