



I came into this article my sophmore year of college. Our head coach brought it to the team in the fall to stress how our offense could average eight runs a game and our defense could prevent the other team from scoring more often. I hope it sheds light and triggers ideas for your team. -Spiker

The Amazing Walk...Gary Ward Explains How Valuable It Can Be

By LOU PAVLOVICH, JR.

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LAS CRUCES, N.M. — Of all the offensive statistics that are measured in baseball, the lowly walk is undoubtedly one of the most important, according to Gary Ward, one of the best hitting coaches of all time.

The most important number any offense ultimately produces is run production. When Ward was the head coach of Oklahoma State for 19 seasons, his teams led all NCAA Division I teams in run production six times, including four consecutive years from 1985-1988. Here is the breakdown for runs per game during those years:

1985: 10.56 runs per game. 1986: 10.76 runs per game. 1987: 11.43 runs per game. 1988: 11.28 runs per game. 1995: 10.55 runs per game. 1996: 11.36 runs per game.

During those 19 years, his teams averaged 9.2 runs per game. And what fueled that incredible run production was a remarkable on-base percentage by his hitters which was kick started by walks.

When you look at the on-base percentage of Ward's teams during that time, his offense never had a lower on-base percentage than .423 after his first two seasons with the Cowboys. During the 1987 and 1988 seasons, the on-base percentages were extraordinary at .500 and .517.

Breaking it down further, his teams walked more than any team in NCAA Division I history which allowed the on-base percentage to shoot through the roof.

Over 19 years at Oklahoma St., his teams averaged 7.1 walks per game. In 15 of those 19 seasons, his batters walked at least 415 times a season with a high of 607 walks during the 1986 season. That year, OSU batters walked an average of 8.5 times per game.

This year at New Mexico St. under Ward's hitting tutelage, hitters have put up some staggering offensive numbers.

The Aggies have walked 229 times (ranked No. 1 in the latest NCAA stats) in 28 games (8.1 average per game) with an on-base percentage of .500.

New Mexico State's 229 walks were 74 more than the second highest team in the nation. And that was Lamar with 155. Being a disciplined hitting team has allowed the Aggies to score 13 runs per game (No. 1 in the nation) and post a staggering .661 slugging percentage (No. 1) with 63 homers (No. 1) and 85 doubles (No. 1).

Just another day at the office for Ward.





Ward was the architect of 16 straight Big Eight Conference championships spanning three decades at Oklahoma State where he was the head coach from 1978-1996. He guided the Cowboys to 17 NCAA regional appearances and 10 trips to the College World Series. Seven of OSU's College World Series appearances were in consecutive years, an NCAA record.

He compiled a record of 953-313-1 in 19 seasons in Stillwater, Okla. before retiring prior to the 1997 campaign.

Ward came out of retirement and was the head coach for two seasons at his alma mater New Mexico State in 2001 and 2002, leading the Aggies to the Sun Belt Tournament championship 2002.

Incredibly, 108 of his players at OSU went on to sign professional contracts.

Why Walks Are Vital

"The walk has always been important," said Ward. "It isn't about taking pitches. A lot of people get confused about going out and taking a bunch of pitches. The reality is that you must value being disciplined at the plate. On the junior college level, you might find 3-4 guys who can cover the zone with the bat on a team.

"But the great majority of athletes, if you can teach them their zone within the strike zone, can have enough athleticism and bat speed to cover that with some ability. So we have always worked very hard at reducing the zone down and used terms like 'shorten the look' or 'center the ball more.'

"Ted Williams' book The Science Of Hitting was a great influence on me. It was written many, many years ago. When he played, he had that combination of discipline, power and average that I felt was the ultimate offensive performer.

"So we worked on having this type of hitter in our program wherever I have been. The statistic we valued was having a plan when you got to the plate, reduced the look, reduced the zone, and looked to the power zone.

"We discipline our hitters in relationship to their ability. Guys who have the ability to control the entire zone have a little more free reign. But I feel when an athlete's ability and bat speed decrease at the plate, the zone decreases with that. We have to be more precise as to what rhythm we are working with as well. We can cheat a little bit to the power zone or zone we are looking at, and it improves our bat speed a little more."

Ward said that a common question is how you hit the breaking ball.

"Swing mechanics dictate who will and who won't hit the breaking ball well.

"It is much more difficult to hit a breaking ball moving away from a batter. If the breaking ball is thrown consistently well starting on the inside of the plate and finishing on the outside at knee high, I'm not sure how many people can hit that. If you can hit that, you can hit anything else.

"So we talk about taking the breaking ball and started the term 'walk-strikeout ratio.' Our evaluation of hitters was not so much on batting average. We spent some time with on-base percentage and the number of walks that increase and strikeouts which decrease.

"This obviously increases our chances of having people on base. If you hit a pop fly, the percentages are that it will be caught.





"But if you put the ball in play on the ground, one fielder has to catch it. Then he has to throw it. Then it has to be an accurate throw so the person on the other end catches it properly. So we really emphasize to our offense the base fundamental of trying to get people disciplined enough to handle the zone that they can handle with their own unique athletic ability."

Through his 19 years at Oklahoma State, Cowboy hitters had a superb strikeout-walk ratio with 9,001 walks and 6,916 strikeouts.

"Every player has their own strikeout-walk ratio. So it might be higher or lower depending on the hitter. And with the strike zone changing the last 20 years in college baseball, you have to keep that in mind as well. At one time, a good barometer was one strikeout for every 1½ walks for the overall team strikeout-walk ratio.

"But we found that it was better to look at each hitter individually for these numbers. Some hitters with power swing extremely hard at pitches and tend to strikeout more often than others. So you treat the numbers differently from player to player. You keep working on it so that they become better over time with fewer strikeouts. The key is having strike zone discipline which helps the team."

Taking Breaking Pitches

Ward said he identifies what batters can drive inside pitches well, outside pitches hard as well as others who can destroy breaking pitches.

"We ultimately find out what each hitter's strength is. If the hitter is a good fastball hitter who can't hit the curve, we want them to recognize the breaking ball and take it. Getting in rhythm with what they can handle in a certain zone is important.

"Making the hitter more aggressive in a smaller area will allow him to be a better athlete. That is how I feel good power hitters are developed.

"But the bottom line is at the end of the day, what is your walk-strikeout ratio? How many times are you putting the ball in play? You may even chart hard contact by your hitters because some people hit into bad luck through a series of 15-20 at bats, and you don't want to confuse batting average with execution.

"When I was the head coach at Yavapai Junior College in Arizona years ago, we qualified for the Junior College World Series in Grand Junction, Colo. We found ourselves down 8-1 in one game, and we maintained our discipline and fought pitches off. At the end of the game, we came back and won, 14-10. Then we went on to win the national championship that year. It was really a critical game.

"After the game, a young man came up to me from the Grand Junction crowd and said to me, 'Coach, I was at that clinic that you gave here in Grand Junction. You talked then about walk-strikeout ratio and being able to have enough mechanics to take the breaking ball instead of chasing it because so many people can't hit it.

"He asked me if I had any idea how many breaking balls my players swung at during that key game in nine innings. I figured it was probably four or five. And of those, one of our players probably swung at 3-4 of those. He said that is what he had on his chart. He asked me why I felt one of my players swung at so many breaking pitches? And I said that he is a breaking ball hitter. His plan when he went to the plate was to look for the breaking ball because that's what he hit well."





When Ward was the head coach at Oklahoma State, his teams were involved in 10 College World Series. When he compared the walk-strikeout ratio to other teams in the CWS, his ball club always had better numbers.

"Each year you qualify, you pick up the respective stats of the competing ball clubs. And almost without exception, our hitters would have the best walk-strikeout ratio. People would look at the power numbers and batting averages and the great players we had such as Robin Ventura and Pete Incaviglia. Everybody thought we had a lot of talent, and we did.

"But even within the context of that, even the power hitters were expected to have a degree of discipline. "Their walk-strikeout ratio was constantly monitored and valued. Along with that, we learned a new technique called rhythm adjustment during my early years with Oklahoma St."

Rhythm Adjustment

Ward was asked to explain what rhythm adjustment is.

"During clinics, I usually refuse to bring it up because it is far too difficult to explain in a short period of time. In one of my videotapes that I did when I was with Oklahoma State, my assistant coach at the time was Jim Schwanke, and I felt we did a terrific job of explaining what rhythm adjustment was all about.

"The hitter needs to know how much information time he has on the pitch before he commits to the swing. That is the pure essence of hitting talent. How long do I get to see the ball travel? And what am I doing to get my body in a position to hit? Then in the last 30 feet of travel, the hitter must make a decision predicting where the ball will be with its speed and location and whether it will change plane. And it becomes a challenge.

"Its probably a little too much to expect out of a college hitter to do all this. But you must work at those kind of things in your daily drills and be relentless if you want a quality of discipline with your ball club.

"I think Jim Schwanke did one of the really remarkable jobs in college baseball history for Skip Bertman at LSU in taking our system there as their hitting coach several years ago.

"We simply call it the hitting plan per at bat. Although they had 'gorilla ball' at that time with many home runs, they still had pretty sound, disciplined hitters who valued the pitch and valued the base on balls.

"The greatest hitting situation you can be in is ball one, ball two, ball three. We know statistically that the percentages go up as balls are taken. So the worst thing that can happen is see a hitter chase the zone.

"And the worse the hitter, the smaller the zone has to be because he has a less of an ability to cover an area. We want everything balanced and quicker as far as our reaction time.

"So again, how far should the ball travel before I make a move on the ball and/or initiate a swing? The greater the information, the greater the discipline, the greater the strike zone, the higher the walks and the lower the strikeouts.

"You must work on these drills. You can't go out and let people start using batting practice as a driving range. It can't be like that. It is a laboratory. If you're not there every day, problems develop. Even in pregame hitting, I am there to monitor my hitters. Some people wonder why I don't leave them alone prior to games. The way I look at it is that if you have 18 hitters, each one has a variety of verbal clues that you and he have developed over time.





"It might be a comment such as 'stay in the seat,' 'keep your nose up,' 'give me linear load.' You might have 15 or 20 verbal clues for each guy. There is no leisure batting practice ever taken in our program. It is done with supervision and responsibility."

Power Hitters Overswing

Ward said that Oklahoma State's Incaviglia, a tremendous power hitter, even had his issues at times. Incaviglia had the most impressive offensive year in NCAA history as a junior in 1985 as he set NCAA single-season records for home runs (48), RBIs (143), total bases (285) and slugging percentage (1.140).

He also set NCAA career records for home runs (100) and slugging percentage (.915).

"Even in his good years, he would start overswinging the bat, separating and seeing how far he could hit a ball. Then I would run him out of the cage and send him to the soft toss station so he could go back to the basics. I would tell him that this is not a driving range, and I am not interested in oohs and aahs here.

"Batting practice is predictable and at the same speed. You can make a bunch of mistakes and still put on a show. You see an awful lot of very good BP hitters because it is at a predictable speed and many times at a predictable location. If you don't value it as a coach, they won't value their time in BP as a player.

"If you have the kind of drills established to replicate game speeds, game reads and game reaction times rather than guys going out and banging the ball around, then they will be better off. BP is not a social activity. It's business. We want to spend to spend the vast majority of our time practicing at game speed with coaching supervision. And when we teach, that is what the cages and off-site hitting areas are for."

Ward said that batting averages are way too overrated.

"We don't value batting average very much. With many baseball players, batting average becomes their identity.

"I try to detach my hitters from thinking too much about it. When you have over 150 at bats, you sometimes have a lot of flares and seeing eye ground balls that are hits. You might also have a lot of hard hit line drives that are caught. At the end of the year, it is better to look at the on-base percentage.

"If I have a guy who can steal 50 bases a year and walk 50 times, then that is a powerful offensive weapon. If I have a guy who has double, triple and home run power, then they can create their power through their skills.

"We really value and reward disciplined hitters. The highlight of our day is who had the most pitches in an at-bat. Who had the 8-9-10-11 pitch at-bat and won it.

"In order to play championship baseball, we had beat pitchers like Roger Clemens or Jack McDowell when Oklahoma State was playing in the College World Series. There are a lot of times you don't have the ability to beat these guys who will be in the Major Leagues.

"But you do have the ability to make each at-bat so involved and so important that when you look up in the seventh inning and playing Texas, because of your hitter discipline where strikes have been fouled off, his pitch count is at 128, and they have to go to the bullpen.

"We try to play that great pitcher close and then have 2-3 innings to beat the guy out of the bullpen. I can't tell you how many times that system functioned where you get a key pitcher out, and we get to the relief pitcher.





"In an environment like the College World Series, the fear of the walk by the opposing pitcher is a great situations to hit in. That's been proven statistically. But more importantly, if you are able to pitch count a superb pitcher and get that quality starter into 15-20 pitches an inning or get him past 100 pitches in the fifth, sixth and seventh inning, you have a chance to break through.

"By utilizing this system, we felt at Yavapai, Oklahoma St. and certainly at New Mexico State that we have a chance to compete against other teams with superior personnel."

Zone Hitting

Ward was asked to explain the quadrants of the hitting zone he teaches athletes to hit in.

"When we work batting practice, we generally work in and out. We try to increase the horizontal strike zone. When I have had the chance to go into Major League parks and see great hitters over the years, almost all of them have a problem with a part of the zone.

"On our New Mexico State team now, without naming names, I have a terrific high ball hitter. He is one of the best high ball hitters I've ever seen, and he's going to have a very good year.

"I've got a couple of guys who can turn on inside pitches. I have a couple of guys who really need the ball away. It has a lot to do with body types. Every kid has a different length of lever. They have different arms and different power per inch with their levers. One hitter may be wider through the chest or wider from shoulder to shoulder. One person may have arms that are shorter or longer.

"So you help the batter find his true bat path. That may be bottom half, upper half, outside half or inside half. So as you are working on zone discipline, you want him to know what his plan is. Is he a fastball or breaking ball hitter? And what zone does he cover? And do you have enough ability to get enough information off the pitch and enough reaction time with the bat to handle that part of the zone with a degree of power.

"If the hitter stays disciplined until he gets ahead in the count, he are usually better off. If a pitcher is pouring strikes at you and is on to your weakness, then with two strikes you have to tighten the rhythm and shorten the stroke as you fight the ball off to win the next pitch. Probably the most constant mantra that we have is 'win the next pitch' whether it is offense or defense. You must be able to re-focus in 20 seconds and win the next pitch.

"You can't be involved as a hitter in your previous failure or previous success or what the umpire did. Baseball is played with the ball on defense. Hitters don't control momentum. Momentum is controlled defensively. The pitcher is the guy who leads all dances. He may be an adversary. But you must be in harmony with him. You must understand who he is and what he is doing.

"Yes, the zone hitting concept is important and hard to learn. It takes hours of work and great dedication by hitters and coaches to execute it properly."

Umpires & Walks

Ward was asked how home plate umpires come into play with walks. Some call strikes three or four inches off the plate while others have an extremely tight strike zone. No two strike zones are the same with umpires.

"The umpire is the second most important guy on the field offensively to the pitcher. It is a variable we can't control. We have had games at the College World Series where strike zones were liberal. I can remember a couple of 2-1 games where we lost one and won one. I don't know if the pitchers really had





to throw it in the strike zone all game since both were terrific pitchers with command. The hitters had no chance.

"The umpire is a major, major player in games. If I knew what the umpire rotations were and knew the umpires, I would be much better off setting my pitchers in the rotation. There are times when you have a power pitcher who leaves the ball down the middle at 93-94 mph with a good slider. But you are working with a home plate umpire with a liberal zone who rewards command. And you have a power guy on the mound who can't hit his spots.

"This is particularly true of umpires at the College World Series who are new to you. You've only seen them if you have been in that venue a lot. I have been in games where our hitting discipline system is taken away from us because umpires will broaden the zone to speed the game up.

"This has been an emphasis in the game for years. Most umpires feel if they can heighten the zone and widen the zone and get more strikes called, their day is shorter and the game moves along. It also is more enjoyable to spectators. Most importantly, the television executives don't want a 19-12 in the national title game."

Pro Baseball & Walks

The power of the walk has played a big role on the Major League level as well.

Consider the Oakland A's as example A and what General Managers Sandy Alderson and Billy Beane did to re-shape how Oakland was run on a shoestring and still be highly competitive.

According to the book Moneyball written by Michael Lewis, at the opening of the 2002 season, the richest team in Major League Baseball was the New York Yankees with a payroll of \$126 million. The two poorest teams, the Oakland A's and Tampa Bay Devil Rays, had payrolls of less than a third of that at about \$40 million.

During this period of time, Oakland won more regular season games than any other team, except the Atlanta Braves, despite having either the lowest or next to lowest payroll in the game.

And they accomplished this because of their keen insight into drafting position players who had high onbase percentages in college which featured high walk numbers.

A great example is catcher Jeremy Brown who played at the University of Alabama. Scouts hated him because he had a bad body.

But he graded out as a high draft pick in Beane's eyes and Paul DePodesta, his assistant, because of Brown's amazing on-base percentage. He was the only player in the history of the Southeastern Conference with 300 hits and 200 walks.

DePodesta studied which amateur hitters made it to the big leagues, which didn't and why. He felt through this study that foot speed, fielding ability and even raw power tended to be dramatically overpriced.

But the ability to control the strike zone was the greatest indicator of future success in pro baseball.