

The Coaching as Teaching Pilot Project

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ABSTRACT

This report introduces a new form of coaching education and describes the outcomes of its evaluation. Nine volunteer male youth coaches were recruited for the project. Five participated in a series of educational workshops in which accepted, progressive teaching strategies were taught for the purpose of coaching beginner youth players in basketball. An eight-team league was formed and administered in which four of the coaches had participated in the workshops and four had not. Most of the players had little or no basketball experience. Multiple sources of data collected during the workshops and the league were used to evaluate the coaching education program and the league that was formed. All coaches were pre- and post-tested on ethical reasoning, concepts about coaching, and their thinking about the relationships between coaching and teaching (N=7). Players (N=53), and parents (N=40) were interviewed at the end of the league; all coaches were videotaped during practices, teams were videotaped during games, and observations of spectators were conducted during games. In general, the program was evaluated highly by all groups. Coaches who had participated in the coaching education program outperformed the other coaches on a variety of important measures.



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This final report summarizes the key outcomes of the "Coaching as Teaching" Pilot Project. The project was developed with the premise that *coaching is teaching*. By partnering a sports organization with a university teacher education program, a coaching education program was developed that incorporates many of the successful theories, research, and strategies used for effective and progressive instruction in elementary and middle school classrooms. Strategies that support adult learning and development were also employed. The program was delivered to five volunteer youth coaches from the downtown Los Angeles area. At the completion of the coaching education program, a local basketball league was formed with eight teams. Four of the coaches had completed the workshop series while four had not. A central objective of this project was to observe and measure the effectiveness of the curriculum and, specifically, to investigate whether the coaches who had participated in the educational program would demonstrate better coaching strategies and skills than the coaches who had not. A secondary objective was to form a league that upheld principles of mutual respect and collaboration which would result in a reduction of conflict and the presence of supportive behavior amongst players, coaches, and spectators. The specific hypotheses were (1) teaching coaches effective instructional methods will enhance their coaching effectiveness; (2) student-centered, experiential, or "hands-on," coaching instruction will be highly satisfactory to the coaches receiving the instruction; and (3) creating a league that upheld principles of mutual respect for all parties would create a "moral atmosphere" conducive to positive, pro-social behavior by volunteer youth coaches,

youth athletes, parents and relatives, and administrators.

The curriculum was delivered during a series of six, four-hour workshops at a Los Angeles Recreation and Parks facility near downtown. The league was held at the same location, and was seven weeks long, with one game and two, two-hour practices each week. Data were collected on player satisfaction, player performance, team performance, coach reasoning about coaching before and after the workshops and league, coach behavior during practice sessions, parent satisfaction, and spectator behavior during games.

Curriculum

The coaching education curriculum that formed the core of this intervention was *semi-emergent*, an educational approach first used with young children in which the instructor develops parts of the curriculum in relation to the interests, motives, and values of the students. In this curriculum, coaches participated in equal amounts of classroom and court time. During the court time, they had access to a group of youth players with whom they practiced some of the skills taught in each workshop. Although the workshops are designed for basketball coaches, the educational approach is appropriate for coaches of any sport. This curriculum is designed for six, four-hour workshops, but it could be adapted for use with fewer or more workshops.

The curriculum relied on a strong collaborative development process that is aligned with the works of Paulo Freire (1970/2007) and with the Core Values of the Los Angeles Sports Foundation, the organization centrally responsible for the curriculum. These values—Mutual Respect, Effective Communication, Clear and Developmentally Appropriate Expectations, and Advancing Intellectual and Ethical Development—were defined and reflected upon during the workshops.

Importantly, in contrast to a traditional, authority-driven approach, the curriculum relies on a progressive pedagogy in which players and coaches alike are in the roles of both *teachers and learners*, recognizing in each other the ability to both teach and learn. As John Dewey (1944) advocates, group experiences are viewed as opportunities to question, resolve conflicts, learn skills, and demonstrate mutual respect for all persons, regardless of their position or their level of skill. Research studies in education for the last four decades have shown that passive learning, such as that experienced in lecture and/or non-experiential demonstration models are generally less effective, particularly when the learning objectives are not only intellectual material, but also physical skills and specific actions (e.g., Kaufman, 1996).

During the implementation of this curriculum, the coaches were actively engaged and reported satisfaction with the dynamic, participatory form of teaching and learning. This was in evidence by their active participation in all workshop activities, including their

engagement in the co-construction of the learning objectives and in the collaborative critique of what we were doing together. *Appendix A contains the entire curriculum.*

The League

The co-educational league was organized and began immediately after the completion of the workshops. Players were recruited in the local area through the park office, flyers, and announcements at local community centers and schools. Sixty boys and girls signed up and came to the assessment day. There was no charge for participation. On the day of the assessments, two independent, professional basketball coaches assessed the skill levels of all players and formed eight balanced and competitive teams. All players received uniforms and basketballs.

The target age range was 10 to 11. There were several children slightly older or younger but possessed skill levels that were appropriate for the league. The teams formed by the independent evaluators were then randomly assigned to each coach. Each team had the opportunity for two practices before their first game and all teams played seven league games and conducted two, two-hour practices each week.

League games were thirty-two minutes long and consisted of four, eight-minute quarters; the game clock was only stopped for time-outs and at the end of each quarter. The game was stopped for substitutions at the mid-point of each quarter. Teams were not

allowed to press beyond half-court and were required to play man-to-man defense. In the coaching workshops, a method of equal playing time was described and recommended. During the league, however, no particular distribution of playing time was required.

Research

Participants

Participant groups included (1) volunteer youth coaches; (2) youth players; (3) parents of youth players, and (4) league teams.

Coaches. The volunteer youth coaches who participated in the league included 8 males, ranging in age from the early 20s to the late 30s. There were two African-American, one Caucasian, and five Latino participants. Four of the coaches had participated in the workshop series (experimental group) and four had not (control group). In the experimental group, one coach was removed after the third week due to absenteeism and tardiness. One of the other coaches from the experimental group took over that team and coached two teams for the rest of the season. Practices were combined for these two teams.

Players. Sixty children, ages 9-12 participated in the summer league. (Four dropped

out at different points over eight weeks.) Of the 60, 15 (25%) were female. All players were Latino and lived in the local area. Of the 53 players who were available for interviews at the end of the season, fourteen (26%) were female. Skill levels varied from no experience to a few players with significant basketball experience. The majority, however, had very little or no experience with team basketball.

Parents. Between 20 and 45 parents attended each of the games. The term "grown-ups" is more apt, or simply relations, as spectators were often siblings, aunts, uncles, grandparents, and/or neighbors of players. Forty parents completed the survey (1 parent per child).

League Teams. When the league started, there were eight co-educational teams with 7-8 players on each team (fewer girls than boys on each team.)

Game Statistics

The eight teams each played seven games during the league. Experimental-coach teams played only against control-coach teams. As can be seen in Table 1, two experimental-coach teams finished the league significantly ahead with a record of six wins and one loss. Two control teams finished in a tie for third place with four wins and three losses, and one experimental team had the least wins.

Table 1
Team Records

Team #	EXP	CONTROL	wins	loses
1	X		6	1
2	X		6	1
6		X	4	3
8		X	4	3
4	X		3	4
5		X	2	5
7		X	2	5
3	X		1	6

Game Video Analysis

Beginning with the second official game, all games were videotaped. After the league was over, six game videos for each set of teams were viewed and coded by two collegiate basketball coaches from a local university. The videos were coded for commonly kept game statistics. They were also coded using a rubric for specific player movements postulated to be important for effective team play (Krause & Pim, 2002). These additional game statistics reflected three measures of potential player movement after passing—cutting to the basket, setting screens, and repositioning. It was also noted when the player receiving the pass assumed the triple-threat position. Prior to the video coding, each of the coding coaches underwent training and achieved an acceptable level of inter-rater reliability.

Regression analyses were performed on all game statistics for both control and

experimental teams seeking to explain the differences in performance that might be related to wins and losses. None were found.

ANOVAs (Analysis of Variance) were performed comparing experimental and control team scores on a number of variables. The experimental group had significantly fewer Three Point Field Goal Attempts and significantly more Assists than did the control group. Experimental teams attempted close to half as many three point shots as the control teams.

Parent Survey

During the last week of the summer basketball league, all parents were given a pencil and paper survey in both English and Spanish that included eleven statements with scores to circle from 1 (don't agree) to 5 (agree) and an open-ended comment section. The statements referred to their perspectives of their children's experiences in the league, particularly with their coaches, and their own evaluation of the league and their children's coaches. Appendix B contains the Parent Survey in Spanish and English.

Forty parents completed surveys with various levels of thoroughness; 29 entered responses to the open-ended request for comments at the end of the survey, 16 of which were parents of control coaches and 13 were parents of experimental coaches. All coaches received very high feedback scores on the statement agreement portion of the survey. On the 1-5 scale, all coaches' mean (average) scores fell between 4.88 and 4.94.

Open-ended Questions

For the free-response section, 29 parents produced 50 responses that were easily categorized into eight types: (1) Player Improvement; (2) Overall Good Program (e.g., program appreciation, well organized, community contribution); (3) Child Had a Good Experience (fun, happy); (4) Wants Program Repeated; (5) Good Coach; (6) Poor Coach; (7) Poor Player Distribution; and (8) No Player Improvement. Forty-six of the 50 comments fell into positive categories 1-4. Thus, on the whole, the parents reported an overwhelmingly positive experience no matter which coach their children had.

Spectator Observations

The original draft of the project plan included a workshop lesson plan on communicating with parents. In the workshops, however, the coaches did not identify parent problems in the process of generating the learning objectives for the workshop series. Therefore, the lesson was not delivered. Nevertheless, ethnographic, timed observations of "sideline," or spectator behavior were conducted during the last four games. In the analysis of the ethnographic observations, spectators' verbal comments were easily organized into encouragement-oriented comments and instruction-oriented comments. Encouragement-oriented comments included such statements as saying or yelling "Good job" or "All you have to do is try" to players as they played. Examples of instruction-oriented comments included, for example, an exchange between a mother and son at halftime: "Tell (name of teammate) to pass it to you; you are open."

The analysis revealed that the spectators made nearly twice as many encouragement-oriented comments than instruction-oriented comments. During the league, no significant problems with the spectators (mostly parents and other family members) were observed and this assessment was supported by the overwhelmingly positive responses on the Parent Survey completed at the end of the league (see Parent Survey, above), as well as comments made by all the coaches during the post-test coach interviews also conducted at the end of the league. Although some of our coaches reported significant difficulties with parents in other leagues, virtually all parents in this league were helpful and supportive to both players and coaches.

Investigation of a comment made by a coach in his post-test interview, however, provided an interesting opportunity for analysis in this area. He talked about a mother "who was basically telling the child what to do at every game, every single move when he was on the floor." The coach referred to the child as "acting like a robot... and that every time he got the ball, he would look at the mother and the mother would tell him what to do" (3). This coach-reported event was compared with the ethnographic observations taken during this coach's games. Few parents of this particular coach's team attended the games. One in particular was a basketball player herself. She stood out because of her interaction with her son during the games. Moreover, in the player interviews, the player in question stated that his reason for playing was because his mother played basketball in a women's league at the same location. The following excerpts from

observations conducted during one game include comments this mother made:

Parents complain to each other about the coach of team X's lack of engagement and lack of communication with his players during the game.

One of the mothers says in Spanish "He [the coach] does not do anything; he is only sitting down."

During halftime, a mom calls out her son and gives him pointers and tells him to tell a girl on his team to shoot from the paint instead of passing.

It is likely that the parent who coach X is referring to in his interview is the same one observed above. If so, these are clearly different perceptions. Having multiple data sources allows for comparing the perspectives of the coaches and the parents. Such inconsistencies between perspectives reveal the complex, relational dynamics among parents, coaches, and players.

In general, no inappropriate behaviors, such as disagreements with the referees, coaches, or score-keepers were observed among the spectators.

Coach Interviews

All coaches were interviewed individually by a professional interviewer prior to their involvement in the project and directly after the end of the league. All interviews were recorded and transcribed verbatim. Three interview protocols were employed. The first consisted of a set of open-ended questions concerning the coaches' concepts and reasoning about good coaching and its relationship, if any, to good teaching. The

second set consisted of the Moral Judgment Interview (Colby, Kohlberg, et al., 1981), Form A, which contains three parts of a challenging dilemma that pits the right to life against the right to property. During the second interview, after the end of the season, all coaches were also asked questions about their experience in the league. In addition, coaches who participated in the coaching workshops were asked for their frank evaluations of that experience and its impact on their coaching during the league, if any.

Moral judgment. The results of the moral judgment reasoning stage analysis of the pre- and post test interviews were as expected, and demonstrated the equivalency of the control and experimental coach groups in this area. All coaches' scores were near or within the conventional level of moral judgment (i.e., stages two and three). Using the 13-point scale, stage scores ranged from 2(3)-3/4. There were neither statistically significant variations between coaches in the pre-test, nor within any coach between pre- and post-test results. Table 2 presents the coaches' stage scores.

Table 2
Coaches' Moral Judgment cores

Coach ID	Pre-test	Post-test
1	3(4)	3(2)
2	3/4	3/4
3	2/3	3(2)
5	2(3)	2(3)
6	3	3
7	2(3)	2(3)
8	2(3)	3(2)

Workshop Assessment

Written Coach Workshop Evaluations

At the conclusion of each workshop, participant coaches filled out questionnaires anonymously. The questions were designed to encourage reflection and critique of the workshop experience. This information was used not only for evaluation purposes, but also to inform the curriculum as we went along. The questions asked which aspects of the workshop were most and least beneficial to the individual, whether enough or too much time was allotted to specific activities, whether and how the presentations were meaningful, whether the small group work was productive, whether activities were facilitated adequately and, finally, coaches were asked to describe how they felt about the workshop and what they would like to see at the next one. (Appendix C contains the Workshop Evaluation Form.)

In general, all evaluative responses were highly positive. That is, all participants at all the workshops wrote that they felt positively about their experience. What follows are descriptions of the forms of written responses to the other, specific questions. All responses to the question "What aspects/activities of the coaching workshop did you feel were most beneficial to you? Why?" could be easily sorted into four main categories:

1. Helping me to be a better teacher; learning about learning styles and teaching strategies (e.g., probing questions, active listening) and self

evaluation and self-improvement.

2. Participating in drills; having "hands-on" experience.
3. Having a knowledgeable/experienced instructor; observing good demonstrations.
4. Learning basketball fundamentals, good skills and drills.

The majority of the comments fell into the first category, helping the coaches become better teachers. Indeed, this was the only category that all workshop coaches wrote about. For example, one coach wrote, "I struggle with how I would teach (offense) to kids, now I have the skills/knowledge that will help." Another responded, "... the humanistic learning approach. It puts coaching in more of a perspective." A third coach wrote, "Learning the similarities between teaching, coaching, and parenting." The second most common responses fell into Category 2, above, Participating in the actual drills and/or having a "hands-on" experience. For example, one coach wrote, "I enjoyed actually working with kids and doing the drills that we learned." Another said, "By practicing coaching the drills with the kids, it really gave me the opportunity to carry out and execute what I was taught."

The coaches also commonly remarked that they enjoyed having an experienced and/or knowledgeable instructor and competent demonstrations of the drills (Category 3, above) and also that they were able to learn many new skills and drills related to basketball (Category 4, above).

At the end of each evaluation, the coaches were asked to critique their experiences and to tell us what they would like to see at the remaining workshops. Comparing earlier and later responses to this question provided indicators as to how the coaches' thinking may have changed over the course of the workshops.

In earlier workshops, coaches' responses showed more of a concern for information and basic skills about the sport of basketball. One coach wrote, "I felt my understanding of the sport grew vastly." Another stated, "Overall, it was a great learning experience that taught me some basic skills."

In later workshops, by contrast, the comments shifted from a concern about learning new skills and drills to a focus on how they could effectively teach youth players. As one coach said, "[I] feel very good and [am] becoming more comfortable actually working with the kids and becoming more and more confident with our coaching." Another stated, "... it gives me insight into those I want to coach." A third coach said, "I would have liked more time with the kids to see how much was learned." A fourth coach commented, "We could have gone over the aspects...that would have been most effective and most important for the kids to know about after walking away from doing the drill."

The coaches' comments also demonstrated an interest in learning more about coaching

and adopting more effective methods and ideas than those they had used in the past, as these comments exemplify: "I enjoyed the different types of teaching/coaching lecture; it helps us know what we want to try to do." And, "I was satisfied with the vast amount of information that was provided. Anything and everything that will help me continue in the growing process." These later comments indicate an increase in self-reflection as well as a greater concern about effective teaching and self-assessment.

Five-Minute Learning Journals

At the conclusion of each workshop, the participants were asked to write a five-minute journal entry. There were two prompts: "What did you learn the most about today?" and "What do you want to learn more about?" Their answers to these questions provided information about their learning.

Coach responses to the questions consistently highlighted an interest in effective teaching strategies. In addition, their entries demonstrated not only recognition of, but also an appreciation for the personal interaction apparent in the teaching method, specifically, differentiated instruction where each student is taught in response to his or her interests and needs. Some coaches recognized that "differentiated instruction" was necessary for them to do as well in order to create the forms of personal interaction that they were experiencing in the workshops. The following excerpts from the Five-Minute Learning Journals provide examples of these points.

I learned that all kids can be taught something new despite the level of knowledge they might possess. (Journal 5-1)

I learned many different ways of how to make the kids more comfortable and really be motivated to learn. (Journal 5-5)

During today's lesson I learned most about the different approaches I can take towards teaching and coaching the kids, also the different styles of teaching. (Journal 4-2)

I would like to continue to learn about the different styles of teaching. Learning these styles is helping me to learn good communication skills that will be most effective. (Journal 4-3)

I learned that I must relax more and let others help me to coach them better. Ask questions and let the kids answer them. (Journal 2-5)

I want to learn more about how to be positive and help be a mentor as well as a coach and how to find that half-way point with the kids to make that connection. (Journal 5-5)

More drills are always helpful and in addition learning more on the styles of coaching and teaching. (Journal 4-2)

Post-Test Interviews: Workshop and League Evaluations

In the post-test interviews, the experimental coaches were asked to evaluate their workshop experience and both the experimental and control group coaches were asked to describe their experience coaching in the basketball league and how it compared with previous experiences. They were also asked additional questions, for example, about the two, two-hour practices. The following excerpts from the post-test interviews provide illustrative examples. (All caps indicate the interviewer.)

Workshop Experience (experimental coaches)

Coaches that participated in the workshops were asked about their experience in the post-test interviews. While they viewed the experience from different perspectives, there was a common theme about the workshops providing a place for coaches to learn, to learn about learning, and be supported through the learning process.

One coach found the process of reflection on how learning takes place useful for his own coaching:

...CAN YOU TELL ME OTHER THINGS THAT WERE POSITIVE ABOUT THE WORKSHOP ASPECT?

... another thing that was good was when you broke it down and were showing us how the learning takes place. That was interesting. It's not something that we cover. So we understand how children learn and using that, we're trying to develop something else. I was thinking about that every time I was out there with those kids.

GREAT.

...every kid was learning in a different way, so I was trying to get to the way they were learning, try[ing] to focus the whole lesson on them. So just the joy I was getting out of those workshops, too. (2)

Another coach reflected on his initial fear about whether he would be able to coach effectively, and how the workshops helped him to gain confidence and learn in a supportive environment.

FIRST I WANT TO ASK YOU WHAT YOU THOUGHT WERE SOME OF THE GOOD THINGS ABOUT THE COACHING WORKSHOP.

The workshops were good... The teaching part of it, because I was scared going into it because I didn't know much about basketball... The fact that [instructor] was willing to hear us out and say, OK, what is it you want to learn about this. And if we had any problems he takes ... us aside and tells us, this is...what you can do. I thought that was great. The whole strategy of connecting with the kids. That stuff's

always good to review... I really enjoyed it.

WHAT DID YOU THINK OF THE FORMAT OF HAVING CLASSROOM TIME WHERE WE GOT TO DISCUSS DIFFERENT IDEAS, AND THEN GOING OUT ON THE GYM AND ACTUALLY GETTING TO PRACTICE IT YOURSELF?

The workshops we did and how we did it? I loved that. I'm more of a kinesthetic learner so you can explain it to me and I'll probably miss, from step 1 to step 10, I'll probably miss 4-8. But if you're able to explain it to me, this is what we're trying to accomplish, ok, now we go see it, we go do it. I love that. I get to do what you're telling me and I get to see how it works first hand. Of course, some of the instructions were difficult; some of the concepts were pretty hard concepts so it took a while to learn some of these drills for me. But after a few practices I got them down. (1)

League Experience. All of the coaches made insightful comments about the league, including what made it good from their perspective and how it was different from other leagues they had participated in.

WHAT DO YOU THINK WERE THE BEST THINGS ABOUT THIS PARTICULAR LEAGUE?

"...the coaches were nice to each other. The players were nice. It was very sportsmanlike. Everything was very well organized. The refs were very nice and helping out the kids. It was basically like a learning experience for everybody so I think it was one of the best leagues I've seen."

WOULD YOU LIKE TO PARTICIPATE IN THE LEAGUE AGAIN?

"Definitely. I would love to be back in the league and see the kids again, see the new kids. It was a very comfortable situation. There were different people, whether it would be another coach that you could go to and talk to, or yourself or [the instructor], who were there to help, whether we used the help or not it was good to know. The community was good. All the parents got along. That means a lot, too. Sometimes you go places and I tell you, it's another [scene]. It was a very comfortable atmosphere... Especially me being one of the few African Americans that you even see over here. Everyone treats me really nice. It was a good feeling." (3)

WHAT WERE SOME OF THE BEST PARTS OF THIS LEAGUE FOR YOU?

"I felt it was good for me to have somebody like [the instructor] I could turn around to and say, I'm having trouble with this, what can I do? Whereas, in other leagues you're on your own. You'd never see the commissioner but on game days and if

you have trouble, other coaches are competitive within their own league. They don't even want to talk to you and I'm like, Guys, we're trying to work together."

I GUESS THAT'S RIGHT BECAUSE THEY'RE PLAYING AGAINST YOU, RIGHT?

"Yeah. Here I felt like me and J developed a good relationship where if I saw that something wasn't working with me and I saw that I needed help, I felt free and comfortable asking J, "Hey J, I saw that you had good response with whatever, how can I make that work? How can I implement that with mine? He told me and then we'd talk." (2)

DO YOU THINK THE COACHES WERE MORE FRIENDLY WITH ONE ANOTHER IN THIS LEAGUE?

"Definitely. The other league, the coaches all hated each other!! There was so much bad blood and nobody liked the director of the league... everybody was bad-mouthing him. I wasn't 'cause I was the newest person there, but everyone was telling me, this person that, this person this, blah, blah, blah. But in this league, no one had anything against anyone."

IS THERE ANYTHING ELSE YOU WOULD LIKE TO ADD?

"No...I just want to say again that it was a great experience for me and I'd like to do it again." (5)

Coaches also noted the effect that offering a free league in the community had on the participants and how that contributed to an overall positive atmosphere for the coaches.

WHAT DO YOU THINK WERE THE ASPECTS THAT YOU LIKED ABOUT PARTICIPATING IN THIS LEAGUE?

"The part that, how you guys came in and gave the kids balls and their uniforms, it was a free program for them to come in here. All the games here are [usually] charged for. That's what brought most of the kids in here. The love of the sport. Given the chance that they didn't have to worry about paying for something and just letting them play the game. I also liked how you guys were always on top of everything, making sure that we were fine, the whole team was fine, the coaches, and everything was running smoothly. That was another positive thing. How everything was run, basically. It was very positive. No negativity around. All the coaches [acted like they knew] each other, if it's from sight or somewhere else. Everybody was always cool with each other. They were, "Hi, how are you doing?"

No matter if we were on the court or practicing. All the coaches were, How you doing? The same thing with the teams. The little facts, Oh yeah; we're going to beat you. But they were all cool off and on the court. That was another positive on the whole league." (5)

Longer and More Frequent Practices. One of the biggest differences between the set up of the LASF league compared to other leagues is that each team had two, two-hour practices per week, whereas many leagues consist of one, one-hour practice a week. Interestingly, not only did all the coaches approve of this practice time, but also half of them said they wished there had been more practice time.

WHAT DO YOU THINK WERE THE BEST THINGS ABOUT THIS PARTICULAR LEAGUE?

The practices. The practices gave you plenty of time. Often you only have 1 hour...the amount of time definitely gave you...everybody seemed to be on the same page. (3)

DID THIS LEAGUE SEEM REALLY ANY DIFFERENT TO YOU FROM OTHER LEAGUES YOU'VE WORKED WITH IN THE PAST?

You know what? It did seem different. Well, I had more interaction with the kids, I had more time with kids...in the other league, we just practiced before the season, in the park before it started. This was pretty different. I had a lot of fun in this league. (5)

WHAT DID YOU THINK ABOUT THE TWO 2-HOUR PRACTICES EACH WEEK? DID YOU THINK THAT WAS TOO MUCH, NOT ENOUGH, OR JUST RIGHT?

It came out a little short.

MOST BASKETBALL LEAGUES JUST HAVE 1 HOUR OF PRACTICE PER WEEK.

Two hours came out a little bit short. There's always something that you wanted to do with them and you couldn't do it... Maybe an hour more or one more day of practice would have been fine. (7)

WHAT ABOUT THE 2 HOUR PRACTICES PER WEEK, WERE THEY TOO MUCH, TOO LITTLE, OR JUST RIGHT?

It wasn't bad. I thought it was enough time. I think I accomplished quite a bit of stuff.

MOST LEAGUES FOR THIS AGE HAVE 1 HOUR OF PRACTICE A WEEK INSTEAD OF 4.

I thought it was pretty good. The kids loved to play scrimmage so the cool thing is, I got to teach them a few things and for the last half hour we'd do scrimmage. We'd save the scrimmage for the last half hour and we'd discuss things and we'd work on this. I think it was great. I tend to plan overboard anyway. (1)

Another coach noted that the players really benefited from the extra practice time to work on improving their skills.

YOU KNOW HOW, TYPICALLY, IN A YOUTH LEAGUE YOU GET 1 HOUR OF PRACTICE PER WEEK AND 1 GAME PER WEEK. WHEREAS [here] YOU HAD 4 HOURS OF PRACTICE PER WEEK.

Just looking at the level that it was at, that was good for the level it was at. I think 11-12 year olds, even in my case I had an 8-year-old, even in that case with that I had time to really work out certain things with them...I was able to do different things. (6)

Coach Practice Video Analysis

All of the coaches were videotaped during some of their weekly practice sessions. During a two-hour practice, each coach was videotaped while wearing a lavalier (under chin) wireless microphone during the first, middle, and last fifteen minutes of the practice.

Two videotaped practice sessions for each coach were selected from the last two weeks of the season. These recordings of the actual conversations among coach and players provided a unique source of information that would be otherwise unavailable during typical observations. All videos were viewed multiple times by a research

assistant who took detailed ethnographic notes on each one. The notes were analyzed using a general coding scheme constructed from the workshop objectives. Appendix D contains the coding categories for the coach practice analyses.

The preliminary analyses of these tapes revealed startling differences between the control and experimental coaches' behavior. For the most part, the experimental coaches instructed the children in the same ways they had been instructed during the workshops, including using the same teaching strategies. For example, experimental coaches included the players in formulating practice plans and objectives, they asked for players' opinions, they encouraged players to self-critique, they demonstrated empathy, they integrated homework to reinforce learning, they helped players identify their strengths and weaknesses and were able to help individual players find ways to work on their weaker areas. In addition, they had practice plans, similar to lesson plans, with specific objectives and planned activities to reach those objectives. Moreover, experimental coaches had fewer conflicts with and among players during practice. In general, experimental coaches used their instructional time well and provided more effective instruction. Thus, most of their players were engaged in the group activities most of the time, whether it was a team meeting or running a practice drill. Finally, experimental coaches did not use punishments, such as "running suicides" or doing push-ups if players were late or disagreeable. Instead, they used discussion and mediation techniques when necessary.

In contrast, the control group practices were, generally, poorly organized with significant periods of "down time" in which players were unsupervised, running around the gym, shooting at baskets in other areas of the gym, and just plain fooling around.

Alternatively, they were running laps or "suicides" or doing push-ups as a consequence for a behavior deemed punishable by the coach (e.g., lateness). Drills were often poorly organized such that players were waiting long periods of time while a single player had his/her turn doing a drill.

In addition, while the tapes revealed all control group coaches to be predominantly friendly and supportive of their players, they were uniformly authoritarian, making all decisions and expecting blind obedience from the children, e.g., "Do it because I said so." Surprisingly, the tapes also revealed that three of the four control coaches used material rewards, including cash, trips, and trinkets as rewards for good behavior, such as making shots. This behavior had gone unnoticed by the league administrator, project director, and research assistants. None of the experimental coaches used a material reward system.

Player Interviews

Fifty-three players were available to be interviewed during the last week of the league. Each interview took about 30-45 minutes and was tape recorded. Players were asked over forty questions about their experiences with their coach, specifically, and in the

league generally. The interview protocol included both yes/no questions and many open-ended questions concerning the players' reasoning, thoughts, and feelings about their coach and the league. (The player interview protocol can be found in Appendix E.) Concerning the yes/no questions, analyses indicated there were few differences in players' opinions between the two groups. All but a few children reported liking their coach and their experiences, regardless of which coach they had, and all children reported that they would like to play in a similar basketball league again soon. Most children also reported that their coach was a "good coach," but more players of control group coaches identified their coaches as "bad." Virtually all players reported that their coach made them "feel good" during games, whether they won or lost, and that they "got along" with their coach.

Almost all players reported having learned during the league experience; however, the proportion of players who reported learning basketball skills, generally, and specific skills in particular was greater in the experimental group.

Another significant difference between the players of the control and experimental group coaches concerned the actions of teammates. When asked, "Did your teammates act the way you expected them to?" significantly more players of control group coaches said "No."

Open-ended Questions and Responses

A qualitative analysis was conducted on responses to open-ended questions in a two by two comparison, combining responses from two experimental and two control teams' players each of which had a comparable number of player responses.

In most cases, the responses to the open-ended responses were highly similar among the children of both control and experimental coaches. Almost every child reported liking their coach, having fun, loving basketball, and feeling that, generally, they had a good coach. However, comparative analyses of key variables yielded some significant differences.

After responding affirmatively to the question as to whether they thought their coach made them feel good, the children were asked "How did your coach make you feel good?" Seven of twelve responses from the experimental teams contained the content category "He taught me how to play basketball; he explained all the steps of the drills." In contrast, only two of twelve responses from the control coach players reported this.

Similarly, when asked "What was good about your coach?" after answering affirmatively to "Was your coach a good coach?" significantly more players of experimental coaches said their coach was good because he taught them to play better, whereas players of The control coaches were more likely to say their coach was good because he was "fun" or because "he played with us."

All players were asked "What do you think were your responsibilities on your team? What were you expected to do on your team?" Eleven of twelve responses from the experimental teams reported specific behaviors, such as "pass the ball," "block," "get rebounds," "make baskets," "not make a turnover," and so forth. Eight of twelve control coaches' players reported this. More dramatic were the differences among the teams regarding helping other teammates. Six out of twelve of the experimental teams' players responded in this area, specifically. They said, "help other players," "help beginner teammates," and "show respect for others." Only one of the control teams' players reported these behaviors as responsibilities of being on a team. Alternatively, while eight of twelve players on the control coaches' teams responded to the same question with "I didn't know," "whatever the coach told us," and "listen to the coach," only three of the twelve players from the experimental teams said this.

Each player was asked "what did you learn most in this basketball league?" Respondents from both experimental and control teams reported learning skills such as shooting, passing, and game rules more frequently than other things such as how to make new friends, or how to work as a team. First and second responses were coded. There were differences between the two sets of teams in terms of whether they reported specific skills. For example, on one of the experimental teams, out of fourteen possible responses, eleven were highly specific, such as passing, cutting to the basket, and/or making lay-ups. Only two players reported "skills," but did not elaborate, and one player

reported nothing. In contrast, on one of the control teams, also out of fourteen possible responses, only five reported a specific skill and nine reported nothing. Table 2 presents the first and second responses from two experimental and two control teams' players.

Table 2

Skill Reporting: Experimental vs. Control

Experimental Teams		Control Teams	
Team 1 First Response	Team 1 Second Response	Team 5 First Response	Team 5 Second Response
1=dribble knockout 2=general skills 3=passing 1=no response	1=drills 1=cutting to the basket 1=fouling others 1=doing lay-ups 1=king's drill 1=defense 1=passing	2=shooting 1=general skills 3=no response	1=defense 2=dribbling 4=no response
Team 2	Team 2	Team 8	Team 8
1=passing 1=rebounds 1=game rules 1=offense 2=no response	3=dribbling 3=no response	1=defense 2=shooting 1=game rules 3=no response	1=dribbling 6=no response

A final difference between the experimental and control team players occurred in response to the question, "What were some of the worst things that happened to you in

this league?" While players from both teams reported many expected occurrences such as sustaining an injury or getting too tired, twice as many control team players reported problems with their teammates, for example, "they were mean," team members would fight, or team members would not pass the ball.

Two of the three experimental coaches who finished the season chose to use a form of equal playing time that was described in the coaching workshops. (See Curriculum, Attachment 6-1.) At the beginning of each game, they assigned numbers to each player and rotated the series of numbers at each substitution interval during the game. This method differed from the system described in the attachment in that these coaches assigned the players new numbers at the beginning of each game, rather than players keeping their numbers throughout the season. Due to attendance issues, it could be argued that this adaptation, or something like it, was necessary. The control coaches each chose how much playing time their players would receive during the games. Interestingly, all chose the same approach and substituted their lesser skilled players into the game for other lesser skilled players, leaving the most skilled players in the game the majority of the time. This contrast in approach to the allotment of playing time is particularly significant when considering that the two coaches who used a model of equal playing time won more games than the teams which played their most skilled players most of the time.

Conclusions and Discussion

This project was designed to influence coaching methods through a progressive curriculum that taught coaches accepted, effective teaching strategies. Data from multiple sources were collected in order to assess the effectiveness of this curriculum. The specific hypotheses were (1) teaching coaches effective instructional methods will enhance their coaching effectiveness; (2) student-centered, experiential, or "hands-on," coaching instruction will be highly satisfactory to the coaches receiving the instruction; and (3) creating a league that upholds principles of mutual respect for all parties will create a "moral atmosphere" conducive to positive, pro-social behavior by volunteer youth coaches, youth athletes, parents and relatives, and administrators.

Our first hypothesis—that coaches who participated in the workshops would be more effective instructors— was supported by data from multiple sources. First, the two teams that won the most games in the league were both coached by experimental coaches. These winning teams can be considered to have learned more skills than those of the control coaches, since all players in the league were assessed and fairly distributed among the teams at the start of the league.

The player interviews indicated that although almost all players really liked their coach and thoroughly enjoyed their experiences with the league, specific responses to open-ended questions revealed that players of experimental coaches were more likely to

describe their positive experiences and the value of their coach in terms of specific learning of skills, both athletic and social. This was particularly true in the area of team work. Players of experimental coaches described specific team work and helping skills as responsibilities of being on a team whereas virtually none of the players of control coaches reported this. Indeed, the most common response from the players on control teams was that they didn't know what their responsibilities on the team were other than to obey or listen to the coach. Similarly, control team players reported significantly more problems with their teammates.

Secondly, the video game analyses also supported the view that the experimental coaches provided stronger instruction in teamwork. In the workshop curriculum, the areas of passing, moving without the ball, and shooting high percentage shots (particularly lay-ups) were emphasized. The significant difference in assists indicated that the experimental team players were more successful passers. That is, they either had better passing skills or a better idea of where to pass or both. Moreover, since these passes led scoring, it appears that the experimental players were also more frequently in a position to receive a pass and shoot and score. Additionally, perhaps more positive social conditions promoted by the particular form of team meetings, as well as active listening, and mutual respect within the experimental teams made it more likely that they players trusted their teammates. Under these conditions, players are more likely to work harder to get open and more likely to pass to open teammates. (In

the Curriculum [Appendix A] Attachment 1-5 contains the Active Listening lesson plan and Attachment 3-1 contains the Team Meeting lesson plan.)

In addition, the experimental team players attempted fewer three-point shots, which indicated greater accuracy in self-assessing their abilities.

The lack of significant differences in the regression analyses performed on all game statistics for both control and experimental teams indicated that players' skill levels were evenly distributed among the teams. Had the winning teams simply had better players, there should have been differences in, for example, the field goal percentage.

Finally, the coach practice video analyses demonstrated that the experimental coaches were more organized, and used identifiable teaching strategies more frequently than did the control coaches. As a result, their players were engaged or "on task" much more of the time during practice, doing meaningful things that led to learning. These data demonstrated that the experimental coaches had learned and were using some of the teaching strategies taught in the workshops. They had practice plans with both social and athletic objectives which, to varying degrees, they carried out. In contrast, the control coaches appeared to have no clear plan or objectives for their practices.

It was especially interesting that three of the control coaches used material reward

systems with their players as well as punishments. These methods encourage obedience and extrinsic learning, that is, learning for the reward, rather than learning for its own sake. In addition, there was no evidence that such rewards and punishments were effective.

Our second hypothesis, that student-centered, experiential, or "hands-on," coaching instruction would be highly satisfactory to the coaches receiving the instruction was supported by the written workshop evaluations, learning journals, and by the post-test interviews with experimental coaches. These coaches specifically identified the experiential aspects of the workshops as highly beneficial. Moreover, all experimental coaches voluntarily commented that (1) they would highly recommend the workshop series to other coaches, and (2) that they wanted to attend more workshops of this sort.

Our third and final hypothesis was that creating a league that upheld principles of mutual respect for all parties would create a "moral atmosphere" conducive to positive, pro-social behavior by all participants. This hypothesis was overwhelmingly supported in our project by all data sources including coach post-test interviews, player interviews, parent surveys, and spectator observations. First, it was well-organized and had a consistent "presence." The league director was in regular communication with the park staff, and was present at all games and most practices. This made it possible to quickly resolve any issues that came up. Parents, coaches, and players were pleased most of

the time because their concerns were addressed in a timely manner. Project assistants, some of whom were fluent in Spanish, were available to discuss issues with parents without a language barrier. All coaches were collegial with one another and often helped each other out, including co-coaching at times. These observations were corroborated by the post-test interviews with both experimental and control coaches. They reported being more comfortable with the other coaches and with their players than they had experienced in the past. All coaches reported a strong interest in participating in a similar program again.

Interestingly, the overwhelming success of our program may have affected our research results in ways we had not expected. Principally, the league experience was so highly evaluated by all participants that some of the expected, statistically significant differences between the two sets of coaches/teams could not be established.

In addition, it is possible the low level of prior experience with team sports and coaching made it more challenging for players and parents to be critical of the coaches or the league. Perhaps a more experienced group would have been more critical.

In summary, the analyses demonstrate that teaching coaches effective methods of instruction does result in more effective coaching. Viewed either from a sports skills or a social skills perspective, *Coaching as Teaching* appears to represent a useful and

engaging model of coaching instruction. In addition, developing leagues that uphold ethical principles, norms of collegiality, and provide support for coaches also helps. Participants are more likely to enjoy their experience. Coaches, in particular, benefit from not only the assistance of the league administrator but also the support of their peers.

Program Recommendations

This section provides recommendations for individuals and organizations that are starting or already engaged in coaching education.

Coaching Workshops

It can be frustrating for coaching educators to teach pedagogical methods, or "theory," to volunteer youth coaches in the typically short, one-day clinics. Coaches are often much more interested in the skills and drills of the sport. Our experience presenting a series of six workshops—much more than the typical amount of time—was very helpful because we were able to see a shift in the way coaches thought about their learning experiences. Although the coaches in the experimental group began the workshops with a strong interest in learning skills and drills, their interest in how to impart their newfound knowledge grew as time went on.

Based on these outcomes, it is recommended that when presenting coaching education workshops, instructors be advised to be aware and supportive of coaches' strong initial desire to learn skills and drills over learning and applying theory. Instead of presenting lectures or "passive learning" experiences and expecting coaches to learn, we would advise creating an alignment of the pedagogy, or teaching strategies, used with the coaches and the teaching methods you want them to use with their athletes. Active learning occurs when coaches engage in meaningful learning activities that require them to observe, think, and problem solve. Similarly, when coaches engage in co-determining what they need to learn, they become active rather than passive learners. Focus first on the skills and drills and actively engage coaches in "learning by doing." Then, after a substantial amount of skill content is covered, review not only the material but how the material was presented. As coaches become familiar with effective teaching strategies, they will choose them because their athletes will learn more effectively, too.

League Administration

Playing Time

Coaches' decisions about the allotment of playing time is often based upon projecting which players should play the most so that the team will have the best chance to win. However, decreased playing time can contribute to disinterested players and dissatisfied parents. Based on the success of the coaches in our project that used equal playing with their teams, as well as the positive feedback from the parents, it is recommended that

leagues and coaches use similar systems to regulate equal playing time for their players.

Parent Meetings

Although communicating with parents was not a problem identified by the coaches in our workshops and, therefore, was not covered in the workshop series, we offer a detailed lesson on parent meetings and dealing with parents generally in our curriculum. In general, we believe youth sports leagues can create a more supportive environment for youth players if the parents are actively engaged in the youth sport experience, rather than solely relegated to bringing snacks or cheering from the stands.

It is recommended that parent meetings be held by each coach prior to the start of the season and periodically, as necessary. These meetings should engage parents in an experience designed for them to identify their expectations and goals for their children, and to open the channels of communication between coaches and parents.

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