

## 2018: A crucial year for China

The year 2018 is of special significance to China because it marks the 40th anniversary of the Reform and Opening-Up, and the fifth year since the Belt and Road Initiative started.

If the momentous economic changes that have taken place in this great East-Asian country over the last few decades were presented in motion pictures, they would appear as epic and magnificent. But what matters the most, and is really behind all of the country's recent prosperity, is the formation of a set of theories with uniquely Chinese characteristics. Because of these theories, China found that it no longer needed to blindly follow the so-called "truths" that underlie the patterns of development in other countries. The country has proved by its actions that the path it's walking on is the right one, and this path has become the driving force for its high-speed growth and the motivation for the Belt and Road.

As of July 2018, more than 100 countries and international organizations have signed agreements with China to work on the Belt and Road Initiative—countries ranging from Eurasia to Africa, Latin America, the Caribbean, and the South Pacific. And now the basic design of the Belt and Road has been completed, and all its supporting pillars have been built: The project has been included in the international discourse system and written into resolutions of the United Nations General Assembly and the United Nations Security Council. A three-part structure of international cooperation has emerged, which is (1) based on bilateral cooperation, (2) supported by a multilateral mechanism, and (3) led by summit forums. Under the Belt and Road, and based on the principles of equality, openness, and benefit-for-all, China has formed an open international system in which countries can work together toward their goals. It can be said that the domestic and international achievements represented by both the 40 years of the Reform and Opening-Up and the five years of the Belt and Road have rested on these same principles of cooperation and on a win-win spirit.

Of course, the economy isn't the only thing that has changed in China. Along with economic developments, significant evolution has occurred in the country's educational system.



Shixin Wang
Deputy Chief Editor of
China Education Online,
Chief Executive Editor of
AcaBridge

## The academic explosion in China

According to a recent report from Bloomberg News, Qingnan Xie of the Nanjing University of Science and Technology and Richard B. Freeman of Harvard University analyzed the total number of papers published in scientific fields from 2000 to 2016 in China. The research showed that, in the fields of physics, engineering, and mathematics, the proportion of papers published by Chinese scholars grew fourfold during this period. In 2016, this number exceeded the number of papers published by American authors. And when selecting Chinese authors rather than going by which country a paper was published in, the number rose even higher. More than 30% of all papers published in the fields of physics, engineering, and mathematics were written by Chinese scientists.

Before the research of Xie and Greenberg was completed, Science and Engineering Indicators 2018, released by the U.S. National Science Foundation at the beginning of this year, showed that 426,000 science and engineering papers were published in China during 2016, more than the 409,000 papers published in the United States during the same year.

China is catching up with the United States at an amazing speed, not only in terms of the number of scientific papers published, but also in terms of their quality. Papers published in 82 top science and technology journals were analyzed, and the result was published by the Nature Index (of Nature magazine). It shows that China has overtaken Europe, Japan, and South Korea and become second only to the United States, which ranks first. "Judging by the current trend, it's likely that China will replace the United States in terms of the quality of papers after seven to eight years, in around 2025," Nature predicted. Xie and Free-