

**Multimedia Appendix 4. Summary of Findings Table for the Effects of Digital Education (more interactive) compared to Digital Education (less interactive) on communication skills**

<b>Digital education (more interactive) vs digital education (less interactive)</b>				
<b>Patient or population:</b> second or third year undergraduate medical students				
<b>Settings:</b> Universities				
<b>Intervention:</b> digital education (more interactive forms: VP simulations and online multimedia modules )				
<b>Comparison:</b> digital education (less interactive forms: online classic modules, problem solving VP)				
<b>Outcomes</b>	<b>Illustrative comparative risks (95% CI)</b>	<b>Number of participants (number of studies)</b>	<b>Quality of the evidence (GRADE)</b>	<b>Comments</b>
<b>Skills</b> (measured with checklist, Likert scales, OSCE) (postintervention)	The mean skills score in blended digital education groups was 0.12 higher (-0.09 lower to 0.33 higher).	864 students (4 studies)	⊕⊕⊕⊖ moderate <sup>a</sup>	The standard deviations was derived from a SMD of 0.12 (95% CI: -0.09 to 0.33) which indicates no difference between the two groups.
<b>Attitude</b> (measured with survey) (postintervention)	Not estimable	421 students (1 study)	⊕⊕⊖⊖ low <sup>a,b</sup>	One study [38] assessed students' attitude towards the intervention and reported moderate improvement in postintervention attitude scores with VP simulation compared to online

				module (SMD=0.71, 95% CI: 0.51 to 0.91).
<b>Satisfaction</b> (measured with survey) (postintervention)	Not estimable	67 students (2 studies)	⊕⊖⊖⊖ very low <sup>a,b,c</sup>	One study [35] assessed students' satisfaction and reported that students' were more satisfied with online-based VP simulation compared to online-based video module (P= .007).
<b>Knowledge</b>	No studies reported knowledge outcome.			
<b>Patient-related outcome</b>	No studies reported patient-related outcome.			
<b>Adverse outcome</b>	No studies reported adverse events.			
<b>Economic evaluation</b>	No studies reported economic evaluation.			
<p>OSCE-objective structured clinical examination; VP- virtual patient.</p> <p>GRADE Working Group grades of evidence</p> <p><b>High quality:</b> further research is very unlikely to change our confidence in the estimate of effect.</p> <p><b>Moderate quality:</b> further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.</p> <p><b>Low quality:</b> further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.</p> <p><b>Very low quality:</b> we are very uncertain about the estimate.</p>				

**Table 4 Legend:**

<sup>a</sup> Downgraded by one level for study limitations: the risk of bias was unclear or high in most included studies.

<sup>b</sup> Rated down by one level for inconsistency: the heterogeneity is high with large variations in effect and lack of overlap among confidence intervals (CIs).

° Rated down by one level for imprecision: number of participants (effective sample size) in the study is less than the number of patients generated by a conventional sample size calculation for a single adequately powered trial (optimal information size)

