

Using the Lowy Institute Asia Power Index to Teach Social Science

A Plan for a Facilitated Discussion

By Paige Tan

The Lowy Institute, one of Australia's most well-regarded think tanks, released its second annual Asia Power Index in May 2019 (available at <https://power.lowyinstitute.org>). High school and college educators can use this resource to get students doing hands-on explorations of Asian political, military, economic, and diplomatic power using data. Students can learn about Asia while enhancing their data literacy and critical-thinking skills. This essay provides a plan for an interactive discussion with students using the Asia Power Index. In the session, students will be interacting with the instructor and peers in a full-class session, working in small groups, and exploring a data-filled website.

The Asia Power Index

The index defines Asia as stretching from Pakistan to Japan west to east and Russia to New Zealand north to south, and encompassing twenty-five significant countries. The Asia Power Index attempts to measure the states' power as the "capacity to influence regional events."¹

Often, analysts looking at power only consider a country's resources: how big the country's military is, how many ships and planes it has, and the size of its economy. The Lowy Asia Power Index attempts to marry an understanding of a state's resources, its capacity to do something, with other measures, also based on data. The intent is to capture a state's effectiveness in using the strengths it has to influence others. So, on capabilities, the Asia Power Index examines a country's economic resources, military capability, resilience ("the capacity to resist real or potential threats to stability"), and future resources (understanding of future resources that influence perceptions of a state now). On ability to influence others, the index adds a country's economic relationships (depth of trade and investment relationships), cultural influence ("the ability to shape international public opinion through cultural appeal and interaction"), diplomatic influence, and defense networks (relationships with allies and others in the defense field).

Using these measures of capacity and influence, the Director of the Asia Power Index, Hervé Lemahieu, and his team defined submeasures and indicators. They then populated the database with figures for all the twenty-five countries in all areas. They also defined a weighting system to factor in their analysis of the relative importance of the categories in a country's overall power. After this massive data exercise, the institute came up with an overall ranking of Asian countries' power. There are also rankings of the region's countries by each measure and submeasure.

Using the Index to Explore Asian Power with Students

The Asia Power Index is an excellent tool to help students understand how to measure seemingly amorphous social-political-economic concepts like *power* with real data, as well as the inherent problems in doing so. With the students, start with a context: Many people believe power in the world is moving toward Asia. Many believe China is already the most powerful country in the world. Ask students: what is power? (the ability to get others to do what you want, or to influence events, in the index's terms). Ask them: What are the most powerful countries in Asia? Continue with: How do we know those countries are powerful? By this point, educators will probably be hearing from students about countries' military capacity and economic size, maybe total population or diplomatic strength.

Focus the discussion by getting students to consider how we could measure power so that we could compare one country to another. It might be best to put students in small groups for this part of the exercise. Guide

the students to dig into each of the power concepts they've identified. So if they think military force makes a country powerful, ask students how to measure a country's military power. Ask them to think about how you could compare one country's military force to that of another. Number of troops is a part of the answer; so is military spending (the Lowy Asia Power Index uses both). Get students thinking about what else might matter in understanding a country's power. Insightful students may already start thinking about the weaknesses of some measures (I'll discuss this more later). Focus students at this point on generating creative variables; so on military force, students might think of the percentage of citizens under arms, popular support of the military, or number of nuclear weapons. Don't let students worry at this point if numbers for these variables aren't readily available. It might work well to set different student teams thinking about how to measure different facets of power: military, diplomatic, economic, for example, so they can dig deep in one area instead of surface exploration of several topics.

After a good discussion of students' ideas about which are the most powerful countries in Asia and what goes in to making up a country's power and how we might measure power, allow the students to see the Lowy Institute Asia Power Index. Demonstrate the functionality of the website on a screen everyone can see. Show students the overall rankings, the map version of the index, and the ability to show rankings based on each of the thematic measures. Exhibit how to delve into each measure, submeasure, and indicator for a country (click on any country from the main map page, then go down the web page expanding the measures and submeasures with clicks to see more data as you go). Then, let the students explore the website on their own devices, if available. If individual devices aren't available, ask students to tell you what to explore on the big screen to understand Asian power: what countries and measures do they want to see? Let their curiosity drive the exploration. Remind students that you're interested in knowing what are the most powerful countries in Asia and why. They should also think critically about how the index measures power.

After the students have finished some free exploration of the website or you have explored together, go back to your consideration of the countries' power again. Did the exploration of the data and rankings change students' minds at all about which countries are most powerful in Asia? How so? The discussion at this stage should be much better informed. The first time around, you were probably dealing with big concepts: military, diplomacy, and economy. Now, you can probe further. What about a military makes a country powerful? What about the economy makes one country more powerful than another? What about diplomacy or defense networks? (If students seem to have explored only the surface level of the website, work in depth on one country looking at one measure. Choose China, then economic resources. Click in further to see all the submeasures and indicators at play.) Did any of the creative measures the students came up with in their brainstorming at the beginning show up in the Asia Power Index submeasures or indicators? How do students feel about the indicators they came up with versus the ones in use by the index? How do they feel about the way the index is trying to measure power?

This would be a good time to bring in the country comparison feature of the website. Comparing number 16-ranked North Korea with number 6-ranked South Korea should encourage students to think critically. How

does power compare? South Korea ranks sixth based on high scores for economic resources and relationships, defense networks, diplomatic influence, and cultural influence. North Korea finishes last in some categories: economic relationships, for example. North Korea's military capability is ranked one below South Korea's. But North Korea has nuclear weapons, and South Korea doesn't. Ask students to critically evaluate the way the index handles the power of the two countries. Do North Korea's nuclear weapons trump South Korea's more comprehensive national power? And what does our answer to this question say about the index's way of understanding power?

The downloadable "Pocket Book" (link at the bottom of the main page of the website) also gives detailed figures on the thematic measures and submeasures. Get students to explore critically the measures of economic power. Economic size is measured through gross domestic product (GDP). What can overall GDP size tell us about national power? (Economic power can undergird the wherewithal to build an effective military, for instance.) How is it limited? (It doesn't tell us anything about how that economic pie is distributed or how much of it the government controls.) With the print-out format of the "Pocket Book," students can see that the US has ten times more Nobel Prizes than China over the last twenty-eight years, but China has two times as many supercomputers and almost three times as much power generated from renewables than the US. What will that all mean for the future?

As you guide the discussion of Asian power, bring in to the conversation the conclusions provided by the index website and the Lowy Institute team.² I'll summarize a few here: In the overall ranking of Asian power, the US is still the number 1 power in Asia, but it is declining while China is rising. The US leads in military capability, resilience, defense networks, and cultural influence. It is number 2 in economic resources, future resources, and economic relationships. The US drops to third place in diplomatic influence. (Clicking on each of the thematic areas on the top of the main page will get you a ranking of powers in that one dimension visible in the left column.)

The Lowy team classes the US and China as "superpowers," with Japan and India following behind as "major powers."³ Rather than a top four, though, there are two dyads with the US and China close in power and then a long drop before Japan and India, also competitive. Singapore is ranked as the most powerful Southeast Asian country, interesting and surprising given the country's small size and population. North Korea has "played a weak hand very well," improving its score and ranking in 2019.⁴ Lemahieu and his team believe summits with President Donald Trump gave Kim Jong Un increasing visibility and legitimacy.⁵

If you're lucky, as the discussion progresses, a sharp student will have taken issue with some aspect of the construction of the index. That will lead you to the next stage of the discussion. Talk to students about how to construct an index to measure a concept like power. There are many judgment calls to be made. What countries are to be included? Is the US truly an



Source: Screen capture from the Asia Power website at <https://power.lowyinstitute.org/>.

Asian power? As we examine measures, under cultural influence, an indicator used is the regional diaspora of people from the country. This makes intuitive sense. "Your" people are in other countries and might be friendly to your interests in politics, economics, and security. But is this always the case? Chinese abroad have sometimes been a boon to China (many overseas Chinese invested in China after the country opened up its economy in 1978). Sometimes, though, as during the Cold War, overseas Chinese have been strongly anti-Communist and thus anti-China (see Chinese Singapore's vigilant anti-Communism before the 1990s). Likewise with using tourist arrivals as a measure of the cultural influence or attractiveness of your country, there is something to this measure. It makes intuitive sense. Why would people come to your country if they weren't attracted to it in some way? But do tourist arrivals really translate into something concrete that you can use to make your country more powerful, to make others do what you want them to? For example, are those tourists going to fly home and impel their home governments to be friendlier to your country?

Students who are thinking critically will also think about the meaning of different variables. Yes, military expenditure is important in understanding relative military power. The US spends the most on defense and is still currently the world's most formidable military power, but the US spends large amounts of its military dollars on salaries for its soldiers. However, just because American soldiers cost more than China's does not mean that China's soldiers will be proportionally less lethal. Also, what if in the next conflict, space weapons or cyberattacks are decisive rather than the aircraft carriers, next-generation fighters, MRAP vehicles, or Trident II missiles on which the US has spent billions? Does that US defense dollar figure help you understand a future war fought in the cyber domain? (Cyber represents just a small part of the index: it is just one of six indicators under one of the five submeasures for the measure of military capability.) Draw a lesson with the students that the index must be applied using our own knowledge, judgment, and foresight.



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The issue of how to measure raises a problem that only the brightest students may see on their own. In the construction of indices like this, sometimes we measure what we can count, what we can find data for, rather than what might in a more nuanced but harder-to-measure way help us understand the concept. So one of the indicators under cultural influence is number of tourist arrivals. Tourist arrivals are eminently countable, but, as alluded to above, can we be sure that they link empirically to real influence of the recipient country? Ask students to look for other indicators that might be in the index because they are countable rather than because they are the most apt measure for a particular phenomenon. What might be alternatives, even if they are more difficult to quantify? (This isn't to diminish the index. This problem just comes with the territory when constructing an index. Students should be made aware, thus enhancing their data literacy.)

How about the weightings given to each of the thematic measures? In a superb feature, the Asia Power Index makes these weighting calculations explicit to the user. Ask students to play with the weighting calculator section of the website (find it in the topmost bar on the main page). In this area, students can change the weightings given to different measures to see how that affects the overall rankings. So if you have a student who believes only military force should count in the calculation of power, she or he can weight that much more strongly and observe how that changes the countries' relative rankings.

Comparing This Index to Others; Constructing Students' Own Index

You can conclude this exploration of the index by showing the students other important indices that we use to measure concepts in political science, sociology, and economics. The Dow Jones Industrial Average is one example of an index students probably hear or see often on the news. It is a snapshot picture of the overall health of the stock market. Transparency International's Corruption Perceptions Index often gets a mention in the news as well, with the last-placed country proclaimed the "most corrupt in the world."⁶ In development, the gold standard of indices is the United Nations Development Program's Human Development Index (HDI), which uses health, education, and standard of living data to approximate citizen well-being. See the UNDP website for concise information on how the HDI is built.⁷ Draw a lesson with students from the evolution of the HDI. Traditionally, economic policy aimed to grow the economy, and it was assumed that would automatically lead people to be more affluent. But, after many years, some development economists rebelled. Economist Mahbub ul-Haq and others created the Human Development Index to shine a light on more meaningful data about human well-being: outcomes in health, education, and income. A lesson for students is that the way we understand a phenomenon often guides our policy efforts. So if we aim for economic growth, we'll measure growth, and we'll put in place policies favoring growth. If we aim to concretely make people better off, we can design our policies to achieve that goal. A good question for students about these goals is whether or not they are always mutually exclusive.

A follow-up assignment to the in-class exercise discussed in this essay could be to have students construct a simple index on something of interest to them. This could be done with a small selection of countries, a few variables, and a weighting on an Excel spreadsheet. The World Economic Forum has a Global Gender Gap Index that might inspire some students.⁸

Further Lesson Ideas

Above, I've created a plan for a discussion of the Asia Power Index in a social science class. For classes focused specifically on history or international relations, an educator could build a critical discussion of what makes a country powerful today, comparing and contrasting the past. The instructor could use the power transition theory to talk about the passage

of power from one global hegemon to another in history and compare that to contemporary geopolitics.⁹ Is China going to surpass the United States? What does that mean for the global order? What does it mean for the United States's well-being? As the Asia Power Index continues to develop annually (the *Key Findings Report* suggests that is the plan), I hope it will also become a rich resource to explore changes in power in the region over time.¹⁰

For a college-level class in international relations, public policy, or leadership, consider asking students to pretend they are political leaders in different Asian countries. Realist international relations theory tells us that countries seek to enhance their power.¹¹ How could leaders use the Asia Power Index to improve their overall stock of national power? This should get students to think about the index in a prescriptive fashion. The areas of weakness the index identifies for countries might be areas they could focus on to enhance their power. From the index, for example, we see that China comes out ninth in defense networks. In contrast, the US's strong showing in formal defense relationships with regional allies buttresses its status as the region's number 1 power. If you put yourself in the shoes of China's paramount leader Xi Jinping, should China invest more in building regional alliances? Think about how that fits with China's historical foreign policy stances and China's current needs/plans. Would allies add to China's power? Is drawing allies closer to China feasible? In what other areas could China act strategically to enhance its power? How could you make choices among different areas of investment? Remember, in the real world, resources are finite.

Conclusion

For educators, the Asia Power Index offers a highly usable interface and quality data. The measures, submeasures, and indicators are conceptualized well. Through a guided exploration of the index and discussion, students can enhance their knowledge of the power dynamics of the Asian region, as well as their literacy in understanding data and thinking critically about how to compare nations. ■

NOTES

1. Hervé Lemahieu, *Lowy Institute Asia Power Index Key Findings Report 2019* (Lowy Institute, 2019).
2. *Ibid.*, 5.
3. Hervé Lemahieu, "Five Big Takeaways from the 2019 Asia Power Index," *The Lowy Interpreter*, May 29, 2019, <https://tinyurl.com/y3e7amnm>.
4. Nick O'Malley, "New World Order: How Jacinda Ardern Elevated New Zealand's Influence," *Sydney Morning Herald*, May 29, 2019, <https://tinyurl.com/yy5y9o8l>.
5. Lemahieu, *Lowy Institute Asia Power Index Key Findings Report 2019*, 5.
6. Transparency International, "Corruption Perceptions Index 2018," accessed November 13, 2019, <https://tinyurl.com/y3ua3ozy>.
7. UNDP, "UNDP's Human Development Index," accessed November 13, 2019, <https://tinyurl.com/nzpwvow>.
8. World Economic Forum, "Global Gender Gap Report 2018, Geneva, Switzerland: 2018," accessed November 13, 2019, <https://tinyurl.com/y29gg499>.
9. AFK Organski, *World Politics* (New York: Knopf, 1958).
10. Lemahieu, *Lowy Institute Asia Power Index Key Findings Report 2019*.
11. Hans Morgenthau, *Politics Among Nations*, 6th ed. (New York: Knopf, 1985).

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