
Problems of mathematical statistics teaching: about one method to motivate students

© Kh.R. Fedorchuk

Bauman Moscow State Technical University, Moscow, 105005, Russia

In the article we share our experience of teaching mathematical statistics to students. The study describes in detail a method of improving student intrinsic motivation. This method uses vivid and memorable examples from the real life. We also propose a new approach to the order of giving teaching material during the lesson.

Keywords: *mathematical statistics, learning problems, intrinsic and extrinsic motivation, real life problems, vivid and memorable image.*

REFERENCES

- [1] Hogg R.V. *The American Statistician*, 1991, no. 45, pp. 342–343.
- [2] Cobb G.W. *Amstat News*, 1991, no. 12, pp. 1–4.
- [3] Smith G., Colleger P. *Journal of Statistics Education*, 1998, vol. 6, no. 3. Available at: <http://www.amstat.org/publications/jse/v6n3/smith.html>
- [4] Mellander K. *The Power of Learning: Fostering Employee Growth American Society for Training and Development*. Homewood, Business One Irwin, 1993, 197 p.
- [5] Hoerl R., Hahn G., Doganaksoy N. *International Statistical Review*, 1997, vol. 65, no. 2, pp. 147–153.
- [6] Gal I., Ginsburg L. *Journal of Statistics Education*, 1994, vol. 2, no. 2. Available at: <http://www.amstat.org/publications/jse/v2n2/gal.html>
- [7] Gordeyeva T.O., Shepeleva Ye.A. *Vestnik Moscovskogo universiteta. Seriya 14: Psikhologiya — The Moscow University Herald. Ser. 14: Psychology*. Moscow, 2011, no. 3, pp. 33–45.
- [8] Ivanov O.V. *Statistika: Uchebnyy kurs dlya sotsiologov i menedzherov. Chast 2. Doveritelnyye intervaly. Proverka gipotez. Metody i ikh primeniye* [Statistics: course for sociologists and managers. Confidence intervals. Hypothesis testing. Methods and their applications]. Moscow, MSU Publ., 2005, 220 p.
- [9] Ramsi D. *Statistika dlya "chainikov"* [Statistics for Dummies]. Moscow, Williams Publ., 2008, 320 p.
- [10] Reznik A.D. *Kniga dlya tekh, kto ne lyubit statistiku, no vynuuzhden yeyu polzovatsya. Neparаметricheskaya statistika v primerakh, uprazhneniyakh i risunkakh* [The book for people who don't like statistics but have to use it. Nonparametric statistics in examples, exercises and pictures]. St. Petersburg, Rech Publ., 2008, 265 p.

Fedorchuk Kh.R. (b. 1963) graduated from the Faculty of Mechanics and Mathematics of Lomonosov Moscow State University in 1987. Senior lecturer, Department of Computational Mathematics and Mathematical Physics, Bauman Moscow State Technical University. Research interests include reliability theory, pedagogics.

e-mail: sashajasha@yandex.ru
