# 观察日记逼我学会了提问

初一暑假，科学老师布置观察作业，我选了蚂蚁，要求每天记一段。头一个礼拜，我的日记全是废话：今天蚂蚁很多，今天蚂蚁搬面包，今天没什么变化。老师批了四个字：只记不问。

这四个字点醒了我。第二天我逼自己在每页末尾写一个问题。问题一开始很傻：蚂蚁为什么绕着糖转？它有没有眼睛？可写下去就不一样了。第九天我写：同一只蚂蚁昨天走左边今天走右边，它认路靠什么？第十四天我写：蚁洞口的土粒为什么天天换位置，是谁搬的，搬到哪儿去了？

问题越写越长，我专门腾出半页当疑问清单。为找答案，我去翻书，翻不到就去问科学老师。老师翻了我的清单，挑出两个问题说值得做实验。我在阳台上用花盆扣了一小块蚁洞，埋了半截吸管，看蚂蚁走不走吸管。它们走了。我在日记里写：它认路多半靠气味，因为吸管里它一路都在碰地。

这个习惯后来搬进了课堂。以前上课我听讲像看戏，演什么看什么。现在每节课前我扫一眼标题，先给自己提一个问题：这节课要回答什么？带着问题听，走神少了，笔记也知道该记哪句。初二上学期科学测验，我选择题错得最少的一次就是那次。

我的疑问清单现在还在，从暑假那半页一直续到初二的笔记本后面，两页半，四十多个问题，答上去的不到一半。可我觉得清单有用，不在答上去的那一半，在没答上的那一半：它们让我知道哪些东西我还不懂，不懂的东西明明白白摆着，比糊里糊涂强。

观察蚂蚁这件事，外人看是蹲着看虫子。我自己知道，它真正教会我的是提问。看是学习的门，问才是学习的腿。日记逼我每页问一个，问着问着，问题自己会长大，从蚂蚁长到课本，再长到别的我想知道的一切。

# My Ant Diary Taught Me to Ask Questions

In the summer after my first year of middle school, the science teacher assigned an observation diary, and I chose ants, one entry every day. For the first week my diary was full of nothing: many ants today, ants carried bread today, no change today. My teacher wrote four characters as a comment: you record, you never ask.

Those four characters woke me up. The next day I forced myself to write one question at the end of every page. The questions began as silly ones: why do ants circle around sugar? Do they have eyes? But as I kept writing they changed. On the ninth day I wrote: the same ant went left yesterday and right today, what does it use to know the way? On the fourteenth day I wrote: why do the soil grains at the hole change place every day, who moves them, and where do they go?

The list grew longer, so I cleared half a page for it as a question list. To find answers I went through books, and when books failed I asked the science teacher. He looked through my list and picked two questions worth testing. On the balcony I covered a small piece of an ant hole with a flower pot and buried half a drinking

straw to see whether the ants would walk inside it. They did. I wrote in my diary: they most likely know the way by smell, because inside the straw they kept touching the ground all the way.

This habit later moved into the classroom. Before, I listened to lessons like watching a play, seeing whatever was shown. Now before each lesson I glance at the title and ask myself one question: what is this lesson meant to answer? Listening with a question in mind, I drift off less, and my notes know which sentence to catch. In the science quiz of the first term of my second year, I got my fewest wrong choices in the multiple-choice part.

My question list still exists, continued from that half page in summer to the back of my second-year notebook, two and a half pages, more than forty questions, fewer than half answered. Still I find the list useful, and not in the answered half but in the unanswered half: it shows me plainly what I do not yet know, and knowing that plainly beats being comfortably confused.

Outsiders see observing ants as crouching and staring at bugs. I know what it really taught me was how to ask. Looking is the door of learning; asking is its legs. The diary forced one question per page, and as I kept asking, the questions grew up by themselves, from ants to textbooks, and then to everything else I want to know.