JavaScript Learning Experience According to Science

Let's take a look at the scientific criteria for a learning experience to be classified as good. We'll also examine where JavaScript falls in terms of these criteria.

The first good news is that you can immediately start writing code. The second good news is that you can see the effect of your efforts within a seconds. You don't need to go through a long compilation process. The things you build with JavaScript often manifest in visible changes on screen.

While I am not claiming that learning JavaScript is super easy, I do claim that you get more direct and immediate feedback when dealing with JavaScript than with most other languages. Why does this matter?

Because everything is given for you to experience flow. Flow experiences are often referred to as optimal experiences. It feels like you are *in the zone*. If you are in flow, time flies. You are deeply immersed in an activity. Your learning experience becomes close to optimal.

According to science, there are a few necessary conditions for flow to happen:

1. The goals of the activity must be clear

2. The task is neither too easy, nor too hard

3. You get direct feedback on the outcome of your actions

Let's look at these points one by one.

The Goals Of The Activity Must Be Clear

Regarding the goals, just look at the two developer surveys and figure out whether it makes sense to become a software developer in 2018. You can literally work from the beach as a freelancer, or as an employee for an international team. Writing JavaScript code often feels like playing with LEGO. You also happen to make good money with it. Within half a year, many people become productive as junior developers. If you can't write code right

now, what better experience could you imagine for yourself than utilising your skills as a frontend or full stack developer?

The Task Is Neither Too Easy, Nor Too Hard

Learning JavaScript is not an obvious thing to do. There are some riddles, pitfalls and hurdles you need to go through. Don't let this discourage you though! Just think about it. Who would you be if you never faced a challenge? You would have nothing in your life to be proud of. These hurdles serve to benefit you. These hurdles also make your learning experience appropriately hard, so that you can experience flow while learning JavaScript.

My opinion is that when learning JavaScript, it is not too hard to experience flow. Obviously, this opinion is debatable, because if you worked as a bus driver for instance, and you have never seen a programming language before, you will need some fundamentals. I admit that this course is not an optimal resource for absolute beginners, because it assumes you know at least the basics of how programming languages work e.g. what **if statements** and **loops** are, what functions are etc. I am planning an entry level product for JavaScript, and I know, advanced JavaScript may be too hard for some people.

However, once you lay down the foundations, you will be ready for these resources, and nothing will stop you. Therefore, with proper guidance, you will improve without getting frustrated about your learning experience.

You get direct feedback on the outcome of your actions

This is where JavaScript shines. As long as you use JavaScript on the client side without complicating your tooling too much, you will get immediate feedback on your actions. Sometimes you just have to refresh your browser. In some cases, you don't even need a browser refresh. Whatever you do, you will immediately see the results of your code.

For this reason, JavaScript is a great candidate for flow experience.