

Task 9: Research Instrument

March 24 2021

Proposed Topic

Optimal Learning Strategy for Learning Python: A Qualitative Study on the Optimal Learning Strategy for Python Learners.

Which instrument will you use to gather data to answer your research questions? Describe the instruments.

In collecting the data needed for this study, this study intends to use interview questionnaires. The interview will be a semi-structured interview to examine the experience, perception, and thoughts of the respondents on learning the programming language.

Research Question	Interview Question / Observation Notes
1. What is the optimum strategy/roadmap to learning the Python programming language?	<ul style="list-style-type: none">What sequence should a student learn Python in?Does the sequence change when learning the language with object-oriented programming as a target environment?Does it do the same having functional programming as a target environment?
2. What are the best ways and methods in learning the programming language?	<ul style="list-style-type: none">What medium is the most effective way of learning the language?Is self-teaching a programming language more effective than learning with a class?
3. What are the common learning strategies that Python students use to learning Python efficiently?	<ul style="list-style-type: none">How did you learn Python your own way?What would you change if you were to learn it again as a beginner.

URL Link used to develop the research instrument:

- <https://sciendo.com/article/10.1515/ijicte-2015-0005>
- https://d1wqtxts1xzle7.cloudfront.net/31715369/ICCIE2012_siti_rosminah.pdf?1376392309=&response-content-disposition=inline%3B+filename%3DDIFFICULTIES_IN_LEARNING_PROGRAMMING_VIE.pdf&Expires=1616571988&Signature=DRQjvc2YayQbI2NY6OceMZwIyc8-eHBwzSup4UkLpIXjCpsX3jvIoR7Lj7WpZMh-MRQBChvW9UJuil-DsEzQipWHicru5~j-7WDqj~rebVwcrTxs9t99ous3eUkiAUtYXYH2pRsGf6sesMzx1KzjavphjV3uvu409Sgy1sqEyo1IVR8D5hHULhPJPSTAMqLm1fykmJpYK4RBwwFdAjJVGr0E8B6jvfaVQNFFLt0ihyQcU0Mmmz82h9jSI8wuJd1xhDX4bew2MJ6dEUw0FBIBJFb4mowno9LYbFrAL2pEdlzCrd~r2DEy6AdZcRtI579lOeyaIJIflouT11L0pQbyGw_&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA
- <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.17.331&rep=rep1&type=pdf>