



From *Critical Thinking* to *Thinking-based Learning*

A pathway to Successful ELT Experience

在英语教学中发展学生的思维能力

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核心素养背景下的英语教育



英语学科核心素养

《英语课程标准》对思维品质的界定

- 思维品质是指人的思维个性特征，反映其在思维的逻辑性、批判性、创造性等方面所表现的能力和水平。
- 思维品质的发展有助于提升学生分析和解决问题的能力，有助于学生从跨文化及多元的视角观察和认识世界，对事物作出正确的价值判断，促进学生深度学习。
- 学习英语和使用英语有助于促进学生思维能力的进一步发展。

如何在英语教学中发展学生思维能力

- 语言学习不只是学习语言的形式和语言表达的意义；
- 语言学习活动是围绕语篇进行的学习活动，其中包括围绕语篇内容进行的预测、思考、阅读、讨论等活动。这些活动有多重作用：
 - ✓ 接触、感知、理解、学习语言；
 - ✓ 学习知识、经验和智慧；
 - ✓ 发展思维能力。

Example 1

Pathways: Reading, Writing and Critical Thinking

Big Ideas

Big Ideas

ACADEMIC PATHWAYS

- Lesson A: Understanding a biographical text
Identifying supporting ideas
- Lesson B: Ranking ideas in order of priority
- Lesson C: Supporting the main idea and giving details
Writing a descriptive paragraph

UNIT
2

Think and Discuss

1. Do you know any famous inventors?
What did they invent?
2. What inventions are you using right now?

▲ Tiny silica balls, each one 120 nanometers (0.00000012 m) wide, kill cancer cells in a person's body. Nanotechnology was invented in the late twentieth century and is used in many modern inventions.

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Exploring the theme

Exploring the Theme

Read the information on these pages and discuss the questions.

1. Do you agree with the list of the most important inventions? Can you think of other inventions to add?
2. In your opinion, which inventions made the biggest changes to our daily lives? How?
3. Which inventions saved the most lives? How?

What's the World's Greatest Invention?

A U.K. company, Tesco Mobile, asked 4,000 people to name the world's most important invention. Some inventions—like the washing machine and wheel—make everyday life easier. Some, like the medicine penicillin, save lives. Others—like wireless technology and the Internet—changed the way we communicate. As Lance Batchelor, CEO of Tesco Mobile, says, “All of the inventions in this list have changed the world forever.”

- 1 wheel
- 2 airplane
- 3 lightbulb
- 4 Internet
- 5 personal computer
- 6 telephone
- 7 penicillin
- 8 iPhone
- 9 flushing toilet
- 10 combustion engine

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Example 2

Five dangerous things we should let our kids do

- Gever Tulley gave a TED talk, which spells out 5 dangerous things we should let our kids do — and why a little danger is good for both kids and grownups.
 - Which of the things on the right does Gever Tulley suggest children doing? Why?
 - Now read the text of Gever's talk and check your predictions.
- Play with fire
 - Own a credit card
 - Travel alone
 - Own a pocketknife
 - Drive a car
 - Swim in a lake
 - Deconstruct appliances
 - Own a gun
 - Camp in the forest
 - Throw a spear

如何在英语教学中发展学生思维能力

- 语篇不只是陈述事实和表达观点，而且还反映作者的态度；
- 语篇有目的地使用语言手段来直接或间接地反映作者的态度；
- 分析语篇反映的态度及使用的语言手段有助于发展批判性思维能力。

Example 3

Pathways: Reading, Writing and Critical Thinking

READING



Reading and critical thinking

| **Critical Thinking: Evaluating Attitude.** Work with a partner. First, circle the words to complete this sentence.

The author of the reading passage on pages 105–106 seems **positive (optimistic) / negative (pessimistic)** about the future.

Find examples that support your answer. Look for words and phrases the writer uses to describe the scene in the opening paragraph. **Does the description make life sound pleasant or unpleasant?**

Look at how the writer describes appliances, houses, and robots. **Does the writer make these devices sound practical (useful) or impractical (not useful)?**

Now discuss this question with your partner: **Do you agree with the writer's attitude about the future? Why, or why not?**

| **Personalizing.** Discuss answers to these questions in a small group.

1. Which future technologies in the reading would you like to have in your home?
2. Are there other household technologies you would like to have?

如何在英语教学中发展学生思维能力

- 洞察语篇中隐含（藏）的意思和观点；
- 发现语篇中的逻辑缺陷；
- 识别语篇中缺乏证据的论点。

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Example 4

It has long been the hope of many people that robots would revolutionize mundane chores and hard labour such as construction work and housework. The first humanoid robot was designed by Leonardo da Vinci as long ago as 1495. We have gone for hundreds of years with little progress in gaining humanoid robots to assist around the house and the construction site. Labour-saving robots are just a dream. As there has been so little advance on humanoid robots assisting with housework and construction, it will probably never be achieved.

- The conclusion from the above text: As there has been so little advance on humanoid robots assisting with housework and construction, it will probably never be achieved.
- Implicit assumptions are used as reasons:
 - (1) Just because a robot was designed a long time ago, there have been continuous efforts since then to design a robot to deal with certain kinds of work. No evidence is given to show that this is what Leonardo or inventors since him set out to do.
 - (2) If something hasn't been done before a certain time, it never can be done.
- These assumptions may be true but are not supported in the passage by evidence.

如何在英语教学中发展学生思维能力

- 通过写作训练逻辑思维

- Reading, thinking and writing are actually combined;
- Poor writing is often a reflection of confused thinking;
- Writing practice is to some extent a process of developing thinking skills.

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Example 5

Pets add to the quality of life. Any benefits outweigh the costs. However, they can destroy household furniture. Stroking pets is thought to reduce stress. Property values can be affected by the odour animals leave behind them in carpets and curtains. Many people find talking to a pet helps them sort out personal problems. Problems with pets can be sorted out, so they are not insuperable.

Revised version

Pets add to the quality of life. This is evident in several ways. For example, stroking pets can reduce stress. Many people find talking to a pet helps them sort out personal problems. There are some disadvantages to having an animal about the house such as damaged furniture and unpleasant odours. However, these problems can easily be overcome. The benefits of having a pet outweigh the disadvantages.

如何在英语教学中发展学生思维能力

- 语言聚焦活动也能训练思维能力

- 大多数语言形式不是任意的。语言的形式与意义有密切的逻辑联系；
- 语言表达的意义在很大程度上来自语言的内在逻辑。
- 理解语言的形式与意义，分析语言的内在逻辑，有助于发展思维能力。

Example 6

请分析这个对话中的逻辑：

Mad Hatter: Would you like a little more tea?

Alice: Well, I haven't had any yet, so I
can't take more.

Mad Hatter: Yes. You can always take more than
nothing.



Example 7

In the following conversation, why did Speaker A get into a difficult situation?

A: Did I hurt your feelings?

B: Yes, you hurt my feelings.

A: Sorry, but I didn't mean to hurt your feelings.

B: So what did you mean to hurt?

A: ...



Example 8 (Pathways: Reading, Writing and Critical thinking)

- | **Matching.** Underline the subject and object pronouns in the following paragraph about Wakamaru. Then draw an arrow to the noun that each pronoun refers to.

Engineers in Japan built a sociable robot named Wakamaru. They

designed Wakamaru to help and serve people in a friendly, caring, and intelligent way. Wakamaru can recognize faces and use gestures. It knows 10,000 words and can use them to talk to people about the weather and other subjects. Wakamaru can do many tasks for a family. For example, at night, it moves quietly around the house, but it can wake family members up if there is any trouble. During the day, Wakamaru can also send them email and text messages.





谢谢！

欢迎提问与讨论！

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