My Mentor: Robert M. Gagné

Bruce W. Tuckman

I am not likely to forget my first face-to-face encounter with the man who was to become my mentor, Bob Gagné. It took place in December of 1959 when I was an undergraduate psychology major in my senior year, and Bob was in charge of the graduate psychology program at Princeton University. Incidentally, to provide some historical perspective, Eisenhower was President of the United States, and you could buy a Coke for a dime.

I was interested in the field of human learning, and was doing a senior honors thesis on the role of cuing in what was then called programmed instruction. This reflected my strong practical interest in how people learn real information in real settings, not nonsense syllables in a laboratory. In my reading and literature reviewing, there was not much to be found on this new and emerging field, but a name that did come up frequently was Robert M. Gagné, the man who would ultimately dub the area instructional psychology. Based on reading his ideas, I decided that Gagné was destined to become a "star" and was the man under whom I wanted to study. There and then, I became committed to having Bob Gagné as my graduate mentor.

A few months after making this determination, I found myself travelling south west out of New York City’s Penn Station (the old one, not the one that currently sits beneath Madison Square Garden) en route to Princeton, New Jersey. It was Christmas break of my senior year, and I made an appointment to meet with my idol. It was “Mohammed going to the mountain,” so to speak, and I was very excited as I sat back and watched the New Jersey countryside rush by. (It was a lot prettier then than it is now.) At Princeton, I switched to a two-car train that must have been the prototype for the Toonville Trolley, for the short trip to Princeton. I felt like Zippy in Fooney and Zooey (Salinger, 1961). My heart was hammering in my chest.

The Princeton station was across from the McCarter Theater, and only a short walk to Eno Hall, then the building that housed the Psychology department. The campus was deserted because everyone had departed for Christmas, and the Deal for Christmas in old Eno Hall that was burning in winter was completely out. Professor Robert M. Gagné was not at all what I expected. He was a big man with a big round head, topped by sparse and rapidly disappearing tufts of hair. He wore a shaggy old sweater and strange looking shoes. He had a very loud and gruff voice, and his demeanor somehow made me think more of the farming towns of upstate New York, where I was currently attending school, than of staid old Princeton. (He did, in fact, grow up in a farming community of North Andover, MA; I later discovered.) He did not seem at all to fit his name; there was nothing French about him, certainly nothing that conjured up an “accent aigü.” A beret might have helped.

But he was direct, almost blunt you might say, and as smart as I thought he would be. As soon as my initial shock wore off, I could see he was “the man.” His questions cut right to the heart of things, and he treated me as an equal – which I surely was not. He also said he would take me on as his research assistant. When I arrived in September, I would work in his lab. My head was spinning so when I left that I remember nothing of the ride home.

My years at Princeton were greatly influenced by Bob Gagné’s presence and his ideas. His laboratory was in a cinder block building under Palmer Stadium, and it had some odd paraphernalia scattered within it. From his prior years in military laboratories studying psychomotor skills, he had brought various kinds of reaction time apparatus, one of which looked a bit like an airplane cockpit simulator. Those of us who worked in his lab would play with it from time to time, much to his consternation. Gagné, himself, had a strange love/hate relationship with things mechanical, as I was soon to learn. The lab also housed some famous illusions, left behind by his predecessor at Princeton. One of them I remember distinctly – the disoriented room.

The room was built so that everything within it looked larger than it actually was. It had grown musty from disuse, giving it a musty and locatable sort of like something out of Tales from the Crypt (Cochran, 1979).

In the hallway, just outside the lab, stood a cigarette machine, and Gagné was a heavy smoker. Lucky Strike was his brand. Because he smoked a lot, it was not uncommon for him to run out of cigarettes, and then hasten over to his cigarette machine replacements. I distinctly remember running subjects one day and being interrupted by a loud noise coming from outside the lab. The lab manager was so great that I could not proceed with what I was doing, and so went to investigate. What I found was Bob Gagné at war with the cigarette machine, smoking it furiously with both hands, face reddened, shouting epithets at the inanimate object of his affection. The machine, it seemed, had swallowed his quarter (yes, cigarettes only cost a quarter in those days, and none of us knew they were lethal) and given him nothing in return. He was going to get either his cigarettes or his money or the machine would suffer the consequences. It was only after a lot of “shushing” that he calmed down enough to resolve to wait for the man who refilled the machine to show up to get his satisfaction. Gagné also said he would take me on as his research assistant. When I arrived in September, I would work in his lab. My head was spinning so when I left that I remember nothing of the ride home.

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All this, however, was entirely beside the main event, working with the man. He was beginning to develop the idea of learning hierarchies, one of the essential features of his life’s work, and I believe he was really onto something. He was analyzing skills and knowledge into components, and he was doing it as a prerequisite to instruction. When you really think about it, you can see that he stood at the crossroads of his field and moved from behaviorism to humanism, which is what he called it. In the end, I think, we worked in both. In the former, indeed had even developed a runway on which to test rats for his own dissertation, and was now drawn inextricably toward the light of what he called nonreproductive learning. He carried a lot of systematic and analytic quality of behaviorism into his studies of learning and problem solving, thus forcing a discipline of order and objectivity on his ideas. I think it was that order and objectivity that made his new approach so appealing.

I was fascinated with his work, ready to put in the long hours, which, needless to say, I did. I would watch “the man” work, and then work as hard as I could. He had a very clear and direct way of doing things, and sometimes it was difficult to see how he went about it. Fortunately, that was okay with the master or else there would have come an inevitable early parting. The master was always working from the top down, the disciple for proceeding from the bottom up.

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And still the story is not over. After leaving the deanship, I remained at FSU, joining the Department of Educational Research, Bob Gagné's old department. I spent 12 more years there. In the office next to me was Walt Wager who collaborated with Gagné on the third and fourth editions of *Principles of Instructional Design*, after Les Briggs, Gagné’s original coauthor, passed away. In the next office down was Bob Reiser, who collaborated with Gagné on Selecting Media for Instruction. Two offices down was Marcy Driscoll, who collaborated with Gagné on the second edition of *Essentials of Learning for Instruction*. Across from Marcy was Walt Dick, who worked in Gagné’s lab at Princeton as an undergraduate the first year I was there as Bob’s graduate research assistant, and who collaborated with him on his famous chapter on Instructional Psychology in the *Annual Review of Psychology* (Gagné & Dick, 1982). On the back wall of our office suite hung a picture of Gagné accepting the Educational Technology Man of the Year Award in 1988, right next to a clock that Gagné himself made in his garage (and that, unlike its creator, unfortunately stops from time to time).

These former colleagues that were in the offices around me then all told Bob Gagné stories that both mirrored and rivaled my own. Walt Wager retold a story told to him by a student of the time Gagné lit a cigarette while teaching and then, thinking it had gone out, replaced it in the pack in his pocket. A student timidly raised his hand, and when called on, told Gagné that his pocket was on fire. Indeed smoke could be seen emanating from within Bob harrumphed, and then snatched the smoking cigarette from his pocket and began to smoke it while continuing on with his lecture. Or the time he launched a telephone across the room in anger because it would not work right; another indication of his impatience with mechanical ineptitude. Early on, Gagné asked Wager about which Macintosh computer he should buy. Holding his breath knowing how frustrated Bob can get, Wager told him: “If you buy a Mac, you have to use the mouse.” From the other end of the phone came the sound of gnashing teeth.

But what these people talked about most is what they learned from Bob Gagné, from his spontaneous questions, irrepressible curiosity, and creative mind. He left a legacy at FSU of his work ethic, clear thinking, openness to new ideas, and willingness to help others.

The signs and associations and memories of my mentor surrounded me then. I found myself having to share my mentor with four other people, all of whom regard Bob Gagné as their mentor too. Bob Gagné designed the Instructional Systems Program in which they all worked; he gave it legitimacy; he put it on the map. He did as much and more for them as he did for me, but at a different point in his career. We are the living legacy of Bob Gagné the mentor.

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Figure 1. Hierarchy for adding in the “New Mathematics” (Gagné, Mayor, Garstens, & Paradise, 1962).