

The Correlation Between Social Media Usage in Academic Context and Self-Efficacy Towards TPACK of Preservice Science Teachers in Indonesia

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INSTRUMENT/QUESTIONNAIRE

Technological Pedagogical Content Knowledge Self-Efficacy Scale (TPACK-SeS).

Please rate your degree of confidence regarding statements below.

Technological Knowledge (TK)

- I can explain the differences between hardware and software.
 Very Low Low Medium High Excellent
- I can fix hardware problems.
 Very Low Low Medium High Excellent
- I can install software
 Very Low Low Medium High Excellent
- I can use software.
 Very Low Low Medium High Excellent
- I can choose appropriate technological tools for teaching (e.g. interactive board, LCD, ...)
 Very Low Low Medium High Excellent
- I can explain the similarities between hardware and software.
 Very Low Low Medium High Excellent

Knowledge of Teaching with Technology (KTT)

7. I can utilize technological tools (e.g., pH meter, ammeter) to gather scientific data.

Very Low Low Medium High Excellent

8. I can use technological tools (e.g., spreadsheets, computer) to analyse scientific data.

Very Low Low Medium High Excellent

9. I can explain advantages of using technology in science education.

Very Low Low Medium High Excellent

10. I can determine technologies that are appropriate for students' grade level.

Very Low Low Medium High Excellent

11. I can explain how to use technologies in my lesson plan.

Very Low Low Medium High Excellent

12. I can explain how to manage a classroom that is equipped with technologies

Very Low Low Medium High Excellent

13. I can answer students' questions about the technology use in my classroom.

Very Low Low Medium High Excellent

14. I can utilize technological tools to make teaching processes more productive.

Very Low Low Medium High Excellent

15. I can explain how technology affects student learning.

Very Low Low Medium High Excellent

Technological Pedagogical Content Knowledge (TPACK)

16. I can use technological tools to determine students' misconceptions about science.

Very Low Low Medium High Excellent

17. I can use technological tools to assess student learning of science.

Very Low Low Medium High Excellent

18. I can apply my technological knowledge, content knowledge, and pedagogical knowledge all together to create an effective learning environment.

Very Low Low Medium High Excellent

19. I can develop quality lesson plans using my technological knowledge, content knowledge, and pedagogical knowledge together.

Very Low Low Medium High Excellent

20. I can use technological tools to assess students' prior knowledge about science topics.

Very Low Low Medium High Excellent

THE SOCIAL NETWORKING SITES USE (SNSU) FREQUENCY SCALE IN ACADEMIC SETTING FOR PRESERVICE TEACHERS

Please rate your frequency of using Social Networking Sites (SNS)

A Searching and Studying (SS)

1 How often do you search information related to your coursework from any social networking sites?

Never Rarely Sometimes Often Always

2 How often do you search current news related to your coursework from any social networking sites?

Never Rarely Sometimes Often Always

3 How often do you search image or animation related to your coursework from any social networking sites?

Never Rarely Sometimes Often Always

4 How often do you watch online videos related to your coursework (such as video of laboratory experimentation) from any social networking sites?

Never Rarely Sometimes Often Always

5 How often do you integrating image, animation, or videos that you search into your assignment?

Never Rarely Sometimes Often Always

B Download Media (DM)

- 6 How often do you download video related to your coursework?
 Never Rarely Sometimes Often Always
- 7 How often do you download image or animation related to your coursework?
 Never Rarely Sometimes Often Always
- 8 How often do you download document such as Journal articles related to your coursework?
 Never Rarely Sometimes Often Always
- 9 How often do you download learning apps/software that useful for your study?
 Never Rarely Sometimes Often Always
- 10 How often do you download learning apps/software that useful for your teaching in the classroom?
 Never Rarely Sometimes Often Always

C Sharing Media (SM)

- 11 How often do you share your files or document related to your coursework using any social networking sites with other students?
 Never Rarely Sometimes Often Always
- 12 How often do you share picture and video using any social networking sites with other students?
 Never Rarely Sometimes Often Always
- 13 How often do you share your thought or ideas using any social networking sites with other students?
 Never Rarely Sometimes Often Always
- 14 How often do you collaborate with other students in a group work using any SNS?
 Never Rarely Sometimes Often Always

Never Rarely Sometimes Often Always

15 How often do you share current news using any SNS to other students?

Never Rarely Sometimes Often Always

D Professionalism Development (PD)

16 How often do you use SNS to learn computer hardware?

Never Rarely Sometimes Often Always

17 How often do you use SNS to learn computer software?

Never Rarely Sometimes Often Always

18 How often do you use SNS to learn new technological tools for teaching?

Never Rarely Sometimes Often Always

19 How often do you use SNS to create learning media?

Never Rarely Sometimes Often Always

20 How often do you integrate e-Learning platform (such as Moodle, Edmodo, etc.) in the classroom?

Never Rarely Sometimes Often Always

21 How often do you use SNS to update information related to current new technology for teaching?

Never Rarely Sometimes Often Always

22 How often do you use SNS to learn integrating technology into your lesson plan?

Never Rarely Sometimes Often Always

23 How often do you join distance learning workshop such as online short course?

Never Rarely Sometimes Often Always

24 How often do you chat in social media with professional teachers to get information about ICT integration using social media?

- Never Rarely Sometimes Often Always

E Entertainment and Motivation (EM)

25 How often do you read online news for entertainment?

- Never Rarely Sometimes Often Always

26 How often do you listen to music during studying?

- Never Rarely Sometimes Often Always

27 How often do you play Educational Games in smartphone or laptop during studying?

- Never Rarely Sometimes Often Always

28 How often do you watch online video for entertainment purposes during studying?

- Never Rarely Sometimes Often Always

29 How often do you chat in Social media to improve learning motivation from others?

- Never Rarely Sometimes Often Always