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Blended learning at pre-service teacher education in Turkey: A systematic review

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#### **Abstract**

The literature shows an increase in blended learning implementations (N = 74) at faculties of education in Turkey whereas pre-service and in-service teachers' ICT competencies have been identified as one of the areas where they are in need of professional development. This systematic review was conducted to find out the impact of blended learning on academic achievement and attitudes at teacher education programs in Turkey. 21 articles and 10 theses complying with all pre-determined criteria (i.e., studies having quantitative research design or at least a quantitative aspect conducted at pre-service teacher education programs) included within the scope of this review. With regard to academic achievement, it was synthesized that majority of the studies confirmed its positive impact on attaining course outcomes. Likewise, blended learning environment was revealed to contribute preservice teachers to develop positive attitudes towards the courses. It was also concluded that face-to-face aspect of the courses was favoured considerably as it enhanced social interaction between peers and teachers. Other benefits of blended learning were listed as providing various materials, receiving prompt feedback, and tracking progress. Slow internet access, connection failure and anxiety in some preservice teachers on using ICT were reported as obstacles.

Regarding the positive results of blended learning and the significance of ICT integration, pre-service teacher education curricula are suggested to be reconstructed by infusing ICT into entire program through blended learning rather than delivering isolated ICT courses which may thus serve for prospective teachers as catalysts to integrate the use of ICT in their own teaching.

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### **Ethics declarations**

Conflict of interest

The authors declare that they have no conflict of interest.

## **Appendix**

Table 2 Characteristics of the Studies Included in the Systematic Review

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### About this article

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