

ABSTRACT

Learning is basically a teacher's effort to help students carry out learning activities. In current learning activities, educators experience many obstacles in learning. One of the obstacles in learning is students' communication skills and learning activities. Thus, learning is a reciprocal relationship between teachers and students that has the value of teaching and education to acquire knowledge so as to achieve learning objectives. teaching materials for educators, namely changing the role of educators from a teacher to being a facilitator, improving the learning process to be more effective and interactive, as a guide for educators who will direct all their activities in the learning process and are a substance of competence that should be taught to students, and as a tool evaluation of achievement or mastery of learning outcomes. A lot of research on this theme has been done so this study aims to analyze research trends and potential developments on this topic. This research was conducted by bibliometric analysis. The researcher uses the keywords of printed teaching materials in the Scopus database with a span of three years, namely 2019 to 2021. The data is visualized using the help of several applications, namely Bibliometrix, Tableau and VOS Viewers. The results showed that the research trends in the topic of printed teaching materials were themes related to technology, techniques, and related to teachers and students. In addition, several terms were also obtained which were combined with Machine Learning, 3D printing and Biomaterials.

Keywords: Printed Teaching Materials, Learning, Biology and Bibliometrix