令和7年度入学試験問題

英語

（教員養成課程）

注意事項

1 試験開始の合図があるまでは，この問題冊子を開かないこと。
2 問題冊子は表紙を含むページ番号1から9です。
3 解答用紙は5枚です。
4 解答は指定された解答用紙に記入すること。
5 受験番号はすべての解答用紙の指定欄に記入すること。
6 解答は横書きとし，指定された字数にまとめること。
7 解答用紙のみを提出し，問題冊子は試験終了後，持ち帰ること。**なお，いかなる理由があっても解答用紙以外は受理しません。**
8 試験中に問題冊子の印刷不鮮明，ページの落丁・乱丁および解答用紙の汚れ等により交換を必要とする場合は，手を挙げて監督者に知らせること。

1 Read the following passage and answer the questions below. (47 点)

[1] It might feel like the easy solution — just replace your gas-guzzling vehicle with an electric vehicle (EV), and if everyone does that, eventually we'll solve climate change. You can see why California regulators decided that by 2035, all new cars sold in the state must be electric. After all, car exhaust is the single biggest source of greenhouse gas emissions in California, so surely switching gas-powered cars to electric ones will have a big impact in fighting climate change.

[2] Except it doesn't. First, electric cars still pollute. They don't have tailpipe emissions, but the process of producing and transporting them creates pollution. According to the International Energy Agency, the average gas-powered car will create 41.9 tons of CO_2 emissions from the point it's manufactured until it's retired, in contrast to 21.1 tons of CO_2 from an EV. In other words, while the average EV will pollute about 50% less compared with a gas-powered car, it's still highly polluting.

[3] The second issue is power capacity. During the first week in September 2022, California faced a historic heat wave, and alerts were issued asking EV owners to not charge their vehicles during peak times. And this is at a time when only 1.9% of cars operating in California are EVs. What happens when that number is 5%? Or 20%? Without a dramatic increase in power production from clean sources, it won't be possible to supply power to all the EVs without ramping up the use of coal and natural gas for electricity generation, increasing emissions from fossil fuels.

[4] There are some bottom lines that are true whether cars are powered by fossil fuels or electricity:

> Electric cars are just as dangerous for people outside the car: if you get hit by a 9,000-pound electric Hummer or a 7,000-pound gas Hummer, you're dead either way. EVs are just as dangerous for pedestrians and cyclists as their gas-powered cousins, and rushing to adopt them without changing the way we use space on our streets is a recipe for a continued upward trend of pedestrian, cyclist and driver deaths.

[5] Electric cars take up the same amount of space as gas-powered cars; even if we could wave a wand and convert every car on the road today to an EV, traffic would still be miserable, and the demand for driving and parking space would continue to suck the lifeblood out of our cities.

[6] Additionally, car-based infrastructure is very expensive. In 1982, President Reagan signed a law that allocated 80% of the Highway Trust Fund to highways, and 20% to public transportation. This means the country built and maintains an extraordinarily expensive roadway network at the expense of quality high-speed trains and investments in other non-car infrastructure. In 2019, we spent $203 billion nationwide on highways and roads, and that amount is low compared to what is needed. (The Highway Trust Fund doesn't actually cover all the maintenance costs of highways, and we haven't raised the federal gas tax since 1993.)

[7] If all cars were electric, we would still spend a disproportionate amount of money building and maintaining car infrastructure, with little left over to build world-class high-speed rail, bus or bike infrastructure inside and between our cities. And because EVs typically weigh more than their gas-powered counterparts, and heavier

vehicles wear down the road faster, we will need to spend even more money on maintenance over the long term.

[8] Electric cars aren't a complete solution to climate change. They can be part of the answer, but a singular focus on electric cars prevents us from seeing so many other practical ideas. We need a future with fewer cars (electric or not) and much more public transit and bike usage. We need a complete rethink of how we use our public space, and better infrastructure so people can take short trips without using a car.

[9] There are no shortcuts to solving climate change. We shouldn't assume that once every gas-powered car is replaced with an electric one, we'll solve the problem — because we won't. We should instead put our energy into redoing how we use our road space, to truly curb pollution and needless death and bring life back into our cities.

Schneider, M. (2022, September 15). Think bigger. Switching to electric cars isn't enough. *Los Angeles Times*. https://www.latimes.com/opinion/story/2022-09-15/california-electric-vehicles-pollution-traffic-deaths

一部改変

Notes

*Hummer: アメリカのゼネラルモーターズ社の自動車

*curb: 抑制する

1. Select the best answer for each of the following items.

(1) What is one thing mentioned in paragraph [1]?

A. Both gas-powered vehicles and electric vehicles are essential in tackling climate change.

B. California made a law prohibiting the sale of new gas-powered cars after 2035.

C. Car exhaust is not a significant cause of greenhouse gas emissions in California.

D. Car manufacturers proposed the new regulation to reduce emissions from cars.

(2) According to paragraph [2], which is true about the report of the International Energy Agency?

A. A gas-powered car will produce half as many emissions as an electric one throughout its life cycle.

B. A gas-powered car will result in about twice as many CO_2 emissions as an electric vehicle.

C. An electric car will generate about 20 tons of CO_2 emissions when it is recycled.

D. An electric car will not cause pollution unlike a gas-powered one when it is manufactured.

(3) According to paragraph [3], which is true?

A. California will stop depending on fossil fuels such as coal and natural gas to generate electricity.

B. One in five cars operating in California were electric cars when the extreme heat wave hit there.

C. Owners were asked to limit charging their electric vehicles during the heat wave.

D. Power supply problems will be solved when more and more people switch to electric vehicles.

(4) Which of the following is NOT mentioned as a problem for electric and gas-powered cars in paragraphs [4] and [5]?

A. Bad driving behavior during rush hour

B. Heavy traffic on the road

C. Limited space for parking

D. Serious danger to people on the street

(5) According to paragraph [6], which is true?

A. The large amount of money spent in 2019 was not sufficient to maintain the car infrastructure.

B. The law passed in 1982 promoted the increased use of electric vehicles.

C. The quality of public transportation is high because a great deal of money was spent on roadways.

D. The tax put on gas has not changed because the money spent on highways was adequate.

2. According to paragraph [7], what is the disadvantage of EVs compared to gas-powered vehicles? Answer in 80 or less Japanese characters.

3. According to paragraph [8], what should the future of transportation be? Answer in 60 or less Japanese characters.

2 次の英文を読み，設問に答えよ。(63点)

Common sense suggests that public school children will do better in smaller classes than in larger classes. Smaller class sizes provide the opportunity for personal attention and additional instructional help when necessary. Yet, whether smaller class sizes boost academic achievement has been examined in numerous studies with mixed results. (a)This article examines how class size affects academic performance, where smaller class sizes can have the greatest impact, and how some critics question the benefits and cost-effectiveness of class size reduction.

The STAR (Student-Teacher Achievement Ratio) project is a well-known study of a class size reduction program in Tennessee. The study was conducted with a controlled group of 10,000 students. Classes of 22 through 26 were reduced to 13 through 17 students. In addition, the schools in the study had an adequate number of quality teachers and adequate classroom space. The project found that smaller classes resulted in substantial increases in the academic performance of children in primary grades, particularly for poor and minority children. (b)The benefits of smaller classrooms depend on a teacher-student ratio of around 1 to 15 through 18. Reducing class size from, for example, 28 to 25 students shows no significant advantage.

Another survey, which reported results in January 2014, was conducted by the School Improvement Network. This survey involved more than 5,000 educators across the U.S., representing rural, urban and suburban schools. Nearly two-thirds of the educators involved in this survey thought class size had a direct impact on student achievement. Unfortunately, even more respondents said that class sizes have increased over the past three years. (c)The biggest disadvantage with larger classes has been the loss of one-on-one interaction between the teacher and student, these educators stated.

Some have investigated whether hiring a teacher's assistant in a larger classroom can be as effective for increasing student performance as reducing the number of students. These studies have shown that having an assistant in the classroom has no positive impact on student achievement or behavior.

(d)Another question investigated in studies is whether smaller classrooms benefit children in the higher grades as well as those in the lower grades. The results of the studies are that small classrooms have the greatest impact in the early grades, especially on underperforming children. Based on these studies, it makes sense to target funds to reduce class size to kindergarten and grades one through three. On the other hand, bad behavior in the classroom by middle and high school students is commonplace and escalating. Because one of the benefits of smaller class size is fewer discipline problems, it would seem that smaller classes would be an advantage in middle and high schools as well as in grade schools. Also, graduation rates, particularly in urban districts, are far too low. It would also seem that a student who is thinking about dropping out or having trouble fulfilling the requirements for graduation would greatly benefit from the additional individual attention from the teacher that smaller classes allow.

One of the benefits emphasized by supporters of smaller class sizes is the flexibility that it affords the teacher to employ different teaching methods. A single teaching method may not be the most effective for all students in the class. A different learning experience can reach students who are not as responsive to the basic method. Also, a variety of teaching methods may make classes less predictable and boring.

The teaching approaches used by teachers with smaller classes were the subject of a recent large study using data from the U.S., England, Hong Kong, and Switzerland. In March 2008, the researchers reported that many teachers do not modify their teaching methods when teaching smaller classes but rather continue using the same approach as they used with larger classes. Thus, (e)<u>only some teachers</u> are taking advantage of what is perceived to be one of the major benefits of smaller classes.

Irrespective of the teaching methods, however, students in the study continued to perform better in the smaller classes. Thus, students may benefit from smaller classes no matter what teaching methods are used by the teachers. Like the earlier studies, the study also found that children in smaller classes were better behaved and concentrated longer than other students. The students in smaller classes also have more direct interactions with the teacher and work more in groups than alone.

Another factor that has been widely mentioned as a consequence of class size reduction is that lower-achieving students benefit most from the smaller class sizes. In March 2008, researchers at Northwestern University reported the results of a study concluding that, contrary to (f)<u>the traditional view</u>, smaller class size improves academic achievement of high-achieving students more than for low achievers. They concluded that smaller classes do not help in closing the achievement gap between higher and lower-performing students. The opposite conclusion was reached in 2005 by researchers at Southern Methodist University, who found that class size reduction from above 20 students to below 20 students increased test scores for students below the median and decreased test scores for those above the median.

(g)<u>Those</u> who oppose making class reduction a priority generally acknowledge that there are benefits from smaller classes, especially for young children. They apply cost-benefit analyses, however, to conclude that the costs for reducing class sizes are too high for what they call the slight benefits. They claim that it would be more cost-effective to focus on reform measures other than class size reduction, such as high academic standards, more challenging curricula, more qualified teachers, and more support for teachers. They also believe that popular (and political) support for class size reduction causes that approach to prevail over other, more effective reforms.

Chen, G. (2023, August 31). Smaller class sizes: Pros and cons. *Public School Review.*
https://www.publicschoolreview.com/blog/smaller-class-sizes-pros-and-cons　一部改変

問１．下線部(a)で検証したいことは何か。80 字以内で答えよ。

問２．下線部(b)はどのような条件で生じるか。30 字以内で答えよ。

問3．下線部(c)とは何か。40字以内で答えよ。

問4．下線部(d)について，少人数クラスがより学年の高い子どもたちに与える利点にはどのようなものがあると考えられているか。70字以内で答えよ。

問5．下線部(e)とはどのような指導をする教師か。30字以内で答えよ。

問6．下線部(f)とは何か。60字以内で答えよ。

問7．下線部(g)は何を示しているか。40字以内で答えよ。

3 Read the following and answer the question below based on the advertisement in 60-80 words.

(50 点)

You work part-time at an electronics store. One day, Minh, a Vietnamese man who lives in Japan, comes to your store and asks you in English for help picking a cell phone plan.

Minh: I want to sign up for a new cell phone plan, but I am not sure which one to pick. I don't make international calls, because I talk to family back in Hanoi using a chat application similar to LINE. I think I use about 4GB/month. I also make short calls for work here in Japan. I don't want to spend a lot of money. Can you tell me about the three plans and explain which one is the best for me and why?

kyokutalk KYOKUTALK キョクトーク	siromo SIROMO シロモ	SATSUmoba SATSUMOBA サツモバ
データ通信：1GB/月	データ通信：5GB/月	データ通信：100GB/月
国内電話：40円/分	国内電話：5分以内無料	国内電話：かけ放題
国際電話：300円/分	国際電話：300円/分	国際電話：200円/分
990円/月	1290円/月	4990円/月

規定の通信料を超えた場合は、通信不能になります。

4 Complete the account below by filling in each blank using two to four words that match the context.

(40 点)

The Stevenson family were world-renowned for their work building roads, bridges, railways, and lighthouses. The family tradition of engineering [A] by Robert Stevenson, born in Glasgow, Scotland, in 1772. His sons and grandchildren helped make shipping safer for everyone.

He built the Bell Rock lighthouse, one of the most amazing feats of 19th century engineering. The Bell Rock is almost invisible on the surface, but sharp rocks stretch for about 600m beneath the surface. Until the lighthouse was built, about six ships sank on the Bell Rock every winter. For centuries people had tried to find ways to warn ships of the danger, but [B]. Most people thought that building a lighthouse on it [C].

However, Robert Stevenson thought it would be possible. Work began in early 1807. Since the Bell Rock is underwater for most of the day, the 60 workers first had to live on a ship anchored nearby. Next, they [D] build a platform above the water, and then [E] on it so they had somewhere to live. The progress was slow because they had to stop on the winter. They only started working on the lighthouse in 1809.

The lighthouse [F] in 1811, four years after work had begun. It was 35m tall, and its light was visible up to 56km away. Since its construction, [G] have hit the rocks there, and everyone was rescued from both ships. The Bell Rock lighthouse is [H] today and is now fully automated. It is one of the Seven Wonders of the Industrial World, and many artists, including J.M.W. Turner, have painted the lighthouse.