Science Teacher.

VOOYA Stories

At school, you must have learned about an organism's anatomy or which compounds create oxygen, and so on. What you learned is science, a systematic enterprise that builds and organizes knowledge in the form of testable explanations and predictions about the universe. That knowledge was taught to you from a teacher. There are several kinds of science teachers - one who primarily engaged in teaching, and those who do a combination of teaching and research.

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Character: SIR

Social (Helper) – occupations frequently involve work activities that include practical, hands-on problems and solutions. They often deal with plants, animals, and real-world materials like wood, tools, and machinery. Many of the occupations require working outside, and do not involve a lot of paperwork or working closely with others.

Investigative (Thinker) – occupations frequently involve working with ideas, and require an extensive amount of thinking. These occupations can involve searching for facts and figuring out problems mentally.

Realistic (Do-er) – occupations frequently involve work activities that include practical, hands-on problems and solutions. They often deal with plants, animals, and real-world materials like wood, tools, and machinery. Many of the occupations require working outside, and do not involve a lot of paperwork or working closely with others.

Expertise

- **Speaking —** Talking to others to convey information effectively.
- **Instructing —** Teaching others how to do something.
- **Learning Strategies —** Selecting and using training/ instructional methods and procedures appropriate for the situation when learning or teaching new things.
- **Active Learning —** Understanding the implications of new information for both current and future problem-solving and decision-making.
- **Active Listening —** Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

Day-to-Day Tasks

- Evaluate and grade students' class work, laboratory work, assignments, and papers.
- Prepare and deliver lectures to students
- Plan, evaluate, and revise syllabus and curriculum
- Prepare materials for laboratory activities and course materials, such as homework assignments and handouts.
- Initiate, facilitate, and moderate classroom discussions.

Work Setting

- Constant contact with others (face-to-face, by telephone, email, or otherwise)
- It requires working indoors in environmentally controlled conditions.
- A lot of freedom in decision making, without supervision.

Knowledge

- **Chemistry —** Knowledge of the chemical composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods.
- **Biology —** Knowledge of plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other and the environment.
- **Mathematics —** Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
- **Education and Training —** Knowledge of principles and methods for curriculum and training design, teaching and instruction for individuals and groups, and the measurement of training effects.

Education

To be a science teacher in high school, one has to finish a bachelor degree in science, then enroll in Program Pendidikan Profesi Guru for 1 year. However, to teach in university, one has to have a master degree. Here are some schools that offer bachelor›s and master›s degrees in science:

- Sarjana Sains (S.Si), Institut Teknologi Bandung, Indonesia
- Bachelor of Arts (BA) in Chemistry or Biology, Oxford University, United Kingdom
- Master of Science (MSc) in Chemistry or Biology, Imperial College London, United Kingdom

Award

- Global Teacher Prize