

October 29, 2029

John Findura

New Jersey City University

It was October 29, 2029, a Monday. Billy woke up at 7:00AM exactly and yawned. He was not thrilled that the weekend was over, but Halloween was only two days away and he had spent the weekend at some excellent costume parties, as had most every other 10 year old Billy knew. He looked at his wall display, a 55 inch screen only a few millimeter thick that covered the wall across from his bed. His parents had set it so it would not play cartoons in the morning, and instead just showed his schedule for the day and the weather. He was always annoyed by the weather forecast because it didn't really matter much to him. His SmartCloset already knew that today was going to be chillier than the weekend had been and had assembled an outfit that would not only keep him warm, but would also keep him in style. Billy liked to laugh at old movies where a teenage character would be worried about "picking out the right outfit."

Dressed, fed, and on his way to school, Billy pulled out his phone. As soon as he unfolded it the screen turned on and showed him his schedule for the day, again. With the speed and accuracy of facial recognition, there was not even a discernible wait before it jumped to life. Of course his whole school day had been uploaded to his account over the summer, so there would never be an excuse for not knowing that an assignment was due or when a test was coming. Most of the fifth grade teachers were very happy with this, but it just made Billy anxious to know everything that he would be doing months ahead of time. Billy's English teacher, Mrs. Herman, for one, didn't much care for it either.

Instead of the spontaneity of discussion after reading a short story for the first time, she needed to instead focus on the pre-made lesson that she had been assigned. Her district, like most others, invested in outside companies that created and packaged the lessons, put together by Instructional Designers, located...somewhere. This forced her to use proprietary materials licensed from the company. Although she thought Wilson Rawls' 1961 novel *Where the Red*

Fern Grows was an excellent and appropriate book, and she could still vividly recall reading it when she was in middle school, the rights belonged to a different company and she could not use it in her classroom. SmartEye, the program that tracks all of the students' usage on their school tablets, generated daily reports to not only her, but her schools' administration and the company as well, meaning she couldn't sneak the book into the curriculum even if she tried.

Billy walked through the front door of the school as he did every weekday and, like every other weekday, he paid no attention to an oblong black box not larger than his own phone partially obscured in the ceiling. It looked very much like the SmartEye black box embedded in the ceiling of every hallway in the school that tracked student, and teacher, movement throughout the day. This scanner was not really for tracking, however, and did nothing to prevent weapons from being brought into the school, but it was remarkably adept at figuring out which student was running a slight fever or had clammy hands. In fact, over 99% of the students it selected to be screened by the nurses' office invariably were sent home after being more accurately scanned by the SmartDoctor app installed on the nurses' school-issued phone. Because of these procedures, students rarely caught illnesses from each other, cutting down on missed schoolwork. Teachers, also, missed fewer days because of illness and the word in the break room was that they would be given fewer sick days in their next contract.

Billy sat at his workstation in his homeroom and started reading the announcements on the large screen at the front of the room. He could have opened his phone or taken out his tablet, but the same announcements would be scrolling there as well. With SmartEye, and its' app downloaded to every students' phone, the need for taking attendance by the homeroom teacher had disappeared. Not only did SmartEye know if the student was in the correct classroom, it could tell where they were in the building, and through its' app it could discern if the student was

still on the way to school or hadn't even left their house yet. This allowed it to contact students individually to check on them and also notify their parents. Billy's own mother was not always pleased by this, as the last time she kept Billy home because he was ill she was bombarded by notifications asking why she had yet to bring him to the doctors' office.

Mrs. Herman wasn't really all that concerned about which students were present or which were absent. All of her lessons were already downloaded to each students' account and all of her in-class lectures were recorded and available both synchronously and asynchronously. If a student was really home sick, their parents could easily set their home screens to disable any content that was not a live stream of their classroom. If the student was feeling up to it, they could even "beam in" to the class using their VR glasses. She even liked the fact that an algorithm graded all of the students work, saving her a great deal of time and allowing her to focus on helping out the children instead of sitting at her desk. What Mrs. Herman *was* worried about was her upcoming evaluation. When her father was a school teacher, he would complain about the vice-principal sitting in the back of his classroom to observe him.

"How can he tell if I'm a good teacher from sitting in one class for 45 minutes?!" he would say.

Four years ago, administrators finally took that complaint seriously. Because all of her classes are recorded, Mrs. Herman is now evaluated once every quarter based on what she, and her students, have done during the entire 10 week marking period. Of course it would be too costly to have someone actually watch hours of her standing in a classroom, so fortunately SmartEye also has an evaluation feature. Since everything is recorded, from what she is saying to what the students are typing and the grades they are receiving, an algorithm gives Mrs. Herman a rating in almost 25 different categories, including an overall rating. Not wanting to leave

granting tenure to an algorithm, individual districts can “send” an Evaluation Administrator to receive an in-depth, Virtual Reality training on how to interpret the ratings. Or, for a modest fee, and depending on the size of the district, one might also purchase SmartEvaluator, which personalizes what each district is looking for and has an actual person, a company Evaluation Administrator, personally interpret the ratings.

None of that mattered to Billy. He just wanted to get through to Halloween. His day started off in Mrs. Herman’s class, where they were reading a book about a swan who was born with no voice, so he had to use a trumpet to communicate with all the other swans. A pinhole-sized camera on Billy’s tablet followed his eye movements as he read. Every so often, a short quiz would appear on his screen about what he had just read. If he got any of the questions wrong, the tablet would take him back to the part of the story that contained the answer and automatically highlight it. Based on previous answers given, an algorithm would determine Billy’s reading level and structure the questions in a way that were challenging but doable. Of course all of this was taken into account for his Reading rating. Because each student received individualized reading instruction, each student was being asked different questions. With millions of possible question combinations, this greatly reduced any sort of cheating.

For Billy’s next class, Social Studies, he had to take out VR glasses. They were going over the history of New Jersey and the VR allowed them to “walk through” a Lenni Lanape village on the banks of the Delaware River in the early 1700s. They could even interact with a Lenni Lanape elder, through VR, who was more than happy to tell them about the history of the tribe. Billy was excited about the next chapter, where they would get to walk through the camps of George Washington’s army and get a real-time tour of Boston Harbor so they could experience the Boston Tea Party. Math class wasn’t as much fun, but the AR visuals that went

along with the section on fractions made it easier for him to understand that one-fourth and two-eighths were the same.

The lunch period is one of the best parts of every students' day. Because of the waste generated by preparing large enough portions of protein, starches, and vegetables to feed the entire school, they utilize a food delivery service. It's a little more expensive than the traditional school lunch, but they can be ordered weeks ahead of time and customized to ensure that even the pickiest eater, of which there are many in fifth grade, will have a lunch that they both enjoy and is healthy. This also cuts down on waste, the need for cafeteria staff, and servicing an entire kitchen. Science class comes right after lunch, and for Billy, it's usually a highlight of the day.

Using 3-D modeling software, Billy is able to create and test out his own airplane design. After the software shows that his design is airworthy, he prints it with the 3-D printer in the classroom. He gives it a toss and it glides across the classroom, narrowly missing another student. Billy looks around and is glad that Mrs. Nunez wasn't looking, but he'll not be as happy when he gets home and realizes that SmartEye had already sent the ten-second video of him throwing the airplane to his parents. That will surely affect his Citizenship rating for the marking period.

At the end of the school day Billy decides to run over to the park with some friends to play, despite the chilly weather, a quick game of baseball. He needn't worry about telling his parents where he is going as the town he lives in has invested in a system much like SmartEye itself, which can track the movement of all the citizens. Billy's account is set to automatically notify his parents that he is not only not heading straight home, but given the path he is currently taking, he is probably on his way to the baseball field. The only thing he is really concerned with

at this point is whether or not the SmartUmpire system for determining balls, strikes, and outs, is still running this late into October.

References

Greenfield, A. (2017). *Radical technologies: The design of everyday life*. New York, NY: Verso.