
Vocabulary: Innovation and problem-solving 词汇: 创新和解决问题

What do you do when you have a problem? Do you go to an expert, ask your friends to **come up with** an idea? Or, given the chance, would you ask a crowd of strangers for a **solution**? It may sound strange, but it has **spurred** more than a few successful **innovations**. That's the thinking behind a 'challenge prize'.

Challenge prizes come in many shapes and sizes but the basic **concept** remains the same. Rather than consulting and paying an expert to **innovate** a solution, you offer the prize up to anyone who believes they can **solve** it and present the first to do so with a prize. This might sound odd - many would argue, 'Who is better qualified than an expert?' But actually, not using one seems to result in a great deal of **thinking outside of the box**.

Some argue that formal education can kill creativity because it sometimes only teaches a single solution to a problem or single method to achieve a task. In the same way, some suggest that experts can suffer from **tunnel vision**. "If we launch an XPRIZE and it's just the 'experts' that come out and compete, they're usually the ones that will tell us it can't be done." says Marcus Shingles, former CEO of the XPRIZE Foundation, which organises challenge prizes today.

There are other advantages too. "You're not asking people to use a particular solution set on how to solve that problem. So you get this tremendous amount of diversity." adds Shingles. And because the crowd acts like an impromptu **think tank**, its **lateral thinking** can **throw up issues** that may have been **overlooked**.

Challenge prizes were most popular during the 18th and 19th centuries, but have received renewed interest more recently. Historically, many practical **inventions** have been **conceived** in this way – for example, the tin can. More recently, Virgin Galactic, a company hoping to commercialise space flight, developed out of the Ansari XPRIZE 2004 winner Tier One. They successfully launched a reusable spacecraft that left the Earth's atmosphere twice in two weeks. The prize was \$10m.

However, there are dangers connected to **blue-sky thinking**. "You don't want to be creating a challenge prize which incentivises people to solve a problem where there is no demand," says Tris Dyson, executive director of challenge prizes at Nesta, a UK-based innovation foundation. This happened in 1979 where a Kremer prize of £100,000 was

claimed by the first person to fly under human power across the English Channel. Despite its successful completion, it has not led to the adoption of human-powered flight as a form of travel. And of course, there are those who invest their personal time and money only to see no return at all: someone else claims the prize, or they find that the reward does not match the resources they invested.

The pros and cons of challenge prizes affect both problem-setters and **problem-solvers**. But they don't seem to be going out of style anytime soon. To many, the challenge to innovate, the lure of the prize and the prestige of being first is too much to resist. And there's no solution for that.

词汇表

| | |
|------------------------------|-------------------|
| come up with | 想出，提出 |
| solution | 解决办法 |
| spur innovation | 激发创新 |
| concept | 概念 |
| innovate | 创新（解决方案） |
| solve | 解决 |
| think outside the box | 以新眼光看问题，跳出传统的思维框框 |
| tunnel vision | 视野狭隘，井底之蛙 |
| think tank | 智囊团 |
| lateral thinking | 横向思维 |
| throw up issues | 抛出问题 |
| overlook | 忽略，忽视 |
| invention | 创造，发明 |
| conceive | 构想出 |
| blue-sky thinking | “蓝天思考”，不着边际的想法 |
| problem-solver | 善于解决问题的人 |

测验与练习

1. 阅读课文并回答问题。

1. What is the basic idea behind a challenge prize?
 2. According to Marcus Shingles, what can be the problem with 'experts'?
 3. True or false: *Challenge prizes have become popular only recently.*
 4. According to Tris Dyson, what is the danger of challenge prizes?
 5. Which word in the text means 'not planned or prepared'?
2. 请在不参考课文的情况下完成下列练习。选择一个意思合适的单词填入句子的空格处。

1. It's a good idea but I don't think it will be cost-effective to make so we all need to _____ and come up with a new plan.

| | | | |
|-------------------|-----------------------|------------------|---------------|
| thinking blue-sky | think outside the box | lateral thinking | tunnel vision |
|-------------------|-----------------------|------------------|---------------|

2. You have 30 minutes to _____ the answer. You may begin your exam, now.

| | | | |
|------------|---------|----------|--------------|
| innovation | concept | overlook | come up with |
|------------|---------|----------|--------------|

3. Abstract _____ such as family, freedom and duty vary from culture to culture.

| | | | |
|----------|------------|-------------|----------------|
| concepts | inventions | innovations | problem-solver |
|----------|------------|-------------|----------------|

4. It was only once we had implemented the solution that it _____ we hadn't anticipated.

| | | | |
|--------------------|-----------------|-----------|------------|
| spurred innovation | threw up issues | conceived | overlooked |
|--------------------|-----------------|-----------|------------|

5. It was only once we had implemented the solution that raised difficulties we had _____.

| | | | |
|----------|------------|--------|-----------|
| invented | overlooked | solved | conceived |
|----------|------------|--------|-----------|

答案

1. 阅读课文并回答问题。

1. What is the basic idea behind a challenge prize?

You offer a problem up to everyone who believes they can solve it and present the first to do so with a prize.

2. According to Marcus Shingles, what can be the problem with 'experts'?

The experts are usually the ones who say that there is no solution to a problem or that it can't be done.

3. True or false: *Challenge prizes have become popular only recently.*

False. Challenge prizes were most popular during the 18th and 19th centuries, but have received renewed interest more recently.

4. According to Tris Dyson, what is the danger of challenge prizes?

According to Tris Dyson, creating a challenge prize which incentivises people to solve a problem where there is no demand.

5. Which word in the text means 'not planned or prepared'?

Impromptu. (The crowd acts like an impromptu think tank.)

2. 请在不参考课文的情况下完成下列练习。选择一个意思合适的单词填入句子的空格处。

1. It's a good idea but I don't think it will be cost-effective to make so we all need to **think outside the box** and come up with a new plan.

2. You have 30 minutes to **come up with** the answer. You may begin your exam, now.

3. Abstract **concepts** such as family, freedom and duty vary from culture to culture.

4. It was only once we had implemented the solution that it **threw up issues** we hadn't anticipated.

5. It was only once we had implemented the solution that raised difficulties we had **overlooked**.