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On a fateful Friday in Kansas City Missouri in 1981, a suspended walkway in the Hyatt Regency fell onto another walkway below it, killing 114 people and seriously injuring another 216. It was one of the most horrific structural failures of all time. “Those people who could walk were instructed to leave the hotel to simplify the rescue effort; those mortally injured were told they were going to die and given morphine. Often, rescuers had to dismember bodies in order to reach survivors among the wreckage. One victim's right leg was trapped under an I-beam and had to be amputated by a surgeon, a task which was completed with a chain saw.”(Wikipedia) The horrors of that day were enough to drive a member of the rescue effort to suicide, all a result of engineering negligence. Construction difficulties resulted in a modification that doubled the load on the connection between the fourth floor walkway support beams and the tie-roads connecting the walkways. The engineer responsible could have evaded catastrophe by making a few simple calculations, not only did he fail to do so, but his supervisor gave him a stamp of approval without checking his work. While both were stripped of their engineering licenses in Missouri, no criminal charges were pressed and both continued to practice in different states.

Engineering as a discipline requires attention to detail; one small error can lead to disaster. This cold reality would lead some to suggest that, in the engineering discipline, partial credit should not be awarded in order to discourage carless work. So, should partial credit be awarded? The answer is unequivocally yes. In the case of the Hyatt Regency, everything that could have gone wrong did. The designers were carless in the first place, a modification was made without load calculations, there was miscommunication between the designer and the steel contractor, and a large party with hundreds of guests was thrown on top of it. In reality, a system of peer review and federal regulation ensure that one’s person’s negligence does not materialize into a tragedy, as shown by the general lack of daily structural failures. Furthermore, the field of engineering is understaffed. Most people do not desire a career that is very technically oriented. As it is, many engineering students are discouraged by the rigor of their course loads in college. If professors no longer awarded partial credit, a large faction of students would no longer see the benefit in working so hard, only to receive poor marks when compared to their non-engineering peers. Most importantly, the only way to learn is from mistakes. If mistakes are penalized, no one will be willing to take a risk, and intellectual leap, found at the heart of most true innovation. Partial credit ensures students that as long as they think logically; they do not have to conform to procedure but instead may even create a new approach to an old problem. While engineering requires careful attention to detail, partial credit is not the scapegoat from which to draw blame but a crucial part of the learning process and a precursor to innovation.