

How You Can Learn in a World of Information Overload

如何在信息过载的世界中学习（1）

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订阅



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1

Software engineers have a **delightful practice** called **rubber ducking**. When they **run into** a problem with their code, they'll explain it to a rubber duck. They'll work **step by step, line by line**.

delightful /dɪˈlaɪtfl/ adj. 令人愉快的；讨人喜欢的

【例句】The small bookstore had a delightful reading corner by the window.
这家小书店在窗边有一个令人愉快的阅读角。

【例句】Her email was short, but the warm tone made it delightful to read.

她的邮件很短，但温暖的语气让人读起来很舒服。

【常用搭配】a delightful surprise (令人愉快的惊喜) / a delightful experience (愉快的体验)

practice /'præktɪs/ n. 做法；惯例；实践

作“做法”讲时，practice 指某个群体经常采用的一种方式或习惯。

【例句】It is common practice to check the equipment before a meeting.

开会前检查设备是一种常见做法。

【例句】The teacher introduced a new practice for reviewing vocabulary.

老师引入了一种复习词汇的新做法。

【常用搭配】common practice(常见做法)/ best practice(最佳实践)/ daily practice (日常练习)

rubber ducking /'rʌbər 'dʌkɪŋ/ n. 橡皮鸭调试法；向“橡皮鸭”解释问题的做法

这是程序员常说的一种思考方法：把问题讲给一个不会回应的对象听，通过解释来发现思路漏洞。

具体的操作是：① 找一个“无脑听众”（比如橡皮鸭）② 向它逐步解释自己的代码（或者方案）③ 讲的过程中，自己会在某一步卡壳，这就是问题所在

人的大脑思考问题时，潜意识飞速运转，自动脑补会跳过很多细节。用嘴去解释，就是被迫放慢速度，把跳跃的思维转化为严谨，线性的语言输出。这个过程中，人可以捕捉到自己的逻辑漏洞。

run into /rʌn 'ɪntu:/ phr. 遇到；碰上（问题或困难）

【例句】We ran into a problem when the printer stopped working.

打印机突然坏了，我们遇到了一个问题。

【例句】If you run into trouble with the form, call the office.

如果你在填表时遇到麻烦，就给办公室打电话。

【常用搭配】run into a problem (遇到问题) / run into trouble (遇到麻烦)

X by X /... baɪ .../ phr. 一个接一个地; 逐步地; 按.....逐项推进

这个结构强调“有顺序、有节奏地推进”

【例句】She cleaned the old apartment room by room.

她一间一间地打扫旧公寓。

【例句】The coach explained the plan step by step so everyone could follow it.

教练一步一步解释计划，这样每个人都能跟上。

【常用搭配】step by step (一步一步地) / line by line (一行一行地) / day by day (一天天地)

2

And some of the time, they'll learn something new. But how can this work? The ducks don't **talk back**. So, the programmers are explaining to themselves. They're not getting any new information. **And yet**, something about this process helps them learn.

talk back /tɔ:k bæk/ phr. 回嘴; 回应; 顶嘴

【例句】The child was punished because he kept talking back to his teacher.

这个孩子因为一直顶撞老师而受到了惩罚。

【例句】A notebook is useful, but it cannot talk back when your idea is unclear.

笔记本很有用，但当你的想法不清楚时，它不会回应你。

【常用搭配】talk back to sb. (回嘴/回应某人) / never talk back (从不顶嘴)

and yet /ænd jet/ phr. 然而; 可是

表示转折的时候，and 最为中性，基础。And yet 语气更重，强调“意外”“矛盾”感。

【例句】The task looked simple, and yet it took the whole afternoon.

这个任务看起来很简单，可是花了整个下午。

【例句】He had little experience, and yet his first presentation was excellent.
他经验很少，然而第一次展示却非常出色。

【常用搭配】and yet somehow（可是以某种方式）/ and yet still（然而仍然）

3

Rubber ducking is an example of what I call learning by thinking. And understanding how learning by thinking works is the key to becoming a better learner. Now, most of us want to be better learners.

4

That's because we want to make our minds better, more effective, and more **informed**. But learning can be hard. And in the **years ahead**, we'll **have access to** more and more tools and to more and more information through the internet and social media and AI.

informed /ɪn'fɔːrmd/ adj. 见多识广的；掌握信息的；有根据的

【例句】Read several reliable sources before making an informed decision.
在做出有根据的决定前，先读几个可靠来源。

【例句】An informed customer knows what questions to ask before buying insurance. 掌握信息的顾客在购买保险前知道该问哪些问题。

【常用搭配】an informed decision（有根据的决定）/ an informed opinion（有依据的观点）

years ahead /jɪrz ə'hed/ phr. 未来几年

【例句】In the years ahead, many workers will need stronger digital skills.

未来几年，许多工作者将需要更强的数字技能。

【例句】The city is preparing for heavier traffic in the years ahead.

这座城市正在为未来几年更大的交通压力做准备。

【常用搭配】in the years ahead（在未来几年）/ plan for the years ahead（为未来几年做计划）

have access to /hæv 'ækses tu:/ phr. 能够使用；能够接触到

【例句】Students have access to free online courses through the library.

学生可以通过图书馆免费使用在线课程。

【例句】People in small towns may not have easy access to specialist doctors.

小城镇居民可能不容易接触到专科医生。

【常用搭配】have access to information（能获取信息）/ access to education（接受教育的机会）

5

And more information can make learning harder rather than easier. We **run the risk of information overwhelm**. Part of the problem is that we tend to **approach** learning by looking outside of ourselves for more information. But that can just **exacerbate** the overwhelm.

run the risk of /rʌn ðə risk əv/ phr. 冒着.....的风险；有可能.....

【例句】If you skip breakfast every day, you run the risk of losing focus in class.

如果你每天不吃早饭，就有上课注意力下降的风险。

【例句】A company that ignores customer feedback runs the risk of losing trust.

忽视顾客反馈的公司有失去信任的风险。

【常用搭配】run the risk of failing（冒失败风险）/ run the risk of being

misunderstood (有被误解的风险)

information overwhelm /ˌɪnfərˈmeɪʃn ˌoʊvərˈwelm/ n. 信息过载; 信息压倒感

【例句】Too many open tabs can create information overwhelm before you even start studying. 还没开始学习, 太多打开的网页标签就可能造成信息过载。

【例句】A simple checklist can reduce information overwhelm during a busy week. 一张简单清单可以减少忙碌一周中的信息压倒感。

【常用搭配】feel information overwhelm (感到信息过载) / reduce information overwhelm (减少信息过载)

approach /əˈprɔʊtʃ/ v. 处理; 着手对待 n. 方法; 方式

【例句】Different teachers approach grammar in different ways.
不同老师会用不同方式讲语法。

【例句】Before you answer, think about how to approach the question.
回答前, 先想想该如何处理这个问题。

【常用搭配】approach a problem (处理问题) / a practical approach (实用方法)

exacerbate /ɪgˈzæsərbeɪt/ v. 使恶化; 加剧

【例句】Poor communication can exacerbate tension within a team.
沟通不畅会加剧团队内部的紧张。

【例句】Looking at your phone late at night may exacerbate sleep problems.
深夜看手机可能会加重睡眠问题。

【常用搭配】exacerbate a problem (加剧问题) / exacerbate stress (加重压力)

Instead, we could be learning by thinking. We could be starting with the information we already have. I'm a **cognitive** scientist and I've been studying

learning for over 25 years.

cognitive /'kɑ:gnətɪv/ adj. 认知的；与思维有关的

【例句】 Sleep has a strong effect on cognitive performance.

睡眠会强烈影响认知表现。

【例句】 Puzzle games may train certain cognitive skills, such as attention.

益智游戏可能训练某些认知技能，比如注意力。

【常用搭配】 cognitive science (认知科学) / cognitive skills (认知技能) / cognitive ability (认知能力)

语音详解

1.

Software engineers have a delightful practice called rubber ducking. When they run into a problem with their code, they'll explain it to a rubber duck. They'll work step by step, line by line.

2.

And some of the time, they'll learn something new. But how can this work? The ducks don't talk back. So, the programmers are explaining to themselves. They're not getting any new information. And yet, something about this process helps them learn.

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Rubber ducking is an example of what I call learning by thinking. And understanding how learning by thinking works is the key to becoming a better

learner. Now, most t^{of us} want t^{to} be better learners.

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That's because we want t^{to} make ke^{our} minds better, more re effective, and more re informed. But learning can be hard. And in the years ahead, we'll have access to more and more tools and to more and more information through the e^(j)internet t^{and} social media and AI.

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And more re information can make learning harder rather than easier. We run the risk of information n overwhelm. Part of the problem is that we tend to^(w) approach learning by looking outside of ourselves for more re information. But that can just exacerbate the e^(j)overwhelm.

6.

Instead, we could be learning by thinking. We could be starting with the e^(j)information we e^(j)already have. I'm a cognitive scientist and I've been studying learning for over 25 years.

1

软件工程师有一种很有意思的做法，叫作“橡皮鸭调试”。当他们的代码遇到问题时，他们会向一只橡皮鸭解释这个问题。他们会一步一步、一行一行地讲清楚。

2

有时候，他们会因此学到新的东西。但这怎么可能有用呢？橡皮鸭又不会回应。所以，程序员其实是在向自己解释。他们并没有获得任何新的信息。可是，这个过程当中的某些东西确实能帮助他们学习。

3

橡皮鸭调试就是我所谓“通过思考来学习”的一个例子。理解这种学习方式如何运作，是成为更好学习者的关键。现在，我们大多数人都想成为更好的学习者。

4

这是因为我们想让自己的头脑变得更好、更有效，也掌握更多信息。但学习可能很难。而在未来几年里，我们将通过互联网、社交媒体和人工智能接触到越来越多的工具和越来越多的信息。

5

更多信息可能会让学习变得更难，而不是更容易。我们面临信息过载的风险。问题的一部分在于，我们往往通过向自身之外寻找更多信息来学习。但这只会加剧这种过载。

6

相反，我们可以通过思考来学习。我们可以从自己已经拥有的信息开始。我是一名认知科学家，研究学习已经超过 25 年。