2026

AP® Seminar

Free-Response Questions

SEMINAR

Directions:

The AP Seminar Exam has 2 parts: Part A, which contains 3 prompts, and Part B. You can move back and forth between Part A and Part B at any time, but you should manage your time carefully, spending approximately 30 minutes on Part A and approximately 90 minutes on Part B.

Use complete sentences; an outline or bulleted list is not acceptable.

You may use scratch paper for notes and planning, but credit will only be given for responses entered in this application. Text you enter as an annotation will **not** be included as part of your answer. You can go back and forth between questions in this section until time expires. The clock will turn red when 5 minutes remain—**the proctor will not give you any time updates or warnings.**

Note: This exam was originally administered digitally. It is presented here in a format optimized for teacher and student use in the classroom.

PART A
TIME – 30 MINUTES

Read the following passage and then respond to prompts A1, A2, and A3.

A1. Identify the author's argument, main idea, or thesis.

A2. Explain the author's line of reasoning by identifying the claims used to build the argument and the connections between them.

A3. Evaluate the effectiveness of the evidence the author uses to support the claims made in the argument.

"More-Powerful AI Is Coming." Editorial. *Nature*, vol. 636, no. 273, 6 Dec. 2024.

"It is possible that we will have superintelligence in a few thousand days (!); it may take longer, but I'm confident we'll get there."

So wrote Sam Altman, the chief executive of OpenAI, a technology firm based in San Francisco, California, on 23 September. This was less than two weeks after the company behind ChatGPT released o1, its most advanced large language model (LLM) yet. Once confined to the realms of science fiction, the rise of LLMs in the past few years has renewed the relevance of the question of when we might create artificial general intelligence (AGI). Although it lacks a precise definition, AGI broadly refers to an AI system capable of human-level reasoning, generalization, planning and autonomy.

Policymakers everywhere have questions about AGI, including what its benefits and risks will be. These are not easy questions to answer, especially given that much of the work is happening in the private sector, in which studies are not always published openly. But what is clear is that AI companies are laser-focused on giving their systems the whole range of cognitive abilities enjoyed by humans. Companies developing AI models have a strong incentive to maintain the idea that AGI is nigh, to attract interest and therefore investment.

There was a consensus among researchers who spoke to Nature for a News Feature published this week (see Nature 636, 22–25; 2024) that large language models (LLMs), such as o1, Google's Gemini and Claude, made by Anthropic, based in San Francisco, have not yet delivered AGI. And, informed by insights from neuroscience, many say that there are good reasons to think that LLMs never will, and that another technology will be needed for AI to achieve human-level intelligence.

Despite their breadth of ability—from generating computer code to summarizing academic articles and answering mathematics questions—there are fundamental limitations in the way the most powerful LLMs work, which involves essentially devouring a mass of data and using that to predict the next 'token' in a series. That generates plausible answers to a problem, rather than actually solving it.

François Chollet, a software engineer formerly at Google, based in Mountain View, California, and Subbarao Kambhampati, a computer scientist at Arizona State University in Tempe, have tested o1's performance on tasks that require abstract reasoning and planning, and found that it comes up short of AGI. If AGI is to happen, some researchers think that AI systems would need coherent 'world models', or representations of their surroundings that they can use to test hypotheses, reason, plan and generalize knowledge learnt in one domain to potentially limitless other situations.

This is where ideas from neuroscience and cognitive science could propel the next breakthroughs. Yoshua Bengio's team at the University of Montreal, Canada, for example, is exploring alternative AI architectures that would better support the building of coherent world models and the ability to reason using such models.

Some researchers argue that the next breakthroughs in AI might come not from the biggest systems, but from smaller, more-energy-efficient AI. Smarter systems in the future could also require less data to train if they had the ability to decide which aspects of their environment to sample, rather than simply ingesting everything they are fed, says Karl Friston, a theoretical neuroscientist at University College London.

Such work demonstrates that researchers from an array of fields need to be involved in AI development. This will be necessary to verify what systems are truly capable of, ensure that they live up to the technology companies' claims and identify the breakthroughs needed for development. However, right now, accessing the leading AI systems can be difficult for researchers who don't work at the companies that can afford the vast quantity of graphical processing units (GPUs) needed to train the systems (A. Khandelwal et al. Preprint at arXiv, Cornell University; 2024).

To give a sense of the scale of activity, in 2021, US government agencies (excluding the Department of Defense) allocated US$1.5 billion to AI research and development, and the European Commission spends around €1 billion (US$1.05 billion) annually. By contrast, companies worldwide spent more than $340 billion on AI research in 2021 (N. Ahmed et al. Science 379, 884–886; 2023). There are ways that governments could fund AI research on a bigger scale, for example by pooling resources. The Confederation of Laboratories for Artificial Intelligence Research in Europe, a non-profit organization based in The Hague, the Netherlands, has suggested building a 'CERN for AI' that can attract the same level of talent as AI companies do and so create a cutting-edge research environment.

It is hard to predict when AGI might arrive—estimates range from a few years from now to a decade or longer. But more huge advances in AI will certainly happen, and many of them will probably come from industry, considering the scale of investment. To ensure that these advances are beneficial, the research from technology companies needs to be verified using the best current understanding of what constitutes human intelligence, according to neuroscience, cognitive science, social science and other relevant fields. This publicly funded research needs to have a key role in AGI's development.

Humanity needs to bring all knowledge to bear so that applications of AI research are robust and its risks are mitigated as much as possible. Governments, companies, research funders and researchers need to recognize their complementary strengths. If they do not, then insights that could help to improve AI will be missed—and the resulting systems risk being unpredictable and therefore unsafe.

END OF PART A

PART B
TIME – 90 MINUTES

Read the four sources carefully, focusing on a theme or issue that connects them and the different perspective each represents. Then, write a logically organized, well-reasoned, and well-written argument that presents your own perspective on the theme or issue you identified.

You must incorporate at least two of the sources provided and link the claims in your argument to supporting evidence. You may also use the other provided sources or draw upon your own knowledge. In your response, refer to the provided sources as Source A, Source B, Source C, or Source D, or by the author's name.

Write a logically organized, well-reasoned, and well-written argument that presents your own perspective on the theme or issue you identified.

Source A

Frost, Robert. "The Road Not Taken." *The Atlantic Monthly*, Aug. 1915.

Two roads diverged in a yellow wood,
And sorry I could not travel both
And be one traveler, long I stood
And looked down one as far as I could
To where it bent in the undergrowth;

Then took the other, as just as fair,
And having perhaps the better claim
Because it was grassy and wanted wear;
Though as for that the passing there
Had worn them really about the same,

And both that morning equally lay
In leaves no step had trodden black.
Oh, I marked the first for another day!
Yet knowing how way leads on to way,
I doubted if I should ever come back.

I shall be telling this with a sigh
Somewhere ages and ages hence:
Two roads diverged in a wood, and I,
I took the one less traveled by,
And that has made all the difference.

Source B

Agarwal, Anant. "Why Today's Professionals Are Taking the Career Road Less Traveled." *Forbes*, 31 Oct. 2018.

In a world where innovators from Steve Jobs to Vimeo CEO Anjali Sud have legitimized and even glamorized the nonlinear career path, the days of graduating and climbing the corporate ladder at one company for a decade seem like a distant memory. In fact, edX research found that 29% of Americans ages 25 to 44 have completely changed fields since starting their first job post-college.

Zig-zagging is not a phenomenon restricted to new grads, however, and while another study from Deloitte found that 43% of millennials plan to quit their current job within two years, a report from the Federal Bureau of Labor Statistics (BLS) recently cited by JP Morgan Chase & Co. found that job hopping, across all fields and titles, has become a widely accepted characteristic of the modern workforce.

But how did this modern career trajectory come to be, and what does it mean for the future of work? A variety of factors can be attributed to the rise of the nonlinear career path, and professionals should be ready to take advantage of the opportunities it presents.

Reskill And Upskill Without Breaking The Bank

One reason why career paths are less predictable than they used to be can be credited to the crushing debt afflicting millions of college graduates, in concert with the growing presence of affordable opportunities for continued and/or alternative education paths. According to a New America report, the average U.S. student has a median combined $57,600 in debt accrued from undergraduate/graduate study. The same aforementioned edX study found that 39% of respondents say a chief driver of continuous job shifting is the desire for salary increase as they try to meet these hefty loan payments each month. As more universities partner with online learning platforms to offer affordable opportunities to reskill and upskill, it's becoming easier to make significant career changes.

Additionally, a study by McKinsey found that over 375 million workers—or roughly 14% of the global workforce—may be forced to switch occupational categories as digital transformation, automation, and advances in artificial intelligence disrupt the world of work. As careers have become more fragmented and fluid, higher education is responding by developing innovative online learning models to support those who want to hone new skills in developing fields like cybersecurity and data science—without having to pay the $30,000–$120,000 tab or quit work and go on-campus for one or two more years.

These online programs can be as short as a four-week course, all the way up to a two-year, fully online Master's degree. Larissa, an edX learner, is one example. Eager to move out of her current role in sales and into web development, Larissa began the W3C's Front-End Web Developer Professional Certificate program. Upon completing the program, she was able to catapult her new career to new heights—all without breaking the bank or ever taking time off from work.

Another learner, Aditi, chose to pursue online learning options in order to upskill in her current field. Having worked in data security for a few years, she realized that as cyberattacks become more sophisticated, so do the security tools. In order to stay relevant, she took Introduction to Computational Thinking and Data Science from MIT to learn the latest in foundational tools needed on the path to creating the next generation of security tools.

By offering solutions that allow learners at all career stages to reskill and upskill as they embark on new career paths, education providers are inspiring a more passionate, informed, and versatile workforce, and working to close major skills gaps in these new technology-driven fields.

Embrace The Development Of Transferable Skills

Because there's no longer a stigma associated with job hopping, employees have unlimited options when it comes to shaping their own career path. Those who change fields early and often have the opportunity to focus on the development of transferable skills—problem solving, time management and relationship building, to name a few.

In fact, many recruiting professionals say that today, when looking at candidates, transferable skills hold significantly more weight than their academic record or relevant work experience. Employees should leverage modern online programs that offer certifications in skills that are conducive to the kind of professional development that will pay dividends in the age of the anything-but-linear career path, including leadership, team management and more.

Diversify Your Network

Lastly, a major benefit of a nonlinear career path is the expansive professional network that will undoubtedly result from changing fields early and often. By leveraging modern networking tools and attending events and conferences across industries, today's young professionals will be more connected than any generation before them. Further, an employee's prior experience in other industries can inspire a more holistic perspective that they can leverage to be more creative in their new role.

Ultimately, professionals who take advantage of the opportunities afforded by the acceptance and rise of the nonlinear career path will reap the benefits of a more versatile skill set. Affordable and accessible education opens the doors to develop the latest in-demand skills, as well as transferable skills that are valuable and applicable in every job situation. The fluidity of careers also allows for a diverse professional network, which can result in more frequent opportunities. What might you learn by taking the career road less traveled?

Source C

Excerpted from Organisation for Economic Co-operation and Development (OECD). *The State of Global Teenage Career Preparation*. OECD Publishing, 2025.

In PISA[1] 2022, 690,000 students from 81 countries completed assessments on their proficiency in mathematics, reading and science and provided substantial background information about their lives and schools. They responded moreover to questions concerning their career and educational plans, their participation in career development activities, attitudes towards career progression and participation in part-time work....

Within the data on the career preparation of students contained in PISA 2022, some points of information are particularly important. This is because recent analyses of multiple longitudinal datasets from different countries consistently highlight strong statistical relationships between different forms of teenage career development and thinking and better ultimate employment outcomes....

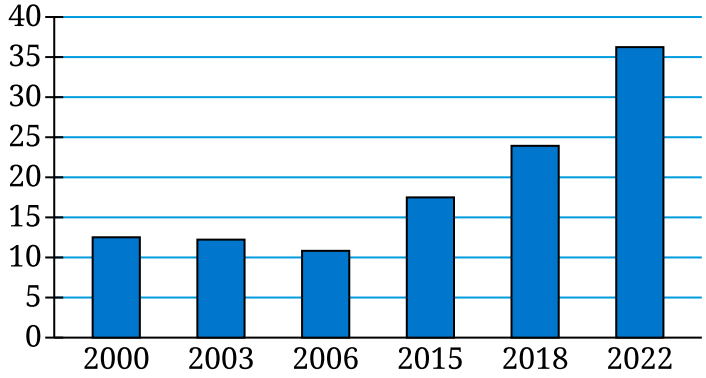
The reason why we launched Dream Jobs...in 2020 during the World Economic Forum was to underline the essential importance of employer engagement in the career development of students. A further important take away from our review of longitudinal datasets is that the career development activities which connect students directly with people in work and workplaces are strongly linked with long-term boosts in employment. Whereas activities such as job fairs, workplace visits, job shadowing and internships cannot take place without the involvement of people in work, other predictors of better outcomes such as student participation in career conversations and Career Pathway programmes, and the development of recruitment skills (CV workshops and interview practice) routinely involve employers and are enhanced by them.

Something special happens when students engage with people in work. It is a form of social capital. Students gain opportunity to access information and advice about the world of work and how it might relate to them individually in ways which are especially trustworthy and relevant. It allows young people to envision new potential futures for themselves and to challenge stereotypical ideas about the sorts of people who are suited for different professions. As the saying goes, if you can't see it, you can't be it. Employer engagement also provides students with chances to develop new relationships of long-term value, leading to recommendations or job offers. Effective guidance demands extensive student engagement with workplaces and people in work....

An important question for schools to ask students around the age of 15 is what type of job they expect to have when they are around 30. Students may be thinking of a few different professions or change their plans over time and this is very reasonable. The important thing is that they are encouraged to begin imagining their futures in work through lower secondary [grades], allowing them time to explore fields of potential interest while they have plenty of time to build an understanding of how the choices they make in education and training can either enable or hinder easy access towards desirable ultimate employment.

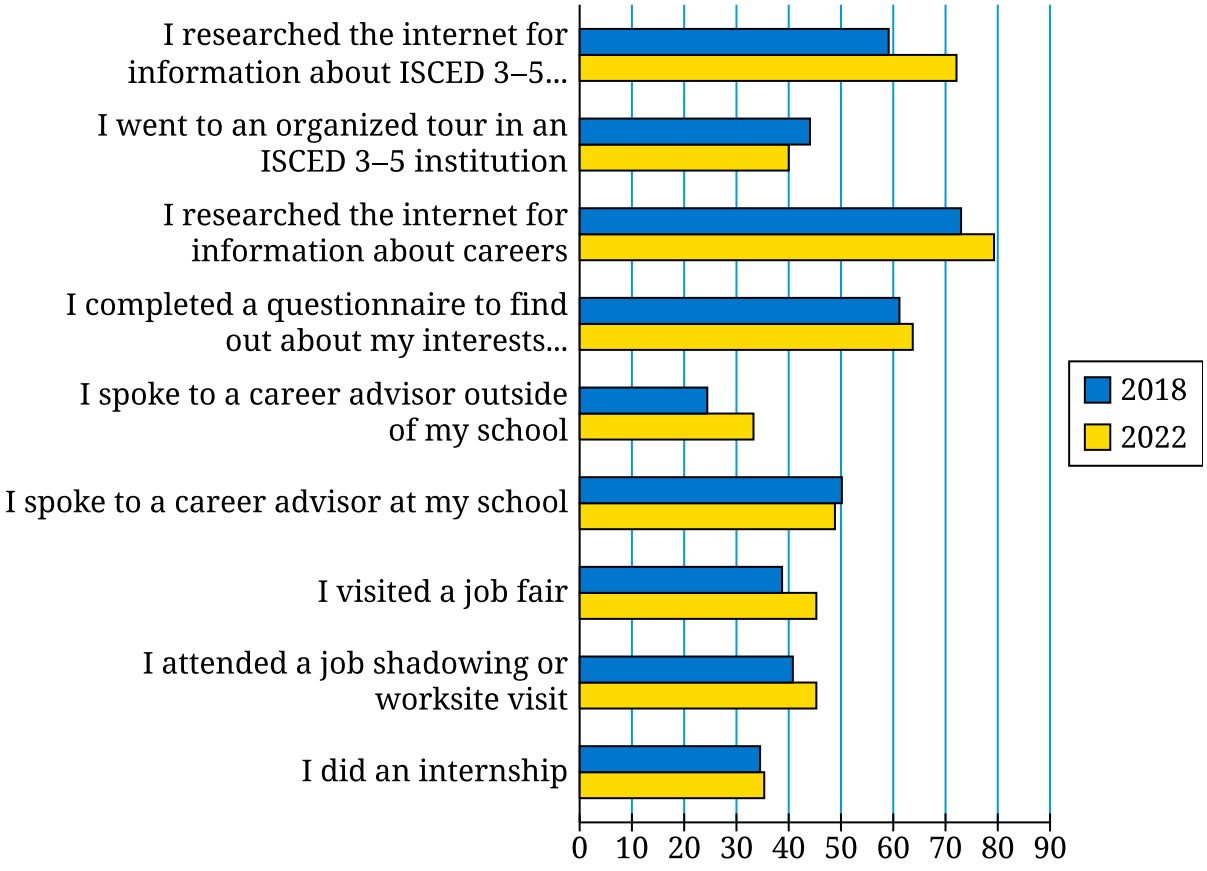
1: PISA is the OECD's Programme for International Student Assessment. PISA measures 15-year-olds" ability to use their reading, mathematics, and science knowledge and skills to meet real-life challenges.

Average rate of teenage career uncertainty [%] within OECD countries participating in all PISA surveys, 2000–2022



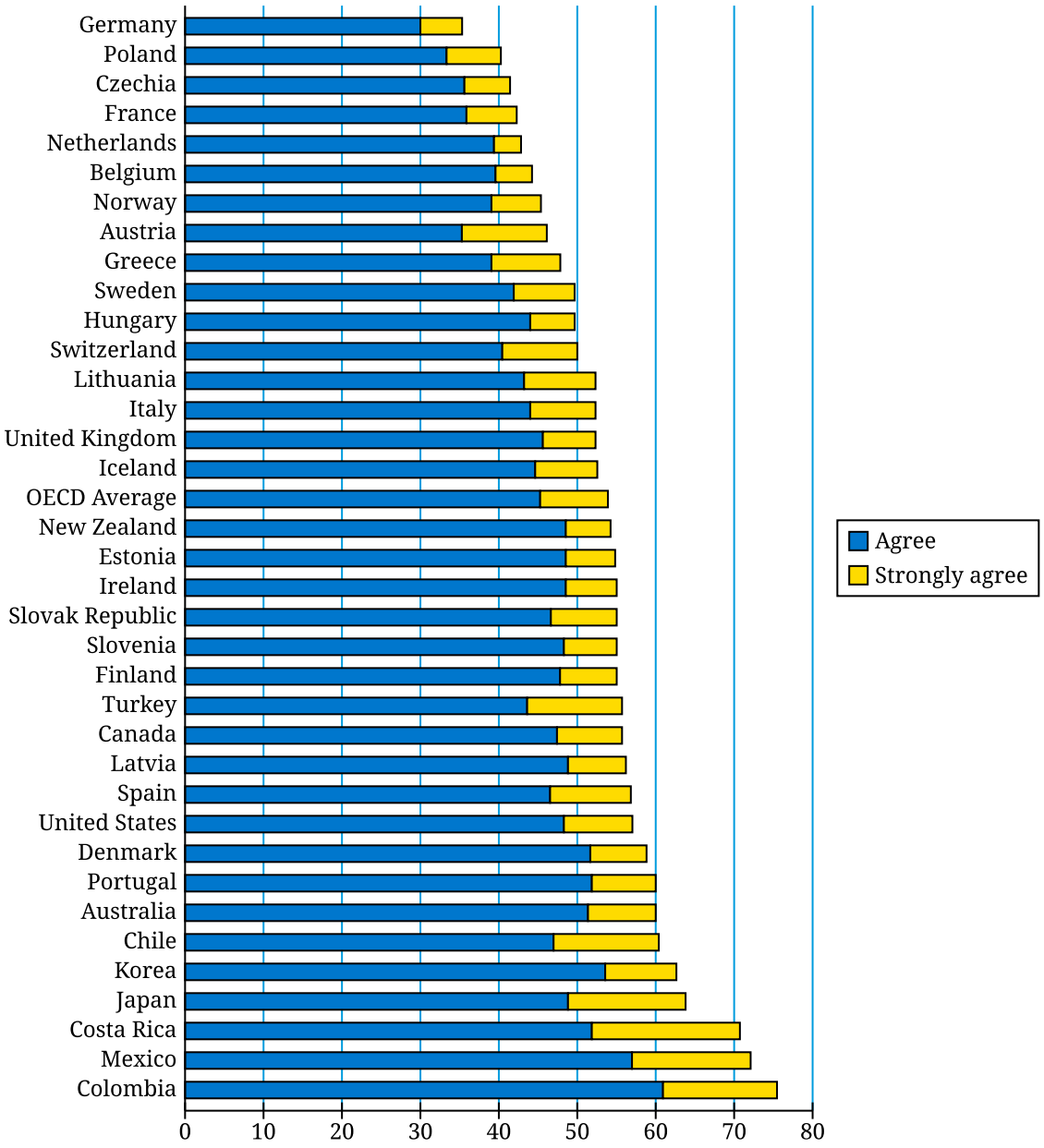
Note. The figure shows the average level of uncertainty among students from countries participating in all PISA surveys asking: 'What kind of job do you expect to have when you are about 30 years old?' This question was not asked in 2009 or 2012.

Student participation in career development activities [%]. Average of all OECD countries providing data in both 2018 and 2022

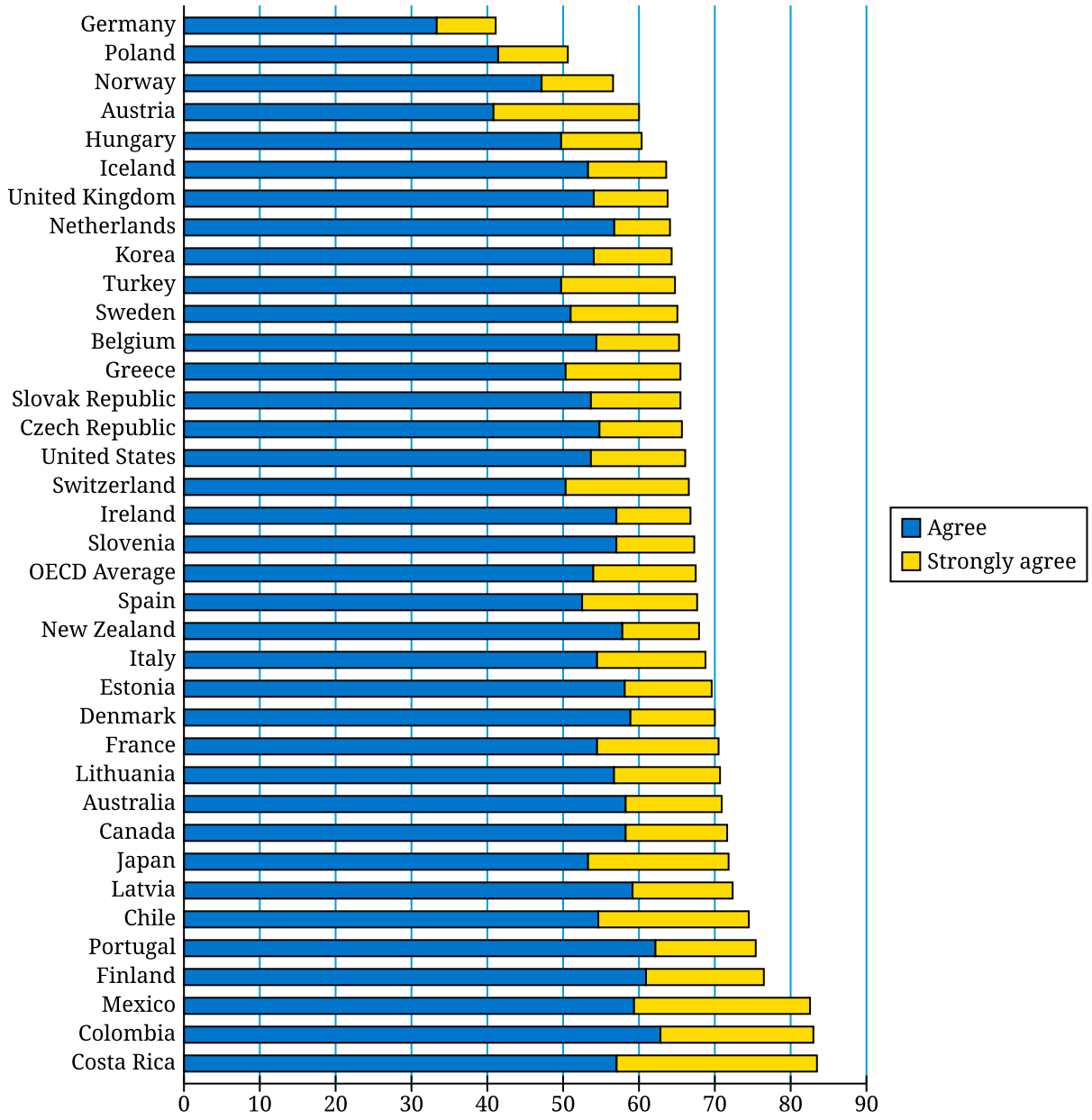


[Note. ISCED refers to the International Standard Classification of Education. Levels 3–5 are equivalent to the years from high school to the first two years of college.]

Percentage of students agreeing with the statement, 'School has helped give me confidence to make decisions'. OECD countries, PISA 2022



Percentage of students agreeing with the statement, 'School has taught me things which could be useful in a job'. OECD countries, PISA 2022



Source D

Bush, Barbara. “Commencement Address to the Wellesley College Class of 1990.” 1 Jun. 1990.

Thank you President Keohane,... and,... the Class of 1990....

In the world that awaits you beyond the shores of Lake Waban, no one can say what your true colors will be. But this I do know: You have a first-class education from a first-class school. And so you need not, probably cannot, live a “paint-by-numbers” life. Decisions are not irrevocable. Choices do come back. And as you set of from Wellesley, I hope that many of you will consider making three very special choices.

The first is to believe in something larger than yourself, to get involved in some of the big ideas of our time. I chose literacy because I honestly believe that if more people could read, write and comprehend, we would be that much closer to solving so many of the problems that plague our nation and our society.

Early on I made another choice which I hope you will make as well. Whether you are talking about education, career or service, you are talking about life— and life really must have joy. It’s supposed to be fun!

One of the reasons I made the most important decision of my life, to marry George Bush, is because he made me laugh. It’s true, sometimes we’ve laughed through our tears, but that shared laughter has been one of our strongest bonds. Find the joy in life, because as Ferris Bueller said on his day off, “Life moves pretty fast. Ya don’t stop and look around once in a while, ya gonna miss it!”...

The third choice that must not be missed is to cherish your human connections: your relationships with family and friends. For several years, you’ve had impressed upon you the importance to your career of dedication and hard work, and, of course, that’s true. But as important as your obligations as a doctor, lawyer or business leader will be, you are a human being first and those human connections—with spouses, with children, with friends—are the most important investments you will ever make.

At the end of your life, you will never regret not having passed one more test, not winning one more verdict or not closing one more deal. You will regret time not spent with a husband, a child, a friend or a parent.

Courtesy George H.W. Bush Presidential Library and Museum

STOP

END OF EXAM