TECHNICAL CREATIVITY AS A COMPONENT OF ENGINEERING SPECIALISTS` ACTIVITY

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From the point of view of science, labor psychology, the combination of scientific, technical and creative (humanitarian) fields make the educational process more effective and useful for students. The simultaneous work of both hemispheres of the brain ensures the development of both logical ("left" hemisphere) and intuitive, creative ("right" hemisphere) thinking. For this reason, dividing people into "techies" and "humanists" is incorrect. The content of education in any field should harmoniously combine technical and humanitarian disciplines that develop both hemispheres of the brain, which is a necessary condition for modern specialists training.

Artistic skills are critical to developing professional and problem-solving abilities. The arts foster the development of four key skills that drive innovation: observation skills, allowing you to pay attention to details; visual thinking, an ability to look at a situation in detail, to see a fuller picture; critical thinking, which allows you to find a way out of extraordinary situations; imagination as an ability to fantasize and create new possibilities necessary for engineering and scientific research. Creative disciplines not only enrich the content of education, but also significantly improve the quality of students' training.

Thus, we can also highlight the following skills of technical specialists acquired through STEAM education: social creativity, i.e. a person's ability to quickly find and effectively apply non-standard, original, creative solutions to situations of professional and interpersonal interaction; an ability to find a way out in a state of uncertainty and ambiguity; creative imagination and ability to explore the unlimited potential of possibilities (involvement in technical creativity can be an important step towards professionalism; curiosity, self-learning and self-discipline, motivation to develop new opportunities and professional achievements; an ability to find non-standard solutions to a variety of issues, thereby strengthening self-confidence; shifting the focus of perception from thinking to creativity, which collectively contributes not only to the increase of student's spirituality, but also to the development of creative abilities; cultural outlook, a culture of professional and business communication is being formed.

Based on this, we realize that professional training of technical specialists at the current stage requires the use of the latest scientific achievements, technological and methodological innovations.

References:

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