



Working with a VolleyWrite Scorer and Spotter: A Training Program for Second Referees

The Basics

Electronic scoring offers some real advantages over paper scoring, and the OHSAA has chosen to use the VolleyWrite Scoring software for its State Volleyball Championships. The Official VolleyWrite Scorer (VWS) uses a laptop with VolleyWrite software, and a flash drive is inserted for back-up purposes. A scoresheet with standard markings can be brought up at any time during a set with the click of a button for the second referee/R2 to review. In addition, there is a display monitor facing the court which can show the score, number of time-outs and number of substitutions used by each team as well as the time remaining in a time-out in process with a countdown timer/clock. If the R2 needs to see player positions on the court for either team, the laptop can be turned to show floor positions, and the libero is clearly identified along with number of the player whom the libero last replaced.

VolleyWrite software incorporates the specific rules that the VolleyWrite Scorer (VWS) selects. For the past season, the NFHS best-of-5-set Varsity option is always selected. The software builds in the application of current NFHS playing rules for a best-of-5 match from the initial entry of information. The VWS pulls up pre-set rosters obtained in advance for the State Tournament. When a lineup is submitted, the VWS ensures a referee gets a first review opportunity, which means a glance to ensure 6 distinct numbers, captain marked, libero listed and libero number not matching any of the 6 starters. The VWS will already have been informed which team is serving and which bench each team will occupy. The VWS enters lineups on a laptop which displays both teams in floor positions on their respective sides of the court with the net in between. Because the VWS typically is able to use drag and drop, there is no possibility of not catching a duplicate number because the VWS has to move number by number from a “pool” of available roster numbers (the “bench”) to their positions according to the submitted lineups. Duplicate numbers can’t exist because the software identifies these. The software prompts the VWS to enter a captain number and always pops up with notification that a new captain needs to be identified whenever the current captain is no longer on the court. Space for an alternate captain is available which is always used when the captain is the team’s libero.

VolleyWrite software allows the Scorer to click a button to record which team won each rally which automatically adjusts the score on the laptop screen and the display monitor. When a substitution is requested, the software automatically checks team rosters to ensure the substitution is legal (i.e., player number is on the roster, no duplicate numbers, substitution entering set automatically placed on correct line of the scoresheet which catches players changing positions in the service rotation) and prevents a wrong player from entering the set. Because “recording” a substitution does not involve the act of writing, the VWS is very quick in processing each sub and libero exchange; legibility is never an issue and, when the R2 turns to verify the subs have been recorded, the VWS typically already has a hand raised to indicate “good to go.” With an experienced VWS and Spotter, there is typically no need for the R2 to call out numbers of players involved in each substitution which frees the R2 to better remember the positions of players on the court.

Display Monitor Assists Second Referee

As noted above, to assist the R2 with quick information, there is a display facing toward the court to for quick-glance access to time-outs and substitutions used. The display can quickly be used for a lineup check to show the R2, upon request, current player order in floor positioning, displaying the front row and back row for each team. If there were no display, the VWS could simply turn the laptop to show the information. This can assist an R2 who is concerned about the positioning of specific players on either side before a rally.

Updating Results of a Rally

The VWS clicks once to credit a point to a team. An undo button allows the VWS to go back and make a correction, if needed. There is a manual correction option to adjust a previous mistake which is a great assistance to quickly returning to play.

Recording a Substitution

The VWS drags the number of player being subbed into the set and drops the number in the spot on the court (which the software records in the proper position in the service rotation) which places that player on the bench in the pool of available players who could be subbed into that position in the rotation. The process is much quicker than a paper scorer writing S4/6, Sx 5/11, etc. The number of substitutions used is automatically updated on the laptop screen and the display monitor.

Recording a Time-Out

The VWS clicks a time-out button for the team that was granted a time-out. Software incorporates NFHS rules and will only allow an official's time-out after two time-outs are used. The three-minute injury time-out is recorded as a comment, and the VWS follows the direction of the R2 in running a 3:00 clock which is intended to give additional time for an injured player to recover to prevent having to drop below 6 players when exceptional substitution has already been used or can't be used.

Administrative Delay Cards

The VWS is able to click on the appropriate action as identified by the R2 and the display by the R1 of the delay consequences: an administrative yellow card (warning for the set), which doesn't affect score or who serves the next rally or an administrative red card/penalty/point to the opponent who will serve next.

Player Injury and Exceptional Substitution

When a player becomes injured/ill or is indisposed and cannot return to the set to allow play to continue, the player must first be replaced by legal substitution. If there are no legal substitutes, an exceptional substitution may be requested which removes the injured/ill player from returning to that set. VW software will prevent such a situation recurring as the rules will block the player from returning. Application of the player order for eligibility as an exceptional substitution is built into the software. The VWS will be able to provide the R2 with numbers of the eligible players. The libero is the LAST option.

Comments: Concussion, unusual events, playing with less than 6 players, etc.

There is mechanism for identifying the header (subject of a comment), team involved and score at the time of the comment with the involved team's score listed first followed by the score of the other team.

Teams Switching Courts for Next Set

The VWS can click a button to switch the team benches for the next set.

Spotter Assistance to Quickly Capture Substitutions and Identify Libero Replacements

A VolleyWrite Scorer (VWS) is assisted by a "Spotter" who partners with the Scorer to capture all substitutions and libero exchanges. At the State Tournament, the Spotter is also operating the same VolleyWrite software as the VWS does. In essence, this serves as a back so that if there were a laptop issue (loss of functionality, player jumping onto table and destroying laptop), there would be virtually no delay in the match. Libero exchanges are handled with a drop and drag which leaves the notation as to which player the libero replaced. When the libero's position on the court rotates to the LF position, a screen prompt ensures that the correct player returns to the court for the libero. This exchange is identified by the VWS with assistance as needed from the Spotter. When the libero moves from off the bench or from an on-court position to serve, the software applies NFHS rules to ensure the replacement is legal, the server is legal, the position in which the libero is serving is not a second position in which the libero served in the same set, etc. The rule requiring that the libero sit out at least one rally before replacing another back-row player is applied. This rule is built into the software and also governs the libero moving from an on-court position to serve the next rally with a required double replacement as an exception to the libero having to sit out a rally before replacing another back-row player. The software handles these things seamlessly, relying upon any needed partnering between the VWS and Spotter to capture all libero exchanges and substitutions. The software utilizes a series of checkpoints to ensure the proper player replaces the libero, legality of substitutions (player on roster, player on only one "line" in the service

rotation) and offers quick access to a viewable/printable scoresheet and Libero Tracking Sheet. This scoresheet is totally legible!

Working with a VolleyWrite Scorer: Pre-Match Discussion

The R2 who is working with a VWS must have a pre-match discussion of the information the R2 will be looking for during the match including wrong server (timing of sharing information); information the R2 wants to hear/see during a time-out (number of T.O.s used by both teams, number of subs used by both teams – both of which are shown on the display monitor); libero in/out for both teams when a time-out is called (timing of sharing information); libero serving (for whom and/or in which position in serving order – e.g., libero serving for #17, etc.); wrong player replacing the libero (timing); libero position rotating to front row and no replacement (timing); libero preparing to serve in a second position in the serve order in the same set from an on-court position (R2 stops play, charges administrative delay), proper players on the court and in correct positions to start a set, players in correct positions on the court to start a set, legal libero replacement to start a set (if R2 messes up lineup check to start a set); and VWS/Spotter trying to enter libero for player leaving court would receive pop-up if player being replaced were front row. In other words, this is essentially the same information the R2 would want from a scorer using a paper scoresheet.

So, what's different? Beyond what has been shared above, the R2 needs to know that the speed of recording information is much faster. Legibility is never an issue in viewing the scoresheet which can be produced with a quick click. Illegal actions are caught by the software. The VWS can very quickly validate and record substitutions and is prompted by the software when an illegal substitution has been requested to notify the R2 so a delay can be charged rather than a rally occurring with a wrong player on the court. Errors in recording can be corrected quickly and easily. The key is that the VWS and Spotter still must partner effectively to capture pertinent match information. The R2 should be able to expect to turn to verify a substitution has been recorded and the VWS is good to go (typically raising hand that is most visible to the R2) and see the VWS already is showing readiness.

Points of Emphasis in Discussion

Lineup Check to Start a Set: To start each set, the R2 should confirm that the VWS and Spotter will use the floor positions on their screen to verify that the correct players are on the court and in the correct positions for both teams. This is a double and triple check on the R2 having conducted a thorough lineup check. In addition, the R2 should tell the VWS that he/she will ask before tossing the ball to the first server that “so and so is serving to start the set on the left” to ensure we never have a wrong server to start a set. If the libero replacement to start the set is illegal (wrong libero number enters, libero replaces front-row player) or the libero replaces the team captain, this information should be shared with the R2 immediately to allow appropriate, timely action.

Libero In/Out Information: While the VWS shares number of time-outs/subs used by each team at the start of the time-out, the R2 shares when he/she prefers to hear the status of both teams’ liberos when the time-out was whistled. While the guidance from NFHS published materials suggests that the information (in/out for each libero) be shared as soon as the Scorer shares time-outs and subs used, the information may be more useful to the R2 as the time-out is ending and teams are preparing to come back to the court. Two things need to happen. First, the VWS AND Spotter both attempt to verify that the legal players are back on the court (the ones who were on the court when the time-out was called) AND especially that the status of each libero is the same as it was when the time-out was called. The R2 uses the in/out information to verify libero status hasn’t changed. IF the VWS or the Spotter notes that a libero exchange had not been concluded when the T.O. was whistled, this information should be communicated to the R2 after the other information is shared by the VWS. This puts the R2 in a prevention mode, allowing communication with the coaching staff of the team who might have thought they had legally completed a libero replacement. The intent here is in line with the spirit of the rule. Libero replacements must be visible to the table staff responsible for tracking and recording this information. This will prevent an issue when the teams return to the court at the conclusion of the time-out.

Illegal Replacements: Any identified illegal replacement should be flagged by the software. The VWS/Spotter would immediately verify this between themselves and then inform the R2 asap to allow the R2 to make the proper intervention. The libero sitting out one before replacing another back-row player is also caught by the software with a pop-pop. This calls into question what happens when the software identifies the libero will be serving in a second position in the serve order with a double replacement. This should lead to the R2 intervening, removing the libero from the court and putting the correct player into the service position at the cost of an administrative delay/card.

Identifying an Improper Server and Timing of Informing the R2: When the player in the service rotation who should be the proper server does not enter the service zone to serve the next rally, this becomes an improper server but not until service contact. The VWS notifies the R2 upon service contact. When the libero is preparing to serve in a second position in a team's serving order the same set, this information is not shared with the R2 until service contact.

Additional things to remember: The R2 must clarify when there is any possible confusion regarding whether a replay has been issued or a re-serve. The R2 must still be aware that the VWS is ready for play to continue after a substitution. The R2 remains responsible for identifying overlaps and position switches and must discuss how information will be obtained quickly from the VWS when requested. When a libero replacement is occurring just as a time-out is being whistle, it may be unclear whether the VolleyWrite Scorer has captured the libero replacement. If this is the case, the spotter and VWS should communicate with the R2 who should verify with a coach of that team what the VWS has recorded in terms of a libero replacement in the interest of the correct player coming back onto the court. This is considered preventive officiating.