

## Descriptive statistics for the scale items

### **Variable: Artificial Intelligence Literacy**

Source: Wang, B., Rau, P.-L. P., & Yuan, T. (2023). Measuring user competence in using artificial intelligence: validity and reliability of artificial intelligence literacy scale. *Behaviour & information technology*, 42(9), 1324-1337. <https://doi.org/10.1080/0144929X.2022.2072768>

Items:

1. I am able to explain what Machine Learning is to others.
2. I understand that the quality of training data directly affects the output of an AI system.
3. I know how to prepare and organize data for training AI models.
4. I know how to ask questions or give instructions to AI (i.e., design prompts) to obtain more accurate and useful results.
5. I am able to effectively evaluate AI-generated answers or content and judge whether they are reliable.
6. I am skilled at integrating AI tools into my workflow to improve efficiency.
7. I can identify which real-world problems are suitable for being solved with AI.
8. I understand the current capabilities and limitations of AI technology (e.g., it may produce bias or misinformation).
9. I am able to critically think about the social impacts of AI solutions (e.g., effects on employment and privacy).
10. I understand that AI systems may have algorithmic bias, which can lead to unfair outcomes for specific groups.
11. I pay attention to protecting personal privacy and data security when using AI tools.
12. I am able to reflect on the ethical and copyright issues involved in using AI-generated content (e.g., text, images).

### **Variable: Online Prosocial Behavior**

Source: Bosancianu, C. M., Powell, S., & Bratović, E. (2013). Social Capital and Pro-Social Behavior Online and Offline. *International journal of internet science*, 8(1), 16-24. [https://doi.org/ijis.net/ijis8\\_1/ijis8\\_1\\_bosancianu\\_et\\_al.pdf](https://doi.org/ijis.net/ijis8_1/ijis8_1_bosancianu_et_al.pdf)

Items:

1. How often do you reply to an email from someone you know who seeks help or information.
2. How often do you forward a petition on the Internet.
3. How often do you answer questions that people put on Internet forums or mailing lists.
4. How often do you report or comment on someone's behavior on the Internet.
5. How often do you provide information and help to people you do not know on MSN / Yahoo Messenger etc.
6. How often do you send emails to five or more email addresses to point out something useful.
7. How often do you forward an email that you feel would be of help to others for their work, education, health or family How often do you contribute to Wikipedia or a similar site.
8. How long have you contributed to Wikipedia or similar websites.
9. How often do you willingly fill out questionnaires / surveys on the Internet so as to help other

people or organizations.

10. How often do you forward an email from someone that asks for help or information.

**Variable: Teaching Innovation Behavior**

Source: Salessi, S., & Etchevers, M. R. (2020). Innovative work behavior: Development and validation of a scale for teachers. *Acta de investigación psicológica*, 10(3), 112-123. <https://doi.org/10.22201/fpsi.20074719e.2020.3.363>

Items:

1. I pay attention to my students' learning needs.
2. I systematically search for new methods, techniques, or work instruments.
3. I critically examine my practice to see how I can improve it.
4. I imagine original solutions to the problems I encounter in my work.
5. I design novel activities to promote my students' learning.
6. I think of new strategies to teach the content.
7. I convince colleagues, administrators, supervisors, etc. of the importance of my proposals.
8. I try to gain approval for my ideas.
9. I obtain the necessary resources to put my ideas into practice.
10. I systematically modify my teaching strategies to achieve better results.
11. I incorporate varied and novel resources to develop the content.
12. I implement original activities to enhance learning.

**Variable: Technological Self-Efficacy**

Source: Rayburn, S. W., Badrinarayanan, V., Anderson, S. T., & Gupta, A. (2021). Continuous techno-training and business-to-business salesperson success: How boosting techno-efficacy enhances sales effort and performance. *Journal of Business Research*, 133(1), 66-78. <https://doi.org/10.1016/j.jbusres.2021.04.066>

Items:

1. I possess the knowledge necessary to use technology.
2. When encountering technical problems, I am confident that I can solve them on my own.
3. I can successfully use a new technology if I only have the manual or online help for reference.
4. I trust my own technical operational abilities.

**Variable: Teaching Anxiety**

Source: Ganley, C. M., Schoen, R. C., LaVenía, M., & Tazaz, A. M. (2019). The Variable validation of the math anxiety scale for teachers. *Aera Open*, 5(1), 18-26. <https://doi.org/10.1177/2332858419839702>

Novak, E., Soyuturk, I., & Navy, S. L. (2022). Development of the science teaching anxiety scale for preservice elementary teachers: A Rasch analysis. *Science Education*, 106(3), 739-764. <https://doi.org/10.1002/sce.21707>

Items:

1. My palms start to sweat if I have to do a difficult problem in my teaching subject.

2. I would start to panic if I had to solve challenging teaching problems.
3. My mind goes blank when I am about to start a challenging teaching problem.
4. Feelings of anxiety interfere with my ability to solve teaching problems.
5. I get nervous when I think my teaching ability is being evaluated.
6. I would feel uncomfortable if another teacher observed me teaching lesson.

Variable: Subjective Workload

Source: Kyriazos, T., & Poga, M. (2023). Dealing with multicollinearity in factor analysis: the problem, detections, and solutions. *Open Journal of Statistics*, 13(3), 404-424.  
<https://doi.org/10.4236/ojs.2023.133020>

Items:

1. I have enough time to complete all the tasks.
2. The pace of the tasks makes me feel pressed for time.
3. I need to make decisions within a very limited time.
4. The cognitive demands of the tasks are high.
5. I need to handle multiple tasks/sources of information at the same time.
6. The demands of the tasks exceed my capabilities.
7. I need to put in a great deal of effort to complete the tasks.
8. To maintain my performance level, I have to work much harder.
9. The job demands are too high to maintain the standard.