



Planetary Health Report Card (Dentistry): *Vokkaligara Sangha Dental College and Hospital*



2024-2025 Contributing Team:

- Students: Shehzadi Jasrah Afreen, Rutu. C. Gokavi, Zaid Addin Shariff, Afifa Akram, Priyanka Padmasai Bandhakavi, Jafna. G, Aaditya Biju, Manisha V. S, Hemanth Rangaswamy, Simoni Kalyani, Ruchitha M.N, Prateeka S. U, Safura Aiman, Mohammed Zain Shariff
- Faculty Mentors: *Dr Sushi Kadanakuppe, Dr Suma N K, Mrs Savitha Rao*

*Primary Contact: Shehzadi Jasrah Afreen, jasrahafreen@gmail.com

Summary of Findings

Overall Grade	F+
Curriculum	F
<ul style="list-style-type: none"> The environment and health are vaguely covered in the curriculum at Vokkaligara Sangha Dental College and Hospital. In the third and fourth year curricula, environmental contamination and its effects on humanity are briefly covered. The college's Planetary Health Student Club (PHSC) hosts a series of lectures that provide insight into planetary health. Recommendations: Starting discussions on planetary health and its impact on biodiversity and humanity in the first year would be beneficial. Students and patients would gain from understanding how oral health connects with planetary health. 	
Interdisciplinary Research	F
<ul style="list-style-type: none"> Vokkaligara Sangha Dental College and Hospital's academic members conduct research on sustainability and planetary health. Materials on the sustainability website are available, and students are encouraged to attend conferences or symposiums on these topics, despite the absence of such events. Recommendations: Vokkaligara Sangha Dental College and Hospital could organise a conference related to planetary health and environment educating students about healthcare sustainability, and climate change. The college could also join the planetary health alliance and/or the Global Consortium on Climate Health Education. 	
Community Outreach and Advocacy	F
<ul style="list-style-type: none"> Vokkaligara Sangha Dental College and Hospital has the opportunity to enhance its community outreach efforts by incorporating planetary health initiatives. While there are no formal programs currently in place, the institution can build upon its existing public health activities to integrate sustainability and environmental awareness into oral healthcare. Recommendations: Collaborating with local organizations and public health departments can create community programs promoting planetary health, involving workshops, awareness drives, student-led initiatives, and long-term engagement. 	
Support for Student-Led Initiatives	C-
<ul style="list-style-type: none"> Vokkaligara Sangha Dental College and Hospital has a student group called the Planetary Health Student Club, with faculty support which is conducting awareness programs and lecture series about various aspects of planetary health. Recommendations: Support for student-led initiatives mostly comes from the dental school. We recommend that the school will provide specific research programs/fellowships for students regarding planetary health and also prioritise grants for related research. 	
Campus Sustainability	F
<ul style="list-style-type: none"> Vokkaligara Sangha Dental College and Hospital does not have a complete strategy for campus sustainability. The Planetary Health Student Club has created Sustainability Guidelines for college meetings and events. These guidelines are not required, but are highly recommended to encourage eco-friendly practices in the college community. Recommendations: There is much to improve with regards to campus sustainability in relation to recycling 	

program, office sustainability, reducing carbon footprint, utilizing renewable energy and supply procurement.

Statement of Purpose

Planetary health is human health.

The Planetary Health Alliance describes planetary health as “a solutions-oriented, transdisciplinary field and social movement focused on analysing and addressing the impacts of human disruptions to Earth’s natural systems on human health and all life on Earth.” This definition is intentionally broad, intended to encompass the multitude of ways that the environment can affect health, including water scarcity, changing food systems, urbanisation, biodiversity shifts, natural disasters, climate change, changing land use and land cover, global pollution, and changing biogeochemical flows. The health of humanity is dependent on our environment, and our environment is changing rapidly and in disastrous ways. Although the World Health Organization has called climate change “the greatest threat to global health in the 21st century,” many health professional school’s institutional priorities do not reflect the urgency of this danger to human health.

As future health professionals, we must be prepared to address the impacts of human-caused environmental changes on our patients’ health. This preparation is in the hands of the institutions providing our health professional training. It is imperative that we hold our institutions accountable for educating health professional students about the health impacts of climate change and other anthropogenic environmental changes, generating research to better understand health impacts and solutions, supporting related student initiatives, embracing sustainable practices as much as possible, and engaging with surrounding communities that are most affected by environmental threats. Because climate change and environmental threats disproportionately affect vulnerable populations (for example, communities of colour, older adults sensitive to health threats, and individuals in low-resource settings), these issues are inherently ones of equity and justice.

With the purpose of increasing planetary health awareness and accountability among health professional schools, we have created a Planetary Health Report Card that students internationally can use to grade and compare their institutions on an annual basis. This student-driven initiative aims to compare health professional schools nationally and internationally on the basis of discrete metrics in five main category areas: 1) planetary health curriculum, 2) interdisciplinary research in health and environment, 3) university support for student planetary health initiatives, and 4) community outreach centred on environmental health impacts 5) school campus sustainability.

Definitions & Other Considerations

Definitions:

- **Planetary Health:** is described by the Planetary Health Alliance as “the health of human civilisation and the state of the natural systems on which it depends.” For example, topics such as climate change, declining biodiversity, shortages of arable land and freshwater, and pollution would all fall under the realm of planetary health. Both planetary health and traditional ‘environmental health’ examine the relationship between human health and the external environment, including extreme temperatures, chemicals, vector-borne diseases, etc. Planetary health explicitly concerns itself with the potential health harms associated with human-caused perturbations of natural systems. Therefore, the human health focus of planetary health makes the field well-adapted for the context of health professional school education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term “planetary health” to satisfy the metric.
- **Sustainable Healthcare:** As defined by the Academy of Royal Colleges, sustainable healthcare involves ensuring the ability to provide good quality care for future generations by balancing the economic, environmental, and social constraints and demands within health care settings. A sustainable healthcare system maintains population health, reduces disease burden and minimises use of healthcare services.
- **Sustainable Oral Healthcare:** As adopted at the FDI World Dental Federation, in its Sustainability in Dentistry Statement (2017), sustainable oral healthcare is the provision of equitable, ethical, high-quality, inclusive and safe care with appropriate, effective and efficient use of resources. Through this, the healthcare opportunities of current and future generations are respected and protected by actively minimising negative environmental impacts. (*Martin, N., Mulligan, S., Shellard, I.J. and Hatton, P.V., 2022. Consensus on Environmentally Sustainable Oral Healthcare: A Joint Stakeholder Statement. Pp. 7–10. York: White Rose University Press. DOI: <https://doi.org/10.22599/OralHealth.c>. CC BY 4.0*)
- **Environmental Sustainability in Dentistry (ESD).** Learning outcomes for Environmental Sustainability in Dentistry (ESD) have been proposed by Joury et al. (2021) based on a review of the literature and adaptation of current learning outcomes in medical education:
 1. Describe concepts and definitions of climate change, carbon footprint and sustainability
 2. Discuss the importance of environmental sustainability for the health of patients
 3. Discuss the carbon hotspots of dentistry and how these can be modified
 4. Evaluate the overall environmental impact of clinical dentistry and how this can be improved through innovation.
 5. Appraise how future healthcare professionals can help shape a sustainable healthcare system, and the knowledge and skills (such as leadership), change management and co-production that they will require.
 6. Evaluate current literature and participate in research on sustainability in dentistry.
- **Dentistry School/Department vs. Institution:** When “dentistry school” is specified in the

report card, this only refers to curriculum and resources offered by the School/department of dental medicine and does not include offerings from other parts of the university (e.g. undergraduate departments (USA), other related departments (e.g. Public Health, Population Health departments). In contrast, when “institution” is specified in the report card, we are referring to the university more broadly including all of its campuses. Any resource reasonably accessible by dental students, no matter where in the institution the resource comes from or if it is specifically targeted for dental students, can meet this metric.

- **Environmental history:** This is a series of questions students are taught to ask during medical encounters that elicits patients’ exposures and environmental risk factors. Historically, this has included consideration of exposures like pesticides, asbestos, and lead, though in the modern era shaped by climate change, it can be expanded to include things like wildfire smoke exposure, air pollution and mould after flooding. Key components include place of residence over the lifecourse, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution. Please be as specific as possible when providing evidence for this metric.
- **Elective:** The word “elective” refers to an optional course or lecture series that a student can opt to take part in but is not a requirement in the core curriculum. Generally, these elective courses take place in the preclinical curriculum but vary by school.
- **Core Curriculum:** This refers to taught material that is delivered to the entire cohort of students in one year.
- **Clerkship / Outreach:** This is a term used in the USA to refer to placements that medical students go on e.g. Pediatrics, General medicine, Psychiatry. In the UK these are referred to as rotations, outreach or placements. This is a relatively short (approximately 4-8 weeks) period of study and patient-centred clinical experience that takes place as part of the undergraduate programme.
- **Clinical rotation:** This is a term used to refer to placements that students go on (e.g., ophthalmology, surgery, cardiology).
- **Community organisations:** For most institutions, there are existing groups that are not directly affiliated with the university and exist as a product of what the community the institution exists in cares about or needs. These specific community organisations relevant to this report include those that are focused around some aspect of climate and health preservation. These community organisations can include but are not limited to local mutual aid initiatives, underserved-resource distribution groups, clean-up and nature conservation groups, community gardeners, and other environmental-related organisations. If your institution does not have access to local volunteerships with community groups, please report any community organisations your institution or school has collaborated with.
- **Climate justice:** The idea that certain population groups and geographical locations which are disproportionately more impacted by climate change are already economically and socially disadvantaged. This double vulnerability sits alongside pre-existing social justice concerns and should therefore shift policy and practice to mitigate the inequitable effects of the climate crisis.

- **Extractivism:** The removal of natural resources typically in large quantities. Within anthropology this term is often used in the context of colonialism to refer to the historic seizing of natural resources, a practice which has developed business models tied to ecological degradation and loss of biodiversity.
- **Global South:** Nations that often have less economic and industrial development and are typically in the southern hemisphere. These nations have been found to be disproportionately impacted by the climate crisis.
- **Low socioeconomic status (SES):** An individual or geographical area that across a variety of socioeconomic factors (e.g., income, education, race/ethnicity) is considered vulnerable. This vulnerability has been correlated to more adverse health outcomes often as a consequence of encountering more barriers in accessing and receiving healthcare.
- **Low and Middle-Income Countries (LMIC):** Countries that have lower degrees of economic affluence.
- **Anthropogenic:** Created through human activity
- **Marginalised communities:** Groups excluded from mainstream economic, educational, social, and/or cultural experiences due to race, gender identity, sexual orientation, age, physical ability, language, and/or immigration status (Sevelius et al., 2020).

Other considerations:

- If there are more than one “tracks” at your institution with two different curricula (for example, Harvard Medical School has a Pathways and HST curriculum track), you can choose to fill out a report card for each track, or fill out just one report card and average the scores received by each track in cases where the scores are different (see the 2021 Harvard or Oxford report cards as examples). Where possible please indicate the proportion of students that are on each track.

Completed in 2022 a [Literature Review by Metric](#) is available for the 2022 medicine report card metrics. We are in the process of updating this review and making it more applicable to all the disciplines. However the review serves as a rough collection of references for further learning and a resource for those advocating for increased planetary health engagement at their institutions.

Planetary Health Curriculum

Section Overview: *This section evaluates the integration of relevant planetary health topics into the dental school curriculum. Today's students will be on the frontlines of tackling the health effects of climate and other environmental changes. Therefore, it is critical that students are trained to understand the health effects of these changes, as well as planetary health issues and principles more broadly. Topics like the changing geography of vector-borne diseases, the health consequences of air pollution, environmental health inequities, and disaster response principles must be part of every dental school's core curriculum.*

Curriculum: General

1.1. Did your <u>dental school</u> offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare (ESH) / Environmental Sustainability in Dentistry (ESD) or Planetary Health in the last year?	
Yes, the dental school has offered more than one elective whose primary focus is ESH/ESD/planetary health in the past year. (3 points)	
Yes, the dental school has offered one elective whose primary focus is ESH/ESD/planetary health in the past year. (2 points)	
The dental school does not have any electives whose primary focus is ESH/ESD/planetary health, but there are one or more electives that include a lecture on planetary health. (1 points)	
No, the dental school has not offered any electives on planetary health or electives that include ESH/ESD/planetary health topics in the past year. (0 points)	
Score Assigned:	0
<i>Score explanation: Our dental school didn't offer any such elective courses in Planetary Health last year.</i>	

Curriculum: Environmental Threats to the Planet

1.2. Does your <u>dental school</u> address the concept of climate change, its causes and its impacts on humankind and biodiversity?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework or other learning experiences (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	0
<i>Score explanation: This subject has not been addressed in our curriculum.</i>	

1.3. Does your dental school address the concept of pollution, its causes and its impacts on humankind and biodiversity?

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective coursework** or **other learning experiences** (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

2

Score explanation: This topic was briefly discussed as a part of our Public Health Dentistry curriculum in the chapter entitled, 'Environmental Health'. The chapter focused more on how the impacts of various pollution deteriorates human health in general and dealt with ways to dispose of waste.

1.4. Does your dental school curriculum address environmental citizenship, the impact of human choices and current and emerging environmental actions?

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective coursework** or **other learning experiences** (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

0

Score explanation: This subject has not been addressed in our curriculum.

Curriculum: Health Effects of Climate Change

1.5. Does your dental school curriculum address the impacts of climate change, air pollution and extreme weather events (extreme heat) on individuals' general health?

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective coursework** or **other learning experiences** (1 point)

This topic was **not** covered. (0 points)

Score Assigned:	0
<i>Score explanation: Our dental school curriculum does not address the impacts of climate change.</i>	

1.6. Does your <u>dental school</u> curriculum explore potential links or associations between <u>oral health</u> outcomes and climate change?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework or other learning experiences (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	0
<i>Score explanation: This subject has not been addressed in our curriculum.</i>	

1.7. Does your <u>dental school</u> curriculum address the impact of climate change on the changing patterns of infectious diseases?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework or other learning experiences (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	0
<i>Score explanation: This subject has not been addressed in our curriculum.</i>	

1.8. Does your <u>dental school</u> curriculum address the impact of anthropogenic and/or industry-related environmental toxins on <u>human health</u>?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework or other learning experiences (1 point)	
This topic was not covered. (0 points)	

Score Assigned:	2
<i>Score explanation: The hazards of mercury used in Silver Amalgam restorative material, and its toxic effects on biodiversity have been briefly discussed as a part of the curriculum in the subject of Conservative Dentistry and Endodontics. The environmental impact of no other oral healthcare interventions have been taught about.</i>	

1.9. Does your <u>dental school</u> curriculum address the outsized impact of <u>climate change</u>, <u>pollution</u> & <u>anthropogenic environmental toxins</u> on marginalised populations such as those with low SES, women, communities of colour, Indigenous communities, children, homeless populations, and older adults?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework or other learning experiences (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	0
<i>Score explanation: This subject has not been addressed in our curriculum.</i>	

Curriculum: Sustainability

1.10. Does your <u>dental school</u> curriculum address the concept of environmental sustainability?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework or other learning experiences (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	0
<i>Score explanation: The concept of Environmental Sustainability is not covered in core curriculum or any other learning experiences.</i>	

1.11. Does your <u>dental school</u> curriculum address the concept & importance of sustainable healthcare?	
This topic was explored in depth by the core curriculum. (3 points)	

This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework or other learning experiences (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	0
<i>Score explanation: The concept of sustainable health is not covered in the curriculum.</i>	

1.12. Does your <u>dental school</u> curriculum address the carbon footprint of healthcare systems?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework or other learning experiences (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	0
<i>Score explanation: The concept of carbon footprint of healthcare systems is not covered in the curriculum.</i>	

1.13. Does your <u>dental school</u> curriculum address the concept & importance of <u>sustainable oral healthcare</u>?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework or other learning experiences (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	0
<i>Score explanation: The concept of sustainable oral healthcare is not covered in the curriculum.</i>	

1.14. Does your <u>dental school</u> curriculum address the environmental impact of <u>oral healthcare systems and interventions</u>?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	

This topic was covered in elective coursework or other learning experiences (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	0
<i>Score explanation: The subject of the environmental impact of oral healthcare systems is not covered in our curriculum.</i>	

1.15. Does your <u>dental school</u> curriculum address the importance of <u>measuring the environmental impact of oral healthcare</u> to identify & reduce contributing factors?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework or other learning experiences (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	0
<i>Score explanation: Dental School Curriculum does not address the importance of measuring the environmental Impact of Oral Health Care to identify and reduce contributing factors.</i>	

Curriculum: Sustainability through Good Oral Healthcare

1.16. Does your <u>dental school</u> curriculum address the importance of promotion of <u>good oral health</u> and <u>preventive care</u> in the delivery of <u>sustainable oral healthcare</u>?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework or other learning experiences (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	0
<i>Score explanation: We have been taught that maintaining good oral hygiene can prevent numerous diseases, and we strive to adhere to the principle that prevention is better than cure. But its connection with sustainability is not covered.</i>	

1.17. Does your <u>dental school</u> curriculum address the <u>environmental significance</u> of delivery of high-quality (operative care) oral healthcare?	
This topic was explored in depth by the core curriculum. (3 points)	

This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework or other learning experiences (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	0
<i>Score explanation: This subject has not been addressed in our curriculum</i>	

1.18. Does your <u>dental school</u> curriculum address the <u>environmental significance</u> of <u>‘integrated oral care’</u>?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework or other learning experiences (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	0
<i>Score explanation: This subject has not been covered in our curriculum</i>	

1.19. Does your <u>dental school</u> curriculum address the importance, <u>environmental & oral health outcomes</u> of individual & dental team’s <u>ownership of care</u>?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework or other learning experiences (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	0
<i>Score explanation: This subject has not been addressed in our curriculum</i>	

1.20. In training for patient encounters, does your <u>dental school’s</u> curriculum introduce strategies to have conversations with patients about the health effects of climate change?
Yes, there are strategies introduced for having conversations with patients about climate change in the core curriculum. (2 points)

Yes, there are strategies introduced for having conversations with patients about climate change in elective coursework. (1 points)	
No, there are no strategies introduced for having conversations with patients about climate change. (0 points)	
Score Assigned:	0
<i>Score explanation: There are no strategies included in our curriculum.</i>	

Curriculum: Administrative Support for Planetary Health

1.21. Is your <u>dental school</u> currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/Environmental Sustainability in Dentistry (ESD)/Planetary Health education?	
Yes, the dental school is currently in the process of making major improvements to ESH/ESD/planetary health education. (4 points)	
Yes, the dental school is currently in the process of making minor improvements to ESH/ESD/planetary health education. (2 points)	
No, there are no improvements to Planetary Health education in progress. (0 points)	
Score Assigned:	0
<i>Score explanation: There are no improvements to Planetary Health Education in progress</i>	

1.22. How well are the aforementioned planetary health/Education for Sustainable Healthcare/Environmental Sustainability in Dentistry (ESD) topics integrated longitudinally into the <u>core</u> curriculum?	
Planetary health/ESH/ESD topics are well integrated into the core dental school curriculum. (6 points)	
Some planetary health/ESH/ESD topics are appropriately integrated into the core dental student curriculum. (4 points)	
Planetary health/ESH/ESD is not integrated and is primarily addressed in (a) standalone lecture(s) . (2 points)	
There is minimal/no education for sustainable healthcare. (0 points)	
Score Assigned:	0
<i>Score explanation: There is minimal education for sustainable health care.</i>	

1.23. Does your dental school appoint a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course?

Yes, the **dental school** has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (1 point)

No, the **dental school** does **not** have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (0 points)

Score Assigned:

0

Score explanation: There is no such member of faculty appointed for the incorporation of planetary health and sustainable health care.

Section Total (4 out of 70)

5.71%

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Interdisciplinary Research

Section Overview: *This section evaluates the quality and quantity of interdisciplinary planetary health research at the broader institution. Interactions between health and the environment are complex and multifactorial. While climate change has been extensively studied from an environmental science perspective, planetary health is an emerging field. As leading health institutions with talented researchers and research resources, institutions should fund research studying the health effects of climate change and anthropogenic environmental toxins. This obligation is particularly strong because the public and policymakers are more attentive to climate change when its implications for human health are emphasised.*

2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your <u>institution</u>?	
Yes, there are faculty members at the institution who have a primary research focus in planetary health or sustainable healthcare/vetcare. (3 points)	
Yes, there are individual faculty members at the institution who are conducting research related to planetary health or healthcare sustainability, OR are part of a national/international sustainability working group, but it is not their primary research focus. (2 points)	
There are sustainability researchers at the institution , but not specifically associated with healthcare/vetcare. (1 point)	
No, there are no planetary health and/or sustainability researchers at the institution at this time. (0 points)	
Score Assigned:	1
<i>Score explanation: There are individual faculty members at our college who are conducting research related to planetary health. The team of two researchers (Dr. Sushu Kadanakuppe, Dr. Suma N.K) in collaboration with a faculty from KLE Institute of Dental Sciences (Dr. Arya Bhardwaj - alumna VSDCH) are conducting a study to explore the perceptions of dental students about environmental sustainability, climate change and human health and their attitudes towards inclusions of these concepts in dental curriculum</i>	

2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your <u>institution</u>?	
There is at least one dedicated department or institute for interdisciplinary planetary health research. (3 points)	
There is not currently a department or institute for interdisciplinary planetary health research, but there are plans to open one in the next 3 years. (2 points)	
There is an Occupational and Environmental Health department , but no interdisciplinary department or institute for planetary health research. (1 points)	

There is no dedicated department or institute. (0 points)	
Score Assigned:	0
<i>Score explanation: There is no dedicated department or institute</i>	

2.3. Is there a process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda at your <u>institution</u>?	
Yes, there is a process in which community members impacted by climate and environmental injustice have decision-making power in the climate + environmental research agenda. (3 points)	
Yes, there is a process in which community members are impacted by climate and environmental the climate + environmental research agenda. (2 points)	
No , but there are current efforts to establish a process for community members to advise or make decisions on the research agenda. (1 points)	
There is no process, and no efforts to create such a process. (0 points)	
Score Assigned:	0
<i>Score explanation: There is no such process, and no efforts to create such a process</i>	

2.4. Does your <u>institution</u> have a planetary health website that centralises ongoing and past research related to health and the environment?	
There is an easy-to-use, adequately comprehensive website that centralises various campus resources related to health and the environment including all of the following: upcoming events, leaders in planetary health at your institution, and relevant funding opportunities. (3 points)	
There is a website that attempts to centralise various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive. (2 points)	
The institution has an Office of Sustainability website that includes some resources related to health and the environment. (1 point)	
There is no website. (0 points)	
Score Assigned:	0
<i>Score explanation: There is no official website of Planetary Health in our institution.</i>	

2.5. Has your <u>institution</u> recently hosted a conference or symposium on topics related to planetary health?	
Yes, the institution has hosted at least one conference or symposium on topics related to planetary health in the past year. (4 points)	
Yes, the institution has hosted at least one conference or symposium on topics related to sustainable healthcare/vetcare in the past year. (3 points)	
Yes, the institution has hosted a conference on topics related to planetary health / sustainable healthcare/vetcare in the past three years. (2 points)	
The institution has not hosted any conferences directly, but they have provided financial support for a local planetary health event. (1 point)	
No, the institution has not hosted a conference on topics related to planetary health in the past three years. (0 points)	
Score Assigned:	0
<i>Score explanation: Our institution has not hosted any conference or symposium on topics related to Planetary health but efforts have been made to deliver local lectures to the students of our institution to introduce planetary health and talk about sustainability issues . Dr Soumya R Department delivered a lecture on biomedical waste management in regard to the same, but not in the past year.</i>	

2.6. Is your <u>institution</u> a member of a national or international planetary health or ESH/ESV organisation?	
Yes, the institution is a member of a national or international planetary health or ESH/ESV organisation. (1 points)	
No, the institution is not a member of such an organisation. (0 points)	
Score Assigned : 1	1
<i>Score Explanation: Our institution is a member of Global Climate Change And Health Alliance (GCHA) which is a part of World Health Organisation (WHO) since 2014</i>	

Section Total (2 out of 17)	11.76%
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Community Outreach and Advocacy

Section Overview: *This section evaluates dental school engagement in community outreach and advocacy efforts associated with planetary health. Researching and teaching planetary health is necessary but not sufficient. It is critical that institutions also directly engage with communities most affected by environmental health harms. Although climate change is a problem largely created by those with power and resources, its impacts fall disproportionately on under-resourced populations and communities of colour. Institutions should partner with local communities affected by climate change and pollution to share information about environmental health threats, advocate together for change, and provide opportunities for students to be a part of this work.*

3.1. Does your <u>institution</u> partner with community organisations to promote planetary and health?	
Yes, the institution meaningfully partners with multiple community organisations to promote planetary and environmental health. (3 points)	
Yes, the institution meaningfully partners with one community organisation to promote planetary and environmental health. (2 points)	
The institution does not partner with community organisations, but has participated in community focused events relating to planetary health. (1 point)	
No, there is no such meaningful community partnership. (0 points)	
Score Assigned:	1
<i>Score explanation: There was a workshop held at St John's Research Institute and V S Dental College formally interfaces with the community organisation programs held at St John's Research Institute based on the link between planetary health and public health.</i>	

3.2. Does your <u>institution</u> offer community-facing courses or events regarding planetary health?	
The institution offers community-facing courses or events at least once every year. (3 points)	
The institution offers courses or events open to the community at least once per year, but they are not primarily created for a community audience. (2 points)	
The institution has promoted community-facing courses or events, but was not involved in planning those courses or events. (1 point)	
The institution has not offered such community-facing courses or events. (0 points)	
Score Assigned:	0

Score explanation: There is no such community facing courses or events regarding planetary health

3.3. Does your institution have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?

Yes, all students **regularly** receive communication updates dedicated to planetary health and/or sustainable healthcare. (2 points)

Yes, planetary health and/or sustainable healthcare topics are regularly included in communication updates to **some courses**. (1 point)

Students **do not** receive communications about planetary health or sustainable healthcare. (0 points)

Score Assigned:

1

Score explanation: Students of VS Dental College receive Annual Edition Green Magazine for planetary health related communication.

3.4. Does the institution or main affiliated hospital trust engage in professional education activities targeting individuals post graduation with the aim of ensuring their knowledge and skills in planetary health and sustainable healthcare remain up to date during their professional career?

Yes, the **institution** or **main affiliated hospital trust** offers multiple in-person or online courses relating to planetary health and/or sustainable healthcare for post-graduate providers, including at least one with a primary focus of planetary health. (2 points)

Yes, the **institution** or **main affiliated hospital trust** offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers. (1 point)

There are **no** such accessible courses for post-graduate providers. (0 points)

Score Assigned:

0

Score explanation: There are no such professional education activities targeting individuals post graduation with the aim of ensuring their knowledge and skills in planetary health and sustainable healthcare.

3.5. Does your <u>institution</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about environmental health exposures?	
Yes, the institution or <u>all</u> affiliated hospitals have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated hospitals have accessible educational materials for patients. (0 points)	
Score Assigned:	0
<i>Score explanation: Our dental college does not have any accessible educational materials for patients about environmental health exposure</i>	

3.6. Does your <u>institution</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about the health impacts of climate change?	
Yes, the institution or <u>all</u> affiliated hospitals have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated hospitals have accessible educational materials for patients. (0 points)	
Score Assigned:	0
<i>Score explanation: We have educational material like pamphlets in English as well as in regional language Kannada but we haven't started distributing it yet.</i>	

Section Total (2 out of 14)	14.29%
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Support for Student-Led Planetary Health Initiatives

Section Overview: *This section evaluates institutional support for student-led planetary health initiatives, such as funding, fellowships, programming, and student groups. Planetary health is a young field and, as young people facing a future deeply shaped by climate change, students are often some of the first at an institution to engage with it. Institutions should provide support for students to engage in sustainability quality improvement (QI) initiatives, discover mentors in their area of interest, and receive funding for planetary health projects.*

4.1. Does your **institution** offer support for students interested in enacting a sustainability initiative/QI project?

Yes, the **institution** *either* offers grants for students to enact sustainability initiatives/QI projects *or* sustainability QI projects are part of the core curriculum. (2 points)

The **institution** encourages sustainability QI projects (to fulfil clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, **but** there is no student funding available and there is no requirement to participate. (1 point)

No, the institution does not offer opportunities or support for sustainability initiatives or QI projects. (0 points)

Score Assigned:

0

Score explanation: No, our college does not offer opportunities or support for sustainability initiatives or QI projects.

4.2. Does your **institution** offer opportunities for students to do research related to planetary health and/or sustainable healthcare/vetcare?

The **institution** has a **specific** research program or fellowship for students interested in doing planetary health/sustainable healthcare/vetcare research. (2 points)

There are research opportunities for students to perform research related to planetary health/sustainable healthcare, but these **require student initiative** to seek these out and carry them out in their spare time. (1 point)

There are **no opportunities** for students to engage in planetary health/sustainable healthcare research. (0 points)

Score Assigned:

1

*Score explanation : There are research opportunities for students to perform research related to planetary health/sustainable healthcare in our college, but these **require student initiative** to seek these out and carry them out in their spare time.*

*Our institution has conducted such research related to planet health and climate change and the measures that have to be carried out for a better sustainability of the environment called **the focus group studies** under the guidance of Dr.Sushi Kadanakuppe.*

4.3. Does the institution have a web page where students can find specific information related to planetary health and/or sustainable healthcare/vetcare activities and mentors within the institution? For example, projects achieved, current initiatives underway at the institution and/or contact of information of potential mentors.

The institution has a web page with specific information related to planetary health or sustainable healthcare/vetcare that includes up-to-date information on relevant initiatives and contact information of potential mentors. (2 points)

There is an institution web page that features some information on projects and mentors within planetary health and sustainable healthcare within the institution, but it lacks key information. (1 point)

There is **no institution** specific web page for locating planetary health and/or sustainable healthcare projects or mentors. (0 points)

Score Assigned:

1

Score explanation : We have an [official website of the Planetary Health Student Club\(PHSC\)](#), additionally, we also have an official instagram page for awareness and educational purpose. [Planetary Health Student Club \(@phsc_vsdch\)](#) • [Instagram photos and videos](#)

4.4. Does your institution have registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?

Yes, there is a student organisation **with faculty support** at my institution dedicated to planetary health or sustainability in healthcare. (2 points)

Yes, there is a student organisation at my institution dedicated to planetary health or sustainability in healthcare but it **lacks faculty support**. (1 point)

No, there is **not** a student organisation at my institution dedicated to planetary health or sustainability in healthcare. (0 points)

Score Assigned:

2

Score explanation: There is a student organisation, the Planetary Health Student Club(PHSC) with faculty support at our dental college dedicated to planetary health.

4.5. Is there a student liaison representing sustainability interests who serves on a department or institutional decision-making council to advocate for curriculum reform and/or sustainability best practices?

Yes, there is a student representative that serves on a department or institutional decision-making council/committee. (1 points)	
No, there is no such student representative. (0 points)	
Score Assigned:	0
<i>Score explanation: No, there is no such student representative in our college.</i>	

4.6. In the past year, has the <u>institution</u> had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)	Score
Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.	1
Panels, speaker series, or similar events related to planetary health that have students as an intended audience.	0
Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.	0
Cultural arts events, installations or performances related to planetary health that have students as an intended audience.	1
Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.	0
Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)	0
<i>Score explanation: In our college we had a project for World Soil Day, where student members of PHSC prepared the garden, planted saplings and are involved in regular maintenance using organic gardening methods.</i> <i>On Earth Day, we had Cultural arts events, related to planetary health that have students as an intended audience.</i>	

Section Total (6 out of 15)	40%
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Campus Sustainability

Section Overview: This section evaluates the support and engagement in sustainability initiatives by the institution. The healthcare industry is a major contributor to greenhouse gas emissions as well as pollution that harms local, regional, and global ecosystems. While healthcare is, by nature, a resource-intensive endeavour, the healthcare sector is well poised to lead the world to a more sustainable future. This will involve scrutinising every aspect of how our systems operate, from where we source our energy, to how we build our infrastructure, to what companies we invest in. Our dental schools, clinics, and hospitals must set the standard for sustainable practices, and show other sectors what is possible when it comes to minimising environmental impact.

5.1. Does your <u>institution</u> have an Office of Sustainability?	
Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is at least one designated staff member for sustainability at the hospital. (3 points)	
There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but no specific staff member in charge of hospital sustainability. (2 points)	
There are no salaried sustainability staff , but there is a sustainability task force or committee. (1 point)	
There are no staff members or task force responsible for overseeing campus sustainability. (0 points)	
Score Assigned:	0
Score explanation: There are no staff members or task force for overseeing campus sustainability in our institution.	

5.2. How ambitious is your <u>institution's</u> plan to reduce its own carbon footprint?	
The institution has a written and approved plan to achieve carbon neutrality by 2030 (5 points)	
The institution has a written and approved plan to achieve carbon neutrality by 2040 (3 points)	
The institution has a stated goal of carbon neutrality by 2040 but has not created a plan to reach that goal or the plan is inadequate (1 point)	
The institution does not meet any of the requirements listed above (0 points)	
Score Assigned:	0
Score explanation: Our college does not meet any of the requirements listed above .	

5.3. Do buildings/infrastructure used by the institution for teaching (not including the hospital) utilize renewable energy?

Yes, institution buildings are **100%** powered by renewable energy. (3 points)

Institution buildings source **>80%** of energy needs from off-site and/or on-site renewable energy. (2 points)

Institution buildings source **>20%** of energy needs from off-site and/or on-site renewable energy. (1 point)

Institution buildings source **<20%** of energy needs from off-site and/or on-site renewable energy. (0 points)

Score Assigned:

0

Score explanation: Our college does not use any form of renewable energy

5.4. Are sustainable building practices utilised for new and old buildings on the institution's campus, with design and construction of new buildings and remodelling of old buildings conforming to a published sustainability rating system or building code/guideline?

Yes, sustainable building practices are utilised for new buildings on the institution's campus and the **majority** of old buildings **have been retrofitted** to be more sustainable. (3 points)

Sustainable building practices are utilised for new buildings on the institution's campus, but most old buildings have **not been retrofitted**. (2 points)

Sustainable building practices are **inadequately or incompletely** implemented for new buildings. (1 point)

Sustainability is **not considered** in the construction of new buildings. (0 points)

Score Assigned:

0

Score explanation: There is no construction of new buildings in our college recently.

5.5. Has the institution implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting?

Yes, the institution has implemented strategies to encourage and provide **environmentally-friendly transportation options** such as safe active transport, public transport, or carpooling and these options are well-utilised by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default. (2 points)

The institution has implemented some strategies to provide environmentally-friendly transportation options, but the options are unsatisfactorily accessible or advertised. (1 point)	
The institution has not implemented strategies to encourage and provide environmentally-friendly transportation options. (0 points)	
Score Assigned:	1
<i>Score explanation: The institution has implemented some strategies to provide transportation options, but the options are unsatisfactorily accessible. We have our college transportation that consists of 3 buses, it helps the commuting of dental, physiotherapy and nursing students. The buses are usually delayed and do not follow the time guidelines.</i>	

5.6. Does your <u>institution</u> have an organics recycling program (compost) and a conventional recycling program (aluminium/paper/plastic/glass)?	
Yes, the institution has both compost and recycling programs accessible to students and faculty. (2 points)	
The institution has either recycling or compost programs accessible to students and faculty, but not both. (1 point)	
There is no compost or recycling program at the institution. (0 points)	
Score Assigned:	0
<i>Score explanation: There is no compost or recycling program at our dental institute.</i>	

5.7. Does the <u>institution</u> apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?	
Yes, the institution has adequate sustainability requirements for food and beverages, including meat-free days or no red-meat, and is engaged in efforts to increase food and beverage sustainability. (3 points)	
There are sustainability guidelines for food and beverages, but they are insufficient or optional . The institution is engaged in efforts to increase food and beverage sustainability. (2 points)	
There are sustainability guidelines for food and beverages, but they are insufficient or optional . The institution is not engaged in efforts to increase food and beverage sustainability. (1 point)	
There are no sustainability guidelines for food and beverages. (0 points)	
Score Assigned:	1

Score explanation: There are [sustainability guidelines](#) for food and beverages, but they are **insufficient**. Canteen of our college campus has implemented measures to serve beverages in steel cups rather than plastic or paper cups.

5.8. Does the institution apply sustainability criteria when making decisions about supply procurement?

Yes, the institution has **adequate** sustainability requirements for supply procurement **and** is **engaged** in efforts to increase sustainability of procurement. (3 points)

There are sustainability guidelines for supply procurement, but they are **insufficient or optional**. The institution is **engaged** in efforts to increase sustainability of procurement. (2 points)

There are sustainability guidelines for supply procurement, but they are **insufficient or optional**. The institution is **not engaged** in efforts to increase sustainability of procurement. (1 point)

There are **no** sustainability guidelines for supply procurement. (0 points)

Score Assigned:

0

Score explanation: There are **no** sustainability guidelines for supply procurement

5.9. Are there sustainability requirements or guidelines for events hosted at the institution?

Every event hosted at the institution **must** abide by sustainability criteria. (2 points)

The institution **strongly recommends or incentivizes** sustainability measures, but they are **not required**. (1 point)

There are **no** sustainability guidelines for institution events. (0 points)

Score Assigned:

1

Score explanation: Planetary Health Student Club of our college has given [Sustainability Guidelines for college meetings and events](#). Our dental college strongly recommends sustainability measures, but they are not mandatory.

5.10. Does your institution have programs and initiatives to assist with making lab spaces more environmentally sustainable?

Yes, the institution has **programs** and **initiatives** to assist with making lab spaces more environmentally sustainable. (2 points)

There are **guidelines** on how to make lab spaces more environmentally sustainable, but not programs or initiatives. (1 point)

There are no efforts at the institution to make lab spaces more sustainable. (0 points)	
Score Assigned:	1
<i>Score explanation: There are guidelines on how to make lab spaces more environmentally sustainable, but not programs or initiatives. We Planetary Health Student Club have made sure to paste posters and spread awareness on proper disposal of waste and conservation of water.</i>	

5.11. Does your <u>institution's</u> endowment portfolio investments include fossil-fuel companies?	
The institution is entirely divested from fossil fuels and has made a commitment to reinvest divested funds into renewable energy companies or renewable energy campus initiatives. (4 points)	
The institution is entirely divested from fossil fuels. (3 points)	
The institution has partially divested from fossil fuel companies or has made a commitment to fully divest , but currently still has fossil fuel investments. (2 points)	
The institution has not divested from fossil-fuel companies, but faculty and/or students are conducting organised advocacy for divestment. (1 point)	
Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that. (0 points)	
Score Assigned:	0
<i>Score explanation: Our college has investments with fossil-fuel companies and there have been no efforts to change that.</i>	

Section Total (4 out of 32)	12.5%
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Grading

Section Overview

This section focuses on the grading of the report card. The institution received a grade for each of the individual sections as well as an overall institutional grade. Section point totals were tallied, divided by the total points available for the section, and converted to a percentage. The overall institutional grade is a weighted average of the section grades, with curriculum receiving a higher weight owing to its larger number of metrics. Letter grades for each section and the institution overall were then assigned according to the table below.

Letter Grade*	Percentage
A	80% - 100%
B	60% - 79%
C	40% - 59%
D	20% - 39%
F	0% - 19%

Planetary Health Grades for the Vokkaligara Sangha Dental College and Hospital.

The following table presents the individual section grades and overall institutional grade for the Vokkaligara Dental College and Hospital on this dental-school-specific Planetary Health Report Card.

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(4/70) \times 100 = 5.71\%$	F
Interdisciplinary Research (17.5%)	$(2/17) \times 100 = 11.76\%$	F
Community Outreach and Advocacy (17.5%)	$(2/14) \times 100 = 14.29\%$	F
Support for Student-led Planetary Health Initiatives (17.5%)	$(6/15) \times 100 = 40\%$	C-
Campus Sustainability (17.5%)	$(4/32) \times 100 = 12.5\%$	F
Institutional Grade	$(5.71 \times 0.3 + 11.76 \times 0.175 + 14.29 \times 0.175 + 40 \times 0.175 + 12.5 \times 0.175) = 15.46\%$	F+

Report Card Trends

Section Overview

This graph demonstrates trends in overall and section grades for the years in which Vokkaligara Sangha Dental College and Hospital has participated in the Planetary Health Report Card initiative.

