The purpose of the present study was to propose and evaluate the effectiveness of a Speech Pathology Program for the preparation of radio speakers, which was used with students of the professional course for broadcaster-Radio Speakers. The Speech Pathology Program for the preparation of radio speakers was structured in 7 modules with the duration of 7 weekly lectures. The program was based on the stimulation of 11 aspects, which were presented in a sequential mode. The participants were divided in 2 groups and paired according to age and gender. The research group consisted of 35 adults, students of the radio speakers course, and the control group consisted of 35 adults who volunteered to take part in the research. Three types of analysis were made: (1) an objective analysis of voice through the extraction of the fundamental frequency; (2) a perceptive-auditory analyses of the vocal use; and (3) an objective analysis of the speech rate during reading. The results indicated that the groups differed from each other in relation to the vocal use and the speech rate during reading. Regarding the vocal use, the groups were different for the parameters of vocal quality, loudness, resonance, coordination between breathing and speaking, articulation, modulation and reading rhythm. Regarding the analysis of the speech rate, the groups were different for the number of words and syllables per minute. As for the objective analysis of voice, the research group presented differences in their pre and post program application performances, with the reduction of the fundamental frequency. The results indicate that the Speech Pathology Program for the preparation of radio speakers was effective in its proposition. The parameters in which improvements were observed are those specific for a good locution.