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Greenery in Schools

As a citizen of LA, I've been hearing about heat waves my whole life. Consequently, I'm very unphased when I hear about one on the news. It's like a normal day, except the classrooms are a little more stuffy, or my classmates and I are a little more sweaty. I soon learned that heat `waves became such a large problem because of the urban heat island effect, where a lack of greenery contributes to an unsafe level of heat in urban environments. We've been normalizing these heat weaves for so long, that it came to my genuine surprise that simply adding greenery to school campuses can help mitigate this problem, and so many others. After visiting some schools in the poorest areas in LA which simultaneously have the least amount of green space, I saw how bad this problem could get. So I began wondering, should districts allocate education money towards greenery? Planting a significant amount of greenery within school campuses would promote the health of students by providing benefits such as reduced stress and increased focus.

Foremost among the benefits of adding green space to schools is the significant reduction of stress among students. Mathew Browning, a professor at Clemson University, published a paper showing that even just exposure to green spaces can help stressed students by reducing cortisol levels: a biological indicator of stress. Cortisol mainly helps regulate the body's response to stress, and therefore less cortisol means less stress. Because green space can biologically limit stress, adding greenery to schools is the perfect way to promote the health of students. Furthermore, Audrey Demeaux, a professor at Portland State University, suggests that adding

green space will result in a slippery slope (where one thing leads to another which leads to another). She created stress reduction theory, in which natural vegetation can lead to reduced arousal states and negative thoughts through unconscious psychophysiological pathways. This will diminish stress and enhance learning including memory processes, thereby boosting academic achievement. Essentially, greenery provides all these benefits without people realizing it. For example, one doesn't realize that the tree outside their classroom is the reason they aren't very stressed at the moment, the mind filters it without one realizing. Therefore, green spaces provide a frequent surplus of healthy benefits, even though most don't know to directly thank greenery for these conveniences. Thus, by reducing cortisol levels, greenery may subconsciously reduce the level of stress in many.

Secondly, greenery also has proven to improve the focus of individuals. Browning reveals that views of greenery from classroom windows improve concentration and reduce heart rate. Moreover, Michael Whitfield explains that a sustained decrease in heart rate may improve focus and information processing. This relates to the subconscious benefit of green space, where the greenery will promote focus by reducing heart rate without the individual knowing. Thus, adding greenery is the perfect way to encourage a sustained level of focus within school environments, obviously one of the most important things for students to have while they learn. Additionally, Demeaux also explains the major issue in direct attention fatigue or DAF. This problem occurs by the overuse of the brain's information processing methods, thus causing tasks to become difficult. Demeaux suggests that green spaces can replenish the attention mechanisms, thereby improving attention. Essentially, green spaces serve as a tranquilizer to overworked brains dealing with DAF, allowing students to focus for longer. Educators have been trying for years and years to engage students, but if their engaged students are not focused, then these years of

engaging students are not worthwhile. Thus, green spaces serve as the perfect solution to improve the focus of students.

Furthermore, green spaces have also been shown to significantly limit the amount of pollution in school environments, benefiting the health of students. The problem of polluted school environments has come to such a dreadful level that parents of students in schools with little greenery have had to personally speak up about the issue. Primary care physician Dr. Lorenzo Gonzalez explains that playgrounds have become very dangerous to children because of a combination of heat island effect and scorching asphalt. Gonzalez emphasizes how large of a problem this is because children are most vulnerable to heat-related illnesses. One may infer that students should not be exposed to dangerous situations in which they become vulnerable. Clearly, this lack of green space is causing issues that are unprecedented and unacceptable. On the other hand, Demeaux again implies that green spaces can support academic performance by improving physical health, for this connection has long been proven. She explains that green spaces can kill three birds with one stone by lowering urban temperatures, filtering harmful pollutants out of the air, and reducing noise pollution. One can imagine that it would be difficult to learn in a loud environment, or in a hot one, and in a place where it is impossible to breathe fresh air. Therefore, the health of students is crucial to their learning, and greenery seems to come out as the perfect solution to this problem.

However, there are experts who think increasing teachers' paychecks might be a better way to use the school’s tight budget. For example, the Edweek Research Center suggests that when salaries increase, meeting inflation levels, they become more appealing to staff and more effective in preserving quality teachers. One may assume that a successful school needs sufficient teachers, and it's clear that a solid salary will aid in accomplishing this goal. Moreover,

teachers' opinions should be considered heavily when spending a school's budget; listening to teachers demands of an increased salary is certainly important. However, an increase in greenery within schools would benefit not only the teachers but every person who is in the school's environment, especially students. Demeaux suggests that green spaces can promote social environments by providing a place for gatherings and interaction. Demeaux says that social cohesion works to prevent social isolation, which has been shown to have a decline in academic performance. Many may agree that it is a far more pleasant environment under shady, luscious trees over scorching hot asphalt. Moreover, this community space benefits everyone within schools: students, teachers, janitors, admin, parents, etcetera. Thus, greenery proves itself as a far better use of money within school environments than increasing teachers salary.

To sum everything up, it's clear that adding a touch of greenery in schools is a smart move. Not only does it boost students' physical health, but it also helps keep stress levels down and sharpens focus. When schools embrace plants and green spaces, they're not just decorating the halls; they're creating a healthier, more inviting place for learning. Thus, planting greenery is crucial to help students thrive.

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