

## Connecting with Students: Insights on Successful Licensing Instruction

by Randy Hatfield AG6RH



My background is sales and marketing. I'm an appliance operator not a circuit designer.

There are a number of things that when put together make the classes I teach so successful (100% of students 14 and older pass the Tech exam the first time. 80% of the students purchase a radio by the second or third/last class.) And the guy I gave this method to is having the same success...I'll start with some

background and then give you the very few pieces to the puzzle.

### My investigation and experience.

Over the years I have monitored/audited various ham radio teachers and their methods. The instructors fall into just a few categories. 1. Engineers who are too technical, dry and seem to toss out sleeping pills with each word. I audited one instructor who teaches a (12 hours) Tech course that he does in one day because people don't come back to the second session! 2. Instructors who love to hear themselves talk and want to teach the entire hobby in the Technician course. They throw way too much unrelated information at the prospective Technician. 3. Instructors who affiliate with a local college and stretch out a Tech (night meeting) course into 8 or 16 weeks. By the time the course is over 1/2 the students stopped attending (other stuff comes up).

Two-plus years ago I started really studying what are the hot buttons for prospective hams. I spoke briefly with Gordon West at the Riverside ARRL Hamvention regarding his method. My dad took his class 20 years ago in the golden age of new hams. It really hasn't changed much over the last 20 years but was refined. I have found since 9/11 and Katrina that the number one reason for interest in ham radio seems to be emergency communications. I have made a focus of teaching emergency communications in the classes I teach and do it in three 4 hour sessions and one lab class which is optional. The number one reason people don't purchase "ham gear" and stay active in the hobby is because they don't think they will use it that much. You have to answer that objection as an instructor.

### What makes my method work?

My philosophy is to motivate students to want to study and learn. If the Pied Piper is happy and excited even "Grumpy" catches a bit of it. Especially, if you smile and chat with him a bit. I also explain that this is a course based on emergency communications on a small budget. Everything I suggest they purchase gives the most *bang* for the buck. In other words, value, without extravagance. This puts the ladies at ease.

1. The ARRL instruction manuals have historically been dry and impersonal as the desert sand. They may be good for the "Techie" but not for the housewife. You get the husband and wife licensed and their excitement, retention rate, radio gear and book sales go up. I use Gordon West's Tech manual. I also use his instructor's manual off the internet. I gear my instruction at the teenager and housewife. The *gents* appreciate the "support".
2. The PowerPoint I made is based on the Gordon's student manual-Pre-Study Q&A. I use a lot of ARRL support publications in the lessons and suggest the new hams purchase certain books for their "knowledge" library. "Knowledge" is more powerful than "reference".
3. I took ARRL's *Beyond Repeaters* online course. I use a lot of that information in the class for demonstrations.
4. I worked with the local city Office of Emergency Services to determine their needs and teach what the local cities need for emergency communicators in the CERT and ECS programs. Some RACES groups still refuse to work under the ECS program and cities are recruiting new hams behind their backs and plan to dismiss RACES personnel who don't want to change. I've heard this from some RACES members, "I've been a licensed ham for 20 years and FEMA don't know what it's talking about".
5. Main demonstration radio...Yaesu FT-60R. This radio is a true emergency services radio. The fact that it can work simplex, repeaters, Echolink and satellites makes it a hot button for teenagers. We demonstrate it's capabilities in the first class session and many students have purchased one by the 2nd or 3rd class. The students see that the radio has more than just an emergency application. You can brag about this little jewel. In the 2nd and 3rd classes we all go outside and work AO-51 in the morning via 3rd party traffic. Some listen-in on their own new radio using a 19 inch whip.
6. There are many demonstrations and items passed around in class (resistors, capacitors, various types of coax and mag-mount antennas, etc.). We demonstrate (Echolink by computer and radio), simplex using various antennas (rubber duck, home-brew 2 element quad, 19 inch whip, copper j-pole) APRS, T-hunting using a handheld, amplifiers, etc.
7. We discuss proper ham radio etiquette and demonstrate it. We talk about basic emergency communications (who, what, when, where, how and why). Who's in charge in an emergency, you or the agency you work for.
8. After the last class I teach a lab on making copper J-Poles. I use a jig for cutting parts to proper length and alignment for soldering. I supply all the materials and each student pays \$20. That price changes with the cost of copper pipe. California is \$5. a 10' stick higher than Arizona.
9. I loan some old ham radios to students who get licensed and can't afford a radio. Some keep them a week, others a month.
10. The new Techs can start out on a simplex frequency I monitor and chat or they can hit the repeater world as fast as they like. The first one to go on to General gets

my portable station to set up at their house for a month. It includes a power supply, Icom 706MKII, 30 foot push-up and an inverted vee. To top the system off they get to use a 12 element boomer with an Armstrong rotor. They get 4 hours of set-up time and instruction from me. Then I get the late night excited phone calls. And I smile with excitement, too. It reminds me of my Elmer, N6ME, when I was a novice.

I would have to say, that the flaw in my system is finding a club willing to take on new hams. When I visit clubs in California or Arizona they say they want new blood. I'll be darned if they bother to contact the list of hams I give them. I find that most "senior hams" aren't into Elmering anymore.

I know that my overview isn't using ARRL manuals. I heard there was a new one coming out soon.\* This could possibly be adapted to it. The whole idea of my making a PowerPoint centered class was to maintain the student's focus. In today's society, time means everything. I pour as much pertinent Technician information into a student's head as needed for them to be a competent Tech operator out of the starting gate. A class must be geared to the housewife and the teenager if the hobby is to retain active hams from a smaller pool of population. The baby-boomer generation is about 100 million people. The next generation, Generation X is only 45 million people.

\*The new ARRL *Ham Radio License Manual* was released in June 2006.

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Randy will share his instructional Power Points with other instructors upon request.  
He can provide his materials on CD. Some restrictions apply.