

*The following excerpt was written in 1958, but I have updated the language slightly to make it a little easier for you to understand.*

You see stories about boys, poor-but-honest, who go to the top because they're smarter than anyone in the county, maybe the state. But they're not talking about me. I was in the top quarter of my graduating class but they do not give scholarships to M.I.T. for that – not from Centerville High. I am stating a fact; our high school isn't very good. It's great to go to – we're league champions in basketball and our dance team is state runner-up and we have a great sock hop every Wednesday. Lots of school spirit.

But not much studying.

The emphasis is on what our principal, Mr. Hanley, calls "preparation for life" rather than on trigonometry. Maybe it does prepare you for life; it certainly doesn't prepare you for CalTech.

I didn't find this out myself. Sophomore year I brought home a questionnaire cooked up by our group project in "Family Living" in social studies. One question read: "How is your family council organized?"

At dinner I said, "Dad, how is our family council organized?"

Mother said, "Don't disturb your father, dear."

Dad said, "Eh? Let me see that."

He read it, then told me to fetch my textbooks. I had not brought them home, so he sent me to school to get them. Fortunately the building was open – rehearsals for the Fall Blow-Out. Dad rarely gave orders but when he did he expected results.

I had a great course that semester – social studies, commercial arithmetic, applied English (the class had picked "slogan writing" which was fun), handicrafts (we were building sets for the Blow-Out), and gym – which was basketball practice for me; I wasn't tall enough for first team but a reliable substitute gets his varsity letter his senior year. All in all, I was doing well in school and knew it.

Dad read all my textbooks that night; he is a fast reader. I reported that our family was an informal democracy; it got by – the class was arguing whether the chairmanship of a council should rotate or be elective, and whether a grandparent living in the home was eligible. We decided that a grandparent was a member but should not be chairman, then we formed committees to draw up a constitution for an ideal family organization, which we would present to our families as the project's findings.

Dad was around school a good bit the next few days, which worried me – when parents get overactive they are always up to something.

The following Saturday evening Dad called me into his study. He had a stack of textbooks on his desk and a chart of Centerville High School's curriculum, from American Folk Dancing to Life Sciences. Marked on it was my course, not only for that semester but for junior and senior years the way my faculty advisor and I had planned it.

Dad stared at me like a gentle grasshopper and said mildly, "Kip, do you intend to go to college?"

"Huh? Why, certainly, Dad!"

"With what?"

I hesitated. I knew it cost money. "Uh, maybe I'll get a scholarship. Or I could work my way."

He nodded. "No doubt...if you want to. Money problems can always be solved by a man not frightened by them. But when I said, 'With what?' I was talking about up *here*." He tapped his skull.

I simply stared. "Why, I'll graduate from high school, Dad. That'll get me into college."

"So it will. Into our State University, or the State Aggie, or State Technical. But, Kip, do you know that they are flunking out 40 per cent of each freshman class?"

"I wouldn't flunk!"

"Perhaps not. But you will if you tackle any serious subject—engineering, or science, or pre-med. You would, that is to say, if your preparation were based on *this*." He waved a hand at the curriculum.

I felt shocked. "Why, Dad, Center is a swell school." I remembered things they had told us in P.T.A. Auxiliary. "It's run long the latest, most scientific lines, approved by psychologists, and—"

"—and paying excellent salaries," he interrupted, "for a staff highly trained in modern pedagogy [*science of teaching*]. Study projects emphasize practical human problems to orient the child in democratic social living, to fit him for the vital, meaningful tests of adult life in our complex modern culture. Excuse me, son; I've talked with Mr. Hanley. Mr. Hanley is sincere—and to achieve these noble purposes we are spending more per student than is any other state save California and New York."

"Well...what's wrong with that?"

"What's a dangling participle?"

I didn't answer. He went on, "Why did Van Buren fail of re-election? How do you extract the cube root of eighty-seven?"

Van Buren had been a president; that was all I remembered. But I could answer the other one. "If you want a cube root, you look in a table in the back of the book." [*or put it into your calculator*]

Dad sighed. "Kip, do you think that table was brought down from on high by an archangel?" He shook his head sadly. "It's my fault, not yours. I should have looked into this years ago—but I had assumed, simply because you liked to read and were quick at figures and clever with your hands, that you were getting an education."

"You think I'm not?"

"I know you are not. Son, Centerville High is a delightful place, well equipped, smoothly administered, beautifully kept. Not a 'blackboard jungle,' oh, no!—I think you kids love the place. You should. But *this*—" Dad slapped the curriculum chart angrily. "Worthless! Beetle tracking! Occupational therapy for morons!"

I didn't know what to say. Dad sat and brooded. At last he said, "The law declares that you must attend school until you are eighteen or have graduated from high school."

"Yes, sir."

"The school you are in is a waste of time. The toughest course we can pick won't stretch your mind. But it's either this school, or send you away."

I said, "Doesn't that cost a lot of money?"

He ignored my question. "I don't favor boarding school; a teen-ager belongs with his family. Oh, a tough prep school back east can drill you so that you can enter Stanford, or Yale, or any of the best—but you can pick up false standards, too—nutty ideas about money and social position and the right tailor. It took me years to get rid of ones I acquired that way."

Your mother and I did not pick a small town for your boyhood unpurposefully. So you'll stay in Centerville High."

I looked relieved.

"Nevertheless you intend to go to college. Do you intend to become a professional man? Or will you look for snap courses in more elaborate ways to make bayberry candles? Son, your life is yours, to do with as you wish. But if you have any thought of going to a good university and studying anything of importance, then we must consider how to make best use of your next three years."

"Why, gosh, Dad, of course I want to go to a good —"

"See me when you've thought it over. Good night."

I did for a week. And, you know, I began to see that Dad was right. Our project in "Family Living" was worthless. What did those kids know about running a family? Or Miss Finchley? — unmarried and no kids. The class decided unanimously that every child should have a room of his own, and be given an allowance "to teach him to handle money." Great stuff...but how about the Quinlan family, nine kids in a five-room house? Let's not be foolish.

Commercial arithmetic wasn't silly but it was a waste of time. I read the book through the first week; after that I was bored.

Dad switched me to algebra, Spanish, general science, English grammar and composition; the only thing unchanged was gym. I didn't have it too tough catching up; even those courses were watered down. Nevertheless, I started to learn, for Dad threw a lot of books at me and said, "Clifford, you would be studying these if you were not in overgrown kindergarten. If you soak up what is in them, you should be able to pass College Entrance Board Examinations. Possibly."

After that he left me alone; he meant it when he said that it was my choice. I almost bogged down — those books were *hard*, not the predigested pap I got in school. Anybody who thinks that studying Latin by himself is a snap should try it.

I got discouraged and nearly quit — then I got mad and leaned into it. After a while I found that Latin was making Spanish easier and vice versa. When Miss Hernandez, my Spanish teacher, found out I was studying Latin, she began tutoring me. I not only worked my way through Virgil, I learned to speak Spanish like a Mexicano.

Algebra and plane geometry were all the math our school offered; I went ahead on my own with advanced algebra and solid geometry and trigonometry and might have stopped so far as College Boards were concerned — but math is worse than peanuts. Analytical geometry seems pure Greek until you see what they're driving at — then, if you know algebra, it bursts on you and you race through the rest of the book. Glorious!

I had to sample calculus and when I got interested in electronics I needed vector analysis. General science was the only science course the school had and pretty general it was, too — about Sunday newspaper supplement level. But when you read about chemistry and physics you want to do it, too. The barn was mine and I had a chem lab and a darkroom and an electronics bench and, for a while, a ham station. Mother was perturbed when I blew out the windows and set fire to the barn — just a small fire — but Dad was not. He simply suggested that I not manufacture explosives in a frame building.

When I took the College Boards [SAT] my senior year I passed them.

from *Have Space Suit — Will Travel* by Robert A. Heinlein