

A METHOD OF ANALYZING OFFENSIVE EFFICIENCY

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It is, of course, trite to say that the cardinal aim of basketball offensive strategy is to work the ball in for short shots, while at the same time forcing the opponents to take the long ones. This, of course, is premised upon the obvious fact that short shots are easier to make. In practice, however, we frequently find that the opponents are quite as diligent in working for the short ones as we are, while at the same time both their defense and ours seem to resent very strongly all attempts to work the ball in for close shots. The results is that in the average contest both teams take short shots, medium shots and, to a lesser extent, long ones. One team may outshoot the other as a matter of mere percentage of shots taken, but still lose because the opposition has more and better shots. On the other hand, all of us have suffered from the efforts of "hot" teams who salted the game away despite the superior and more numerous shots which our boys failed to realize upon.

If consideration be given to situations of this sort, it becomes obvious that any analysis of offensive efficiency must in some way correlate the number and the relative location of the shots taken with the percentage of goals made therefrom. The following suggestions along this line are offered for what they are worth:

1. **WEIGHING THE SHOTS TAKEN.** For the same reason that all teams endeavor to work the ball in for short shots, it is clear that the mere number of shots taken is not in itself a definite criterion of offensive efficiency. For this reason different values or weights must be assigned to the shots attempted, dependent upon the location of the shooter with regard to the basket at the time a shot is taken. A simple method of accomplishing this is to designate three zones in the chart book; Zone 1 being included within a virtual semicircle of six feet radius measured from a point directly beneath the center of the basket and closed by the end line; Zone 2 being included within a semicircle tangent with the outer edge of the foul circle and closed by the end line; while Zone 3 constitutes the remainder of the offensive area. Shots taken in Zone 1, irrespective of whether they are made or missed and including tip and follow shots, are awarded an arbitrary weight or value of 3; Zone 2 shots a value of 2; and Zone 3 shots a value of 1. These are added and the total value or weight of all shots taken during the game by each team is thus obtained.

2. **PERCENTAGE OF SHOTS MADE.** This is, of course, obtained by dividing the number of field goals made by the total number of shots taken, irrespective of their location. The customary practice, so far as keeping the chart book is concerned, is to note upon it the number of the player taking each shot and the location of the player at the time, circling the number when the shot results in a field goal being made.

3. **CORRELATING THE WEIGHTS AND PERCENTAGES.** So far we have discussed the weights and the percentages wholly without relation to each other. The weights represent the results of the offensive system or of individual cleverness or both in obtaining proximity to the basket. The percentage represents shooting ability with or without cleverness in scoring when and if closely guarded. Each element, however, plays its part in the general efficiency of the offense and hence each should be given due credit. This is best accomplished by applying the percentage of shots made (the game-criterion of shooting ability) to the weight of the shots taken (the game-criterion of maneuvering ability) a matter of simple multiplication. Thus Team A shoots .200 and has a weight of 100. Its offensive efficiency is therefore, eliminating the decimals, 20 units. Team B shoots .150 and has a weight of 150. Its offensive efficiency is therefore 22.5, or counting .5 or more as a whole unit, 23.

This system of analysis as applied to twelve game of the