

TEXTO 1

Brazil museum fire: 'incalculable' loss as 200-year-old Rio institution gutted

1 Brazil's oldest and most important historical and scientific museum has been consumed by fire, and
2 much of its archive of 20 million items is believed to have been destroyed.

3 The fire at Rio de Janeiro's 200-year-old National Museum began after it closed to the public on
4 Sunday and raged into the night. There were no reports of injuries, but the loss to Brazilian science, history
5 and culture was incalculable, according to two of its vice-directors.

6 "It was the biggest natural history museum in Latin America. We have invaluable collections.
7 Collections that are over 100 years old," reported Cristiana Serejo, one of the museum's vice-directors.

8 It wasn't immediately clear how the fire began. The museum was part of Rio's Federal University but
9 had fallen into disrepair in recent years. Its impressive collections included items brought to Brazil by Dom
10 Pedro I, Egyptian and Greco-Roman artefacts, "Luzia", a 12,000 year-old skeleton and the oldest in the
11 Americas, fossils, dinosaurs, and a meteorite found in 1784. Some of the archive was stored in another
12 building but much of the collection is believed to have been destroyed.

13 Mércio Gomes, an anthropologist and former president of Brazil's indigenous agency, Fundação
14 Nacional do Índio (FUNAI), compared the loss to the burning of the library of Alexandria in 48BC. "We
15 Brazilians only have 500 years of history. Our National Museum was 200 years old, but that's what we
16 had, and what is lost forever. We have to reconstruct our National Museum."

17 Luiz Duarte, another vice-director, said that governments were to blame for failing to support the
18 museum and letting it fall into disrepair. At its 200th birthday in June, not one state minister appeared.
19 "For many years we had fought with different governments to get adequate resources to preserve what is
20 now completely destroyed," he said. "My feeling is of total dismay and immense anger."

21 At the scene, several indigenous people gathered and criticized the fact that the museum containing
22 their most precious artefacts has burned down seemingly because there was no money for maintenance
23 of hydrants, yet the city had recently managed to find a huge budget to build a brand new museum of
24 tomorrow. Several people outside the gates were clearly distraught and others were blaming the
25 government's austerity policies and corruption.

26 Rio's fire chief Colonel Roberto Robaday said the firefighters did not have enough water at first
27 because two hydrants were dry. "The two nearest hydrants had no supplies," he said. Water trucks were
28 brought in and water used from a nearby lake. "This is an old building," he said, "with a lot of flammable
29 material, lots of wood and the documents and the archive itself."

30 Some Brazilians saw the fire as a metaphor for their country's traumas since it battles terrifying levels
31 of violent crime and the effects of a recession that has left more than 12 million people unemployed.

Adapted from: PHILLIPS, Dom. **Brazil museum fire: 'incalculable' loss as 200-year-old Rio institution gutted.** Available on: <<https://www.theguardian.com/world/2018/sep/03/fire-engulfs-brazil-national-museum-rio>>. Accessed on: September 28th, 2018.B.

AS QUESTÕES DE **1 A 4** SE REFEREM AO **TEXTO 1**.
ASSINALE APENAS **UMA DAS ALTERNATIVAS** NAS QUESTÕES OBJETIVAS.

- 1) Leia as afirmações abaixo e, de acordo com o texto, escreva V para as verdadeiras e F para as falsas.
- I. () O Museu Nacional era considerado o mais importante e antigo museu de história natural e científica do Brasil.
 - II. () As coleções do museu fizeram parte da biblioteca de Alexandria.
 - III. () As causas do incêndio no museu foram apuradas imediatamente.
 - IV. () Há o desejo de que o museu seja reconstruído.
 - V. () O corpo de bombeiros afirma que o incêndio ocorreu, exclusivamente, por se tratar de um prédio antigo.
- 2) O texto afirma que alguns brasileiros veem a tragédia como uma metáfora aos problemas enfrentados pelo país e ainda diz que esses problemas estariam relacionados
- a) aos altos impostos.
 - b) aos índices de violência e desemprego.
 - c) ao uso inadequado de verbas públicas.
 - d) às condições precárias de saneamento.
- 3) O fogo no museu foi substancialmente danoso principalmente pela falta de água nos hidrantes. Transcreva, em português, o trecho que justifica esse fato.

- 4) Traduza para a língua portuguesa o fragmento a seguir, fazendo as adequações linguísticas necessárias.

The fire at Rio de Janeiro's 200-year-old National Museum began after it closed to the public on Sunday and raged into the night. There were no reports of injuries, but the loss to Brazilian science, history and culture was incalculable, according to two of its vice-directors.

"It was the biggest natural history museum in Latin America. We have invaluable collections. Collections that are over 100 years old," reported Cristiana Serejo, one of the museum's vice-directors. (linhas 03 a 07)

TEXTO 2

Viruses killing cancer cells: stimulating an immune response within the cancer microenvironment

1 Using funding from CRUK (Cancer Research UK) and Psioxus Therapeutics, a team of researchers
2 from the University of Oxford led by Professor Len Seymour has recently published a paper in Molecular
3 Therapy Oncolytics.

4 Researchers from the Department of Oncology have been working on creating a therapeutic virus
5 that can be given to cancer patients intravenously. This anti-cancer virus, known as Enadenotucirev, is
6 able to infect and kill cancer cells, while leaving normal cells unharmed. This approach exploits the natural
7 life cycle of the virus, which lyses infected cells in order to release progeny virus particles, allowing the
8 infection to spread from cell to cell through the tumor. The life cycle of some viruses, such as
9 adenoviruses, is intimately dependent on the activities of the cells they infect, and this provides a range
10 of opportunities to engineer viruses that are only active when they encounter the specific environment of
11 a tumor cell.

12 The research in the paper focuses on the unique way that this virus kills cancer cells. By using up all
13 of the cancer cells energy resources the cell loses control of its ion, pumps and swells by forming a blister
14 at its surface. Along with this unusual death pathway (known as 'oncosis'), the cell also displays an
15 increased amount of warning signals at its membrane when killed by the virus. Increased "come eat me"
16 signals create an immune stimulatory environment which, then, is able to activate the body's immune
17 system.

Adapted from: **Viruses killing cancer cells: stimulating an immune response within the cancer microenvironment**. Available on: <<https://www.oncology.ox.ac.uk/article/viruses-killing-cancer-cells-stimulating-immune-response-within-cancer-microenvironment>>. Accessed on: September 28th, 2018.

AS QUESTÕES DE 5 A 8 SE REFEREM AO **TEXTO 2**.
ASSINALE APENAS **UMA DAS ALTERNATIVAS** NAS QUESTÕES OBJETIVAS.

- 5) De acordo com o texto, assinale a alternativa correta no que diz respeito ao vírus anticâncer.
- a) Ele infecta e mata as células cancerígenas, comprometendo também as células saudáveis.
 - b) Ele infecta tanto as células cancerígenas quanto as células saudáveis.
 - c) Ele pode infectar e matar as células cancerígenas sem prejudicar as células saudáveis.
 - d) Ele infecta e mata tanto as células cancerígenas quanto as células saudáveis.
- 6) Com base no texto, leia as afirmações abaixo e escreva V para as verdadeiras e F para as falsas.
- I. () Uma equipe de pesquisadores da Universidade de Oxford, com o auxílio de fundos da CRUK e da Psioxus Therapeutics, publicou um artigo sobre um vírus que mata as células cancerígenas.
 - II. () Pesquisadores do Departamento de Oncologia têm trabalhado na criação de um vírus que pode ser administrado a pacientes com câncer por via oral.
 - III. () O estudo também explora o ciclo de vida de um vírus anticancerígeno e o modo pelo qual ele atua nas células infectadas.
 - IV. () O ciclo de vida de alguns vírus é dependente das atividades das células que eles infectam, oportunizando a projeção de vírus que se ativam apenas em contato com o ambiente de uma célula doente.
 - V. () O vírus anticancerígeno infecta células saudáveis.
- 7) A pesquisa tem foco em um vírus anticancerígeno. Descreva o processo em que o vírus destrói as células cancerígenas.

8) Como ocorre a ativação do sistema imunológico no processo da oncoses?

How to Thrive in the 21st Century

1 Educating a new generation of global citizens prepared to create, collaborate, and navigate the
2 world’s complexities.

3 When Fernando Reimers, a professor of international education at the Harvard Graduate School of
4 Education (HGSE), talks and writes about what he wants children around the world to learn, the
5 conversation runs deep and reaches far. Individual success, he says, increasingly depends upon
6 students’ interpersonal dexterity, creativity, and ability to innovate. And our collective success — our ability
7 to navigate complexities and to build and sustain a peaceful world — also hinges on these kinds of skills.
8 Together, these skills form the basis of an emerging set of core competencies that will influence education
9 policy and practice around the world.

10 In *Teaching and Learning for the Twenty-First Century*, Reimers and his co-editor, HGSE lecturer
11 Connie K. Chung, explore how school systems in six countries are defining and supporting these global
12 competencies. Their aim is to develop a shared framework for promoting the skills students will need in
13 order to thrive as global citizens in a sustainable world in the decades ahead.

14 “Young people are in a context where they’re saturated and inundated with issues from around the
15 world,” says Chung. Between new technologies, multiplying media, and layers of intercontinental
16 connection, “global citizenship education is a ‘must have’ and not a ‘nice to have’ — for everyone,” says
17 Chung.

18 Reimers and Chung used the National Research Council’s 2012 report, *Education for Life and Work:
19 Developing Transferable Knowledge and Skills in the 21st Century*, as a jumping off point for their
20 investigation of policies and curricula that are best positioned to nurture global citizens. That report
21 identifies three broad domains of competence: cognitive, intrapersonal, and interpersonal. “This is not just
22 talking about knowledge,” says Chung. Rather, it includes such strengths as intercultural literacy, self-
23 discipline, and flexibility in social and work domains.

The Cognitive Competencies

25 As Chung suggests, the 21st-century global citizen’s cognitive skill set includes traditional, testable
26 basics such as math and literacy, but extends beyond that to encompass a particularly strong emphasis
27 on the world in which we live. “Current events highlight some of the fears around otherness,” she says.
28 The key to informed citizenship is getting to know other cultures — and valuing them.

29 In addition to rounding out kids’ knowledge base to include a nuanced understanding of world
30 geography and cultures, schools must teach them the skills to use this knowledge as active and engaged
31 citizens.

32 That means being able to:

- 33 • communicate effectively and listen actively;
- 34 • use evidence and assess information;
- 35 • speak at least one language beyond one’s native tongue;
- 36 • think critically and analyze local and global issues, challenges, and opportunities;
- 37 • reason logically and interpret clearly.

38 Become and remain digitally literate, including the ability to “weigh and judge the validity of the
39 content that’s in front of you,” Chung says.

40 In some ways, digital literacy is a linchpin of the other competencies. “Technology gives us humans
41 the possibility to collaborate in ways that are unprecedented, to think and produce things no one could
42 produce individually,” Reimers says.

The Interpersonal Competencies

44 Empathy is a cornerstone 21st-century global competency. We’re all familiar with empathy between
45 individuals: someone’s hurt, and another person deeply understands the pain. But Reimers and Chung

46 envision the concept on a global scale. Empathy resides in the ability to consider the complexity of issues,
47 Chung says — in an interconnected worldview that recognizes that “what we do impacts someone else.”

48 Anchored in tolerance and respect for other people, interpersonal intelligence breaks down into
49 several overlapping skills, including:

- 50 • collaboration;
- 51 • teamwork and cooperation;
- 52 • trust;
- 53 • leadership and responsibility;
- 54 • assertive communication;
- 55 • social influence.

56 As Reimers says, “We need to make sure that we can get along, and that we can see our differences
57 as an opportunity, as a source of strength.” Both regionally and nationally, students need the skills to
58 transcend the limits of fragmentation, “where people can only relate to those who they perceive to be like
59 them.”

60 The Intrapersonal Competencies

61 A particular blend of honed personal characteristics underpins the cognitive and intrapersonal
62 competencies. Reimers points to an ethical orientation and strong work and mind habits, including self-
63 regulation and intellectual openness, as traits that 21st-century educators must nurture in their students.

64 The world is less predictable than it used to be: “People know that half of the jobs that are going to
65 be around 10 years from now have not been invented,” Reimers says. That means teaching young people
66 in such a way that makes them flexible and adaptable. It means enabling them to think of themselves as
67 creators and inventors who feel comfortable taking the initiative and persevering — the skills necessary
68 for starting one’s own business, for example.

69 Instilling in students the value of thinking beyond the short term will give them the best chance to
70 tackle some of the world’s most daunting challenges, including climate change. For example, educators
71 in Singapore were challenged to imagine their country not five, 10, or 15 years down the road, but 30
72 years in the future, Chung says. Encouraging students to think on that kind of a time scale helps them to
73 grasp the reverberations of their actions and decisions.

Adapted from: **How to Thrive in the 21st Century**. Available on: <<https://www.gse.harvard.edu/news/uk/16/11/how-thrive-21st-century>>. Accessed on: September, 28th, 2018.

AS QUESTÕES DE 9 A 12 SE REFEREM AO **TEXTO 3**.
ASSINALE APENAS **UMA DAS ALTERNATIVAS** NAS QUESTÕES OBJETIVAS.

- 9) Traduza para a língua portuguesa o fragmento a seguir, fazendo as adequações linguísticas necessárias.

When Fernando Reimers, a professor of international education at the Harvard Graduate School of Education (HGSE), talks and writes about what he wants children around the world to learn, the conversation runs deep and reaches far. Individual success, he says, increasingly depends upon students' interpersonal dexterity, creativity, and ability to innovate. And our collective success — our ability to navigate complexities and to build and sustain a peaceful world — also hinges on these kinds of skills. Together, these skills form the basis of an emerging set of core competencies that will influence education policy and practice around the world. (linhas 3 a 9)

- 10) Os autores de *Ensinando e Aprendendo para o Século XXI* exploram como os sistemas escolares definem e apoiam as competências globais. Com relação ao objetivo, assinale a alternativa que o descreve corretamente, de acordo com o texto.
- a) Diagnosticar a necessidade de compartilhar e promover habilidades já existentes nos alunos, visando desenvolver um mundo sustentável na década atual.
 - b) Relacionar as habilidades compartilhadas para que sejam desenvolvidas de modo a privilegiar apenas as necessidades globais atuais.
 - c) Denunciar a falta de habilidades dos alunos, condição que os impede de colaborar para o futuro de um mundo melhor.
 - d) Desenvolver uma estrutura compartilhada para promover as habilidades que os alunos precisarão para prosperar como cidadãos globais em um mundo sustentável nas próximas décadas.

- 11) Cite as três principais competências que influenciarão a política e a prática educacional em todo o mundo. Qual a razão de incentivar o pensamento para além do tempo presente e em qual competência esse princípio se manifesta?

- 12) Na frase *“educators in Singapore were challenged to imagine **their** country not five, 10, or 15 years down the road, but 30 years in the future”* (linhas 70 e 72), o pronome possessivo destacado **“their”** refere-se a

- a) educators.
- b) Singapore.
- c) years.
- d) country.