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DIGITAL APPLICATIONS IN THE EDUCATIONAL PROCESS

The task of the modern biology teacher is to create conditions for every student to acquire knowledge through practical application and to select teaching methods that allow them to demonstrate initiative and creativity; above all, the goal is to stimulate the student's cognitive activity during the study of biology. School biology teaching methodology is also evolving alongside the rapid digitalization of education.

Increasingly, biology teachers are turning to digital applications that help them assemble and design lessons using individual digital objects; search for information efficiently; prepare tests and independent assignments; develop creative tasks and projects; create lesson plans that incorporate digital objects; display digital objects using a multimedia projector; use interactive models and digital microscopes during laboratory work; conduct online instruction, testing, and knowledge assessment; facilitate individual student research and creative work during lessons.

Digital applications can be used today at every stage of a lesson, as well as during independent study of the material. For example: during the knowledge activation stage, the instructor can use charts and interactive visuals created with Google Sheets, Google Slides or Kahoot to conduct whole-class or individual questioning; during the stage of acquiring new knowledge, the instructor can utilize digital libraries and specialized applications such as 3D Motion Human Anatomy, Trees PRO HD, Leafsnap, Animated Animal Anatomy, Animal Biology, Creatures of Light and others; during the stage of checking understanding and consolidating new knowledge, electronic practice tools can add variety to the work and help conduct quick assessments on any topic; the assessment and evaluation stage involves the use of crosswords, quizzes and online tests. Digital applications also serve as a foundation for developing interactive exercises. With their help, teachers can create workshops, interactive webinars, case studies, polls and surveys, projects, training sessions, business simulations and more. In turn, interactive exercises in biology lessons can offer a new way to organize active and meaningful student work, making classes more visual and engaging. Lessons incorporating digital applications do not replace the teacher; instead, they make interactions with students more substantive, personalized and effective. The advent of digital applications has significantly transformed biology lessons. Their use in teaching biology is justified, as it fosters student engagement, enhances the quality of education, elevates the teacher's professional expertise, and diversifies the forms of interaction among all participants in the educational process. Furthermore, their use will only continue to expand and improve in the future.