

Carl McGown Interview

VOLLEYBALL COACHING WIZARDS

*Insights and Experience from Some
of the World's Great Coaches*



JOHN FORMAN & MARK LEBEDEW

In honor of the massive contribution Carl McGown made to the sport of volleyball, and especially to volleyball coaching, we would like to share the interview he did as part of the Volleyball Coaching Wizards project.

Carl's interview was among the earliest, and is one of the eight we selected to include in the first ever [Volleyball Coaching Wizards book](#). As we noted in the text, this is an edited transcription of the interview audio. Mainly that means we checked with Carl to make sure we got the names he mentioned correct. We didn't alter anything of significance.

Whether you agree with Carl's coaching philosophy or not, it is always worth listening to the perspective and experience of someone who was in the sport for more than 50 years. Go in with that mindset and you will surely come away the better for the read.

All the best in volleyball,

John Forman & Mark Lebedew
[Volleyball Coaching Wizards](#)

P.S. – Feel free to share this interview with your volleyball coaching peers. The more people who get to read it, the more we can recognize and honor Carl's contribution to our great sport. If you would like to use part of the interview, please let us know.

When it comes to influence on volleyball coaching, few can match Dr. Carl McGown. His advocacy of training specificity, among other concepts, through his work with the USA National Team program, Brigham Young University (BYU) and Gold Medal Squared has changed the thinking and training methods of many coaches all over the world.

Among Carl's personal coaching credits is 225 career victories, nine Top-10 finishes, and a pair of NCAA men's national championships while head coach at BYU. Twice he earned National Coach of the Year honors. He also won league and cup titles coaching professionally in Switzerland.

As a member of the USA coaching staff, Carl helped guide teams to four gold medals, three of which came at the Olympics. Overall, he's been with the program for seven Olympics and seven World Championships.

In 2010 he was inducted in to the AVCA Hall of Fame.

This interview was conducted by John in June, 2015. At this point, Carl's son Chris has just resigned as BYU Men's Volleyball coach. Carl was Chris's volunteer assistant for four years, so his future with the program was uncertain. He was getting ready to do some women's coaching in Hawaii, though.

Can you document your coaching biography?

It might be a long and wandering path. I grew up in Long Beach, California, and for a large part of my youth we lived on 1022 East 1st Street. When I was a little guy - twelve or something like that - I went to this place where they had volleyball courts on the beach. It was about three blocks from my house and some guys one day said, "Hey little boy, do you want to play?"

I started playing on the beach at Long Beach. When I got older, a church that I belonged to - the Mormon Church - had this thing that was called All Church. If you were good in your area you could go to Salt Lake City and play in the All Church Championships. You could do it with basketball. You could do it with volleyball. You could do it with softball. You could do it with a lot of sports.

I played church volleyball, and then I went to BYU and John Lowell had just retired from the Army - Major John Lowell. He became a coach of our club team that we had at BYU. When I graduated from BYU with my masters degree I got a job at the Church College of Hawaii [BYU-Hawaii], and I was assigned to coach it. I begged to coach it.

John Lowell ended up being good friends with Jim Coleman, so Jim invited John to be an assistant coach, and later on Jim needed somebody to go to the World Championships in Bulgaria in 1970. John Lowell told Jim Coleman that I would be good, so Coleman hired me in 1970. I don't know if he hired me is the right word, but he said, "Come and be my assistant coach."

So in 1970 I went to the World Championships in Bulgaria with USA.

Coleman was the coach of our men's team, and then he stepped down, so USA was looking for a men's coach for our national team. From '73 to '76 I got to do that. I coached Doug Beal, and I coached Fred Sturm, and Marv Dunphy was an assistant coach. During those three years I got affiliated with Doug, who would become our greatest coach, and Marv who was terrific, and Fred who was terrific. I got to go to lots of places with those guys- to the Olympic Games, among other things.

Then I was teaching school at BYU. I didn't ever plan to be a volleyball coach. When I was going to school in the '60s there weren't really volleyball coaches. There wasn't NCAA volleyball. There wasn't NCAA women's volleyball. There was just people having a good time together. I'm at BYU teaching school, I'm in the professorial rank, and in 1990 some kind of miracle happened. BYU added a men's NCAA volleyball program, and it was right in the middle of Title IX. It was one of the most unlikely things that you could ever imagine - that a school would start a men's volleyball program in the middle of Title IX - but they did. I was a full professor at the time, had a pretty good job. After a while the athletic director and the dean got together and said, "Carl, we want you to coach this team at BYU."

So I became an NCAA volleyball coach in 1990. I did that until I retired in 2002.

When I had retired, just about that time, Doug needed an assistant coach for the 2004 Olympic Games, so I got to be his assistant coach. In 2008 Hugh McCutcheon became our Olympic coach and he was a player that I had coached at BYU. He dragged me along to be part of the Beijing Olympics. That's that, and now I'm getting real good at golfing and skiing.

Basically from 1970 to 1990, the only coaching you were doing was with the national team?

Yeah.

You were just being the consummate professor and focusing on your students.

Yeah, I got to be a full professor, so you had to research, and publish, and have graduate students, and do all of that stuff that goes on in most universities. Teach and research.

The thing that I feel a lot of people who are aware of your history and involvement with the national teams and whatnot think they understand about you and your contribution is that you brought specificity into volleyball, from a coaching and training perspective. First off, is that a relatively fair statement to make?

I don't know if I brought it in, but certainly it's a really important thing to know if you're going to coach. Yeah, from way back when, we've talked about the specificity and motor programs. We talked about it with Doug, and Marv, and Fred, and all of the coaches in USA volleyball have heard about it a lot.

Where does this come from in terms of your own development? Was this something that was part of your education or did you pick it up along the way?

I went to graduate school at the University of Oregon and studied in the department of physical education there, but I also studied in the psychology department. They had a degree at the University of Oregon in motor learning, and they really got support from the psychology department. When I graduated from the University of Oregon my very first job was at the University of California Berkeley. I took over the position of Franklin Henry who had just retired. Franklin Henry is often called the father of motor learning. One of the things that Henry talked about way back in the '50s is the specificity of motor programs. I knew about him from when I was a student at Oregon, and I also knew about Henry when I was at Berkeley because he had an office in the basement and I'd go down and sit at his knee every chance that I got. He would just tell me stuff.

In the 1970s, when I was with Coleman, and in 1968 when Coleman and Lowell were together, we didn't know anything, I could say. We knew very little about what it meant when we said motor programs are specific. That's something that developed after I was a graduate. We started, this applies, and there isn't much transfer unless you do it this way. That's stuff we learned starting in the early '70s.

On that subject, you just brought up transfer. Can you drill down on that a little bit in terms of how that applies for multi-sport athletes, which these days is a big talking point in terms of youth overall development and sport retention.

There's a lot of work being done on long-term athlete development, LTAD, and whether you should specialize early or not specialize early. Transfer has an influence on what you believe you should do to have the best long-term athlete development that you can

get. We know simply that if these motor programs are so incredibly specific, and there is reason to believe that they are, then one of the things that we would predict right away is that if you're playing basketball, it's not going to transfer very much to your ability to play volleyball, or any other kind of thing that you want to talk about. If you're playing softball, it's not going to transfer all that much to tennis, or even baseball, or what have you.

Once you have a belief in specificity, then you also have to have a belief in lots of other things. In transfer, and in whole versus block practice. What else? There's still other things, progressions, and state dependent remembering, all those things essentially say the same thing if you study them experimentally. In my class I used to say we've got this broad base that you can't ignore it, there's just too much research support for this idea.

If I were putting together long-term athletic development programs in my country, which I'm not, I would be happy to have people specialize early if they wanted to. I'd have some kind of program there for that, but I'd also have programs for people that get into the sport when they're fourteen or something, and now they're going to learn to play volleyball. There are some things to be said for getting in early, and there are things to be said for no, don't get in so early. You'll get burnt out, and you'll get hurt, and what have you. I don't know what else you want me to say.

That's reasonable. Staying on the transfer side of things, it makes intuitive sense that at the fine motor skill level things are not going to transfer. You're not going to be able to take a jump shot in basketball and apply that to basically any other sport. On a more gross level, movement or anything like that, are there things which do transfer?

I suppose you could say everything transfers, but the question is how big is the transfer? Is it small, medium, or large amounts that we're getting from doing these different activities that we do? There's a bunch of stuff now that comes out about the neurological pathways that are going to be used when you do this movement, and it looks like it's just like this other movement. For example, in our country baseball guys hit balls off of a tee. I saw a thing on ESPN the other day where a guy was hitting balls off of a tee, a major league baseball guy. Hitting balls off of a tee and hitting a moving baseball are grossly very much alike, but the neurological commands that you need to put in place to do hitting a ball off a tee are just not the same as hitting a baseball. We would expect transfer to be very, very small.

There have been lots of studies that have done big motor things, not just little fine motor things, but big motor things, and what they find always is the amount of motor transfer is tiny. There's some there, but it's tiny. If you really want to get ahead, you can't be

wasting your practice time on tiny little things, you've got to spend your practice time on the things that are really big and important.

Let's take that to coaching the BYU men. At the starting level you've obviously got to recruit and select players. Did any of this, the motor learning stuff, or the specificity, or any of that play into how you selected players for the squad, and if so, how?

We know that it doesn't have to do with specificity necessarily, but we know that initial ability and final ability are very poorly correlated. There's a guy right now in the NBA, you probably pay no attention at all to the NBA, but they just had the NBA championships and there's a guy there named Stephen Curry that was the MVP of the NBA. Now they're doing little articles about Stephen Curry and how when he was in high school he couldn't do this and he couldn't do that, and when he was in college he still couldn't do this and he couldn't do that. Finally now with all of his development he's the most valuable player in the NBA.

There are, I don't know, thousands of stories like that where these kids weren't very good and they got to be great. I coached at BYU for I think thirteen years, and during that time there were nine [particular] guys that came into my gym. Most of them were not recruited. They just showed up because they were Mormon guys and they wanted to go to school at BYU. They weren't very good and we would put them over on what is called, in our gym, the dark side because the lights weren't very good over there, so it was literally the dark side. We put them over there when they weren't good enough to be with us on the light side, and nine of them in twelve years ended up being first team All-American. If I'd have known they were going to be first team All-American I wouldn't have put them on the dark side in the first place, "Come and be with us, you're going to be an All-American."

How that influences the way you recruit is you're trying to get people. I don't guess I want 5'6 middle blockers. There's some body configurations that have to be there. In terms of who's going to get to be good, you don't really know. I actually wrote a paper for the FIVB one year where we talked about this, and I talk about all kinds of other professional athletes. Tom Brady, and on, and on, and on. What it says to me is coach as many as you can for as long as you can.

If you look at our national team, there are guys that won a gold medal. Riley Salmon, he was never good enough to play college volleyball. All kinds of Olympians in our country who were not very good when they were in college. What that means is what I just said. Okay, get a bunch of guys, get them in the USA gym. We do a pretty good job training people in the USA gym. Let's get them in and see what happens. Reid Priddy is an

example. Just lots and lots of guys. Rich Lambourne is a libero. He was an outside hitter, and on and on.

Right, of course in Karch's case with the women he's got the advantage of having a vast pool. He can run fifty players through his gym in a year and barely scratch the surface.

If you look at the USA women in our country, there's been an immense player pool forever. The player pool for women is enormous in our country. But it's not until Karch became the coach, and Hugh became the coach, that they started training these girls like we train men in our country. I've had dinner with Karch on more than one occasion where we talked about specificity. Karch knows that stuff, and of course he was trained by Marv. Marv was not so focused on specificity because we didn't really know about it as much as we'd have liked, but we knew some.

The men in our country have got this tiny little player pool. My guess is there are more male players in Germany than there are male players in the United States. We've had a lot of international success because we train the guys better than we train the girls, who have not had international success until now.

Let's drill down on that. What was the difference pre-Hugh? What were the women doing that just wasn't working, or wasn't effective enough given the vast pool that they had available to them?

Way back in the '60s the Japanese were the best in the world, and they had a coach that was crazy, and he trained all these girls that won a gold medal. The Japanese women were gold medalists back in, maybe, I'm going to say '64, but I don't remember. It could have been '68. [The Japanese women won gold in 1964, and silver in 1968]

Anyhow, the women in Japan were really good, and a lot of coaches from Japan ended up coming to the United States to coach. I don't know exactly why that pipeline got opened, but maybe just because they were good and the people from the USA asked them if they would come and help us. Very much through our women's history we had Japanese and Korean [coaches]. Moo Park was our national team coach once upon a time, and we had a big influence from Asia, a big impact. They'd been doing that. The coach before Hugh was Lang Ping, I think. That's Asian of course. They'd been doing that since the '60s, and '70s, and '80s, and '90s, and 2000s.

If you come in a men's gym in the United States and watch practice, and come into a women's gym in the United States and watch practice, you're thinking, "Oh, my gosh, this is very different."

I've got a little handout thing that I give when I do coaching clinics, of how BYU won a conference a couple of years ago and they won fifty-two percent of the available points, and a team that finished eighth in the conference, in the Mountain Pacific Sports Federation, won fifty percent of the points that were available. It's not such news that we knew there were a lot of 25-23 games, and how slim the margins were for winning and losing. We think everyone knows that, but when you start looking closely you think, "Wow, it's even slimmer than I thought."

If I'm in a gym where I get one hundredth of a percent more transfer today than you get, I'm better than you in a hurry, if I'm getting one hundredth of a percent more out of practice than you are.

Without necessarily getting too specific, it sounds like in the women's gym there was a lot of block-oriented training. What they would have considered very technical training - not super game-like - whereas in the men's gym, much more game-like, much more random. Is that what was going on?

Yeah. In 2004 both the men and the women trained in Colorado Springs at the Olympic Training Center, and I was Doug Beal's assistant coach then. Toshi Yoshida was the women's coach, and there were lots of times where we would be in the gym at the same time. There were three courts in the main gym, and so we'd be on a court, the women would be on a court, and maybe there would be an empty court for whoever wanted to use it for a while.

Lasting impression is Toshi and Kevin Hambly would be up on tables hitting balls at their girls, and they would do it in some form that looked really impressive. They would hit this way, and they would hit that way, and then here comes one from here, and here comes one from there. You'd look at it and you're thinking, "Wow, this is really an impressive practice," but what's going on is they're standing on tables hitting balls at their girls, which isn't of course what we think learning how to dig is all about.

We'd be over on our side of the curtain and we'd be playing volleyball in one form or another, and they would hardly ever play volleyball. They would just dig balls that their coaches hit at them. Yeah, it was lots different.

Going back to what you were doing with the BYU guys, because some may not understand how the men's structure works. You get the players in the Fall when they start school, but you only have them for a minimal amount of time because of the NCAA rules. You don't really get them full on until January, and then the season runs through basically the beginning of May when the finals are. How would you set up your training over the different phases of your season?

There is a phase where you get all your players twenty hours a week. When the season starts in January you get your players twenty hours a week all the weeks, but in the Fall you get twenty hours a week for usually six weeks. They keep changing the NCAA rules. There was a time when you could only have them two hours, and you could only have four of them. That was what you got for ten of the weeks. Say that a semester is sixteen weeks, so for ten of the weeks you can only have them two hours a week. What you're going to do then is you're going to have these individual and small group sessions and you're going to do everything you can to get the fundamental skills exactly the way you want the fundamental skills to be performed. It's not so bad.

Actually, the NCAA regulation ended up being some kind of a Godsend. Now you've got to pay attention to how the fundamentals work, you can't just start playing all of a sudden. You've got to make sure they know how to play.

I had a guy named Mike Wall who ended up being a two time All-American and a two time National Champion. He's now an assistant coach for the men's team. When he was a fifth year senior I was telling him, "Mike, this is the way I want you to hold your hands when you pass." Here's a guy, it's a fifth year guy, 42 inch jump [about 107cm], really a good player, and I'm making sure that he knows how to hold his hands when he gets ready to pass or dig a ball.

The fall semester meant our guys were going to have the fundamentals exactly the way we wanted the fundamentals to be. Maybe not the way Marv wanted the fundamentals to be, or how Scates wanted them to be, but the way we wanted them to be. They could learn that in the Fall, so it was a blessing, I think, that it was like that.

Of course in women's volleyball it's not like that. They're going to start practice in the middle of August and they're going to play volleyball at the end of August. They get the same rules that we have in the Fall. They get those same rules in the Spring or the Winter, whatever, and then they take Summer off. By the time they get back they're out of shape and they've forgotten how you're supposed to hold your hands. The way it is, men's volleyball in the United States is better than the way it is for women.

This is going to be a little bit of a detour, but I think we're going to get to this point anyway. You talk about having a very specific way you want your players to execute a given skill, and I understand you've been quoted as saying there's one correct way. Obviously, you just mentioned that Marv Dunphy might have a different way, and Al Scates might have a different way, but I'm presuming that when you say, "There's one right way," it's based on bio mechanics. Is it something where you're trying to teach every single player the exact same

technique, or is it something where there's at least a little bit of adaptation from player to player based on their own physiology?

That quote that you just stated, I never said that.

That's good to know.

I play golf, and if you go down to the golf course, or if you go to the US Open that they just had, you can see the swing mechanics of pretty good pros. Mostly they look the same. This guy swings like that guy swings. What I do say is I think that some ways are better than other ways. I think this way is better than that way, and so I want you to come in my gym and play this way, because I think it's better. I'm worried about two percent. I can tell you a couple of stories about liberos. I guess I will tell you a story about Erik ... Who's Erik, jeez, I can't remember his name...

National team liberos?

National team libero.

Sullivan?

Yeah, Erik Sullivan. In 2002 I went with Doug to the World Championships in Argentina, and while I was there Doug said, "Carl, go coach somebody."

"Doug, what does that mean?"

He said, "Just go find somebody and coach them."

I'm wandering around and I see a libero. He's our libero so you know he's pretty good, or he wouldn't be our libero. Somebody else would be there. He's got a little thing that I don't like very much that he's doing when he's passing and digging. I tell him, "Erik, can I coach you?"

He looks at me kind of, "Sure, that would be okay."

I start changing the way he passes.

We're at the World Championships and this is a good player, and I said, "Okay, I want you to do this instead of that, and also we'll do this instead of that."

We start doing stuff and part way through the tournament I hear Doug say to Hugh, "Erik is playing better," so that fires me up.

When I get ready to leave and we're walking on the tarmac on the way to come back home out of Buenos Aires, Erik Sullivan comes up to me and says, "Carl, you really helped me. That's the best I've ever played."

We changed some little things and he played better.

In 2009 I'm with Hugh. He's coaching the women now and we're in San Juan Puerto Rico for a zone tournament, and Hugh says to me, "Go work your magic on Stacy Sykora."

I say, "Okay."

I go to Stacey and I tell her, "Stacy, I've come to coach you. Let me tell you about Erik Sullivan."

We talk about Erik Sullivan and she says, "Okay, let's go."

I'm coaching Stacy and she starts playing better, and she tells me when we're leaving, "That's the best I've ever played. I'm never going to change the way I do things."

We changed some little things and she played better.

My son, a couple years ago, was the AVCA Coach of the Year at BYU, and I went to the convention in 2013. I went to the banquet and I'm sitting at a table listening to him speak and Stacy comes up with her cell phone and says, "Carl, I just want to show you my cell phone. These are all the things that you told me back in 2009 and I still have them and I still use them when I play volleyball."

She was in Brazil playing and got hurt in a van wreck, and if she hadn't been hurt she would have played in the 2012 Olympic Games and I think they'd have been gold medalists because she was way better than the girl that played instead.

I could send you a spreadsheet with the BYU record in their conference for the last five, ten, fifteen, and twenty years. They were quite a bit better than all the other teams in the conference for the last five, ten, fifteen, and twenty years. I've fooled with Erik Sullivan. I've fooled with Stacy Sykora. I'm coaching BYU. I went to Switzerland not so long ago - 2007, 2008 - and changed the way they played. All of those things with Erik, and Stacy, and BYU for the last five, ten, fifteen, twenty made me think that some ways are better than other ways.

I ski with a guy who's the bio-mechanics instructor at BYU. We skied together all the time I was at BYU. We're both retired now, and we would talk about the bio-mechanics, "Should I do it that way?" Or, "That way's better than that way."

You can see that I have a strong belief that some ways are better than other ways. So I will be in our gym in August and be an assistant coach at the University of Hawaii [Hilo]. The coach there has said to me, "Carl, I already know how I want to play. You can coach the team. I want to find out how you want to play."

We're going to go teach those girls this way is better than that way. I'll sell that. We've already given them a book by Carol Dweck, and so they've read that and we're going to sell them that this way is better than that way, and that's what we're going to do. It makes sense to me. We haven't been crummy doing it this way.

How are you, for lack of a better word, defining the better way? Presumably there's a motor learning or mechanical aspect to that. You're looking at the athlete and saying, no, if we adjust this position or this movement slightly, we're going to get, as you said, the two percent.

Yeah. We have some principles that we think for example, if we're teaching you to forearm pass we're going to say to you do you think the laws of physics apply to this skill? You're going to answer. The answer is ...? I'm waiting to hear it.

Yeah of course.

The laws of physics apply, and here's another thing we think applies - simple movements. It's better than if you make a complex movement. What do you think about that? Would you agree with that?

Yeah.

Okay, so we're two for two so far.

Let's add one more principle. We think that the ball will do unexpected things when it comes over the net to you, and the thing that you can respond best to unexpected events with is with something that has to do with hands and arms, better than legs, better than facing. Your hands and arms are very malleable, very adjustable. Let's use them to try to get a nice platform out there, to try to get the laws of physics in place.

We operate with those three principles, and if you can make guys and girls believe that these principles make sense, then what follows is if these are the principles, then we have to do these things to adhere to those principles. These things being, now we'll

have some keys that we tell you about because motor learning says you need to have keys, and you need to have certain kinds, and you need to have them in certain orders and what have you.

Now we believe in our principles, and these keys are going to make it so that you look like this when you pass and dig. That makes perfect sense to me and to most of the people that we get to coach.

Being over in Europe, the culture of coaching, well, the culture of volleyball in general is interesting because obviously they don't have the education link that we do in the States - whether it be high school or college. Most things are run in the club system. So many aspects of it are different. There tends to be a more of a pragmatic approach to things than may be the case for a lot of us coaches coming from the US system. The bottom line is the bottom line. Does the ball go where I want it to go? If so, then that's the technique that we need to use, or this player needs to use, or whatever.

I'm assuming that your argument would be that okay, yeah, that's fine but if you want to close that two percent gap that you mentioned before, then that's where you need to start getting into the finer elements and the finer details.

Yeah. We can argue successfully, I think, there are a lot more volleyball players over there than there are over here. Over there being Germany, or over there being almost all the countries over there. There are more boys playing volleyball than in the United States. Yet, USA has won lots of gold medals with a little tiny player pool.

I'm talking about the BYU team in the conference for the last twenty years, and it's not like everybody wants to come to BYU and have all kinds of rules and regulations placed upon them, and it snows here. A lot of boys are from California and they don't want to go over. It's not like UCLA and everybody's dying to come to our school. We're BYU and no one's dying to come to our school, but we're way better than anybody else for the last five, ten, fifteen, twenty years. What does that mean? I think it means what I'm telling you. What we're doing here must be good.

Let's circle back to how you handle the progression of the season. We talked about the Fall stage where for a certain phase you get them for just the two hours, and then the four hours in the weight room, or whatever, and you can work a lot on the mechanics. Once you get them into the traditional season, as they call it, in January, where does the focus go to at that point?

We focus on a couple of systems. We want our block and defense to get in place, and we'll start on that. We've already got them moving the way we want them to move, the footwork patterns, and the arms, and all of that stuff. That we could do with small groups. Now we get everybody for twenty hours, the whole group. Now the first thing we're going to put in is our block and defense, and once we get it so that we like it pretty good- maybe it takes us two or three weeks to get the foundation in place - then we're going to put our offense in place, and then we're going to try to just get better. Maybe we'll have a week or so to just get some good 6-on-6 stuff going on.

I know you've got non-conference competition at the beginning and then conference play before you get into playoffs and the NCAA tournament. Is there any sort of peaking idea throughout that progression, where you want the team to peak at certain points?

No. In the beginning, in January, I always wanted to schedule some wins. I'm never going to play some of the teams that BYU played the last two or three years. They're playing teams that are too good for them, and teams that ended up winning NCAA championships and stuff, but I didn't want to do that. I wanted my guys to get some wins under their belt, and then we just talk all the time about, "Okay, we want you to get better today. We want you to get better today."

That's the primary focus, get better today. You're going to have a list that you're working on that we've worked on together. When I tell you to get better today I'm talking about you doing this. I'm talking about that other guy doing that, and we're just going to keep going until it gets to be the end of April and we're starting to get ready for playoffs, and starting to get ready for the NCAAs. Now there's going to be some peaking going on. Mostly we're just trying to get better every day.

There will be times... I had a little form that I would give to the guys and they would fill it out telling me how they're doing, physically and mentally, and there would be times when I'll make practices shorter and what have you. There have been lots of times we had a day off and I went skiing. I don't think of those as tapering, or peaking, or anything. It's just like we need to have a day off. I guess you could think of it as tapering, but I didn't ever think of it as that. They were tired, okay.

How did you set up your typical week? You were playing mostly on the weekends, I presume? How would you structure the progression of training over the course of the week leading into your competition?

Monday would be not a heavy day. Tuesday would be a little bit heavier. Wednesday we'd get after it pretty good. It's going to take two and a half hours to do all the stuff

we're going to do. Thursday it's going to take maybe a couple of hours, and then Friday and Saturday we're going to play.

You basically built intensity through the week up to match day.

Yeah. Thursday is, we're going to play really hard, but just not very long.

What were the guys doing in the weight room during the regular season?

During the Fall there would be a period where we would lift four days a week, and mostly we were doing Olympic style high, fast twitch kind of stuff. They have standards that we expect them to reach, and what have you. I had a team where I had four guys with 42 inch or greater jumps. I played my whole life and I never saw anybody with a 42 inch jump, and I had four of them on my team. We would get in the weight room and we would lift hard, and we worked hard in practice and the guys got better. There would be six, seven inch gains from when they were freshmen to when they were seniors.

At some point we're lifting four days a week, and then when we start with our twenty ... Then we would only lift three days a week. When we got to the regular season in January, we would lift one day a week, and usually on Monday morning.

I was talking with Mick Haley the other day and, this is probably something they're going to try and do this year. They're looking at during the season lifting every training day but only doing two exercises each session, and doing it after training. Instead of doing one longer session as I'm assuming you were talking about for your Mondays, it would be a series of much shorter sessions, I'm assuming.

I know this. We have the data, that you can get stronger if you're lifting one day a week. I also know that if I just had a hard practice, and practice should be hard. I don't want to come in and just screw around in practice. We're here to practice. The duration may vary, but we're trying to get better and we have to work hard to do that. I know that if I just had that kind of a practice I'm in no way interested in being in the weight room after.

With the national team, obviously the whole structure is very different. You're talking more training camps versus a sustained period where you've got them like you do at the college level, and you can work with players from freshmen on up. What's the philosophy at that stage in terms of approaching player development and approaching technical and tactical work?

I'm sure it varies. I can tell you what I think. I became Doug Beal's assistant coach on 2003. The guy that was his assistant had just got a new job at Arizona State University -

Brad Saindon - and I had just retired. Doug said, "Do you want to come and be my assistant?"

I said, "I would love it. If I come over there I want to do some things. I want this to happen, and that to happen. I don't just want to have nothing to do."

He said, "Come on over. We'll spend four days in April and we'll talk about what you want."

I got over there and it was a Monday, and I said, "Well, I want to do this," and he said, "Okay."

"I want to do that," and he said, "Okay."

By the time the morning was over Doug had said, "Okay, you can do everything you wanted to do."

So I did it.

I got in the gym with all the guys who were going to be 2004 Olympians and we talked to them about, "We're going to change the way you play volleyball. We're going to play like this, as opposed to like that."

In the gym when I was there with Doug Beal we were all about playing volleyball with these fundamental movements, the stuff we've been talking about, you and I. We did that. We did that, we did that, we did that, and when we started we were ranked twelfth in the world at the time. We ended up being ranked fourth in the world when the Olympic Games were over in Athens.

Hugh, who was an assistant coach with me and with Doug, Hugh got the job. Hugh had played volleyball at BYU. Hugh knew what we were doing on the way to Athens because that's what he was used to as well. Hugh got to be the coach, and Hugh just kept going doing the same kind of stuff. This is the way we're going to play. He just kept going. You know, of course, that in 2008 the men won a gold medal. If you look at them, if you go watch them play, you're going to see they look a lot like BYU, the way they're playing, with the same passing movements, with the same blocking movements, with the same attacking movements. They look a lot like BYU looks.

That was it. Hugh was over in 2009. The Long Beach State coach became the coach [Alan Knipe]. At Long Beach State they don't play the way that we play at BYU. It was the first time since 1984 that the USA wasn't playing the same way they've been playing all these years. First there was Doug as the coach, and then there was Marv as the

coach, and then there was Fred as the coach, and then there was Doug as the coach, and then there was Doug as the coach again, and then there was Hugh as the coach. All of those Olympic Games we had basically the same kind of stuff going on. We said, "This is the way that we play in this gym."

You're talking about making technical changes with players. These are guys who are either playing professionally overseas for the most part, and/or are college athletes who obviously are playing under different coaches. I'm sure there was some resistance - whether from the player themselves or their coach on the other end - to changing them to reflect the style that you guys wanted them to play in the USA gym versus what their professional club or their college team was doing. How did you overcome that sort of thing?

I think that in the first place, we can tell them stories about how much better people get when they come in the USA gym because we're going to play a certain way. We can tell them stories about Erik Sullivan if we want, about he just changed. We can tell them stories about the guys that were on that team in 2004, how they changed. The way that men play in our country is mostly the way that we play in our national team. It's much more alike than it is different. It's not that way in women's volleyball, it's much more different than it is alike in women's volleyball. In men's volleyball you don't have to change the world to get these guys to do some of these things you want them to do.

Kevin Barnett was a right side player in 2004 and I told him once upon a time, I told him, "Kevin, you're going to get cut from this team because you can't block on the right side. You're a real good blocker on the left side, but you don't know how to pass. There's no place for you on the right side, there's no place for you on the left side, you're going to get cut. What if we do this? What if we teach you how to pass?"

Of course he was all for that, and we taught him how to pass. He ended up being maybe our best passer and our best outside hitter in Athens. If you phoned Kevin Barnett and asked, "Did you change the way you were passing on the way to the 2004 Olympic Games?" he would tell you, "Yeah, I did, and I'm sure glad I did or I wouldn't have made the team."

For the moment, let me rewind things a little bit. You mentioned some of the names of coaches you've worked with. Who's been involved in terms of helping you develop as a coach over the years, and are there people or things that you continue to follow from your own developmental perspective?

The guy, of course, that got me going was Jim Coleman. He's the father of volleyball coaches in the United States. Then, of course, I got to hang out with all these guys that

all had a big influence. I had to hang out on my own, too. When I first started coaching at BYU we were in the Mountain Pacific Sports Federation, everybody was terrific and we were terrible. There was a whole bunch of you better figure out how to do this yourself. John Lowell, Jim Coleman, those guys had a big influence. And of course Doug, Fred Sturm and Marv Dunphy. All of them. It's been wonderful.

Mark and I have managed to create a couple of heated debates having to do with a couple of different things. One of them is hitting and setting close to the net or not close to the net, which I know is research that has been done. I'll get to that in a second. One of the other things that we talked about was the value of digging versus the value of transition points. In other words, digs are not all created equal. The story that come up is that at one point, and this is, I think, when Erik Sullivan was still libero for the national team, he was fantastic at digging in six. Got lots and lots of digs, but the team discovered that they actually did worse, they scored fewer points.

We didn't discover that.

You didn't? All right, what's the true story?

The true story was he was good in the middle, and we put him there and he stayed there for the whole tournament.

There was no drop off in production from the pipe, for example?

No, we don't know that. We don't have that data.

Okay, inconclusive then.

No one knows that, but I do know what happened to Karch. He put his libero middle back, and their point scoring efficiency went up four percent.

Okay, interesting. Women versus men, so there may be a causality there. The women's pipe isn't as strong as it is in the men's game. That's interesting. The reason I brought up the whole tight set, not tight set is because there was a study that was done on the BYU women's team, I believe in 2006, where all the different facets of the game skills were examined for that season, and one of them was the distance from the net that the set was executed at and its impact on point scoring.

I've seen that report, and I know there are others that have been done in a similar vein. I haven't been able to go through them just yet. You being a researcher

yourself, one of the issues that I've got with a study like that is it's not cross sectional, it's a single team in a single season, which introduces some potential biases into the results. One which actually came up in a discussion, was expectations. If a hitter is expecting the ball to be at a certain distance and it's set at a different distance, it may not be that the set at the alternate distance is any better or worse. It's just that the hitter can't hit the ball there because that's not where they're expecting it. Have people actually tried to do more broad based studies of these things?

That was a masters study that was done. The guy that chaired the study is Gil Fellingham, who knows quite a bit about volleyball and an awful lot more about statistics. One of the data points in that study is that hitting the ball out of the back row was one of the least efficient things you could do. When I look at that study, we talk about it in our coaching clinics, actually. This is maybe just because she was no good, not because hitting it from the back row is no good. I know, and the people I talk to know that, yeah, this is just BYU that we're looking at here and there's all kinds of reasons why the data can turn out the way they turn out.

We've got a guy now that's working for BYU volleyball, Giuseppe Vinci, that has VolleyMetrics as his little company. He now has the ability with the way he's charting - he's charting all these women's teams and all these men's teams, so he's got a really wonderful database. He's just now putting his company together, so I don't know what questions he's looking at or what answers he's giving, but I know pretty soon if you want to know something about men's or women's volleyball, Giuseppe Vinci is going to have great data.

Yeah, he's collecting a massive amount, isn't he?

Yeah, and it's done correctly, with Gil Fellingham supervising the whole thing because Gil knows.

Switching gears a little bit, you've stayed involved with the sports and involved with coaching for a considerable amount of time here, part of which, for a lengthy stage it wasn't even your primary focus. What's kept you motivated?

I like being in a gym. When I was little I liked to play. I got big and I couldn't play anymore, and if I was going to have anything to do then I had to be in the gym coaching, and I like it.

How involved do you stay these days?

I was Chris McGown's volunteer assistant coach for the last four years. There were plenty of perils to deal with, father/son kind of stuff. I didn't ever think it was my team to coach. It was his team to coach, so I was just doing what I was told, mostly. Now he resigned, and I'm going to go coach at the University of Hawaii Hilo Campus. My wife and I like Hawaii, so it'll be a chance to be in the gym having fun.

And away from cold Provo.

Yeah, but I'm going to go home. They're going to be through in the end of November, so I'll be home in time to strap my skis on.

Just in time to get going with the men's season in January.

Yeah, no. I've got to get asked, now they have a new head coach.

While I'm thinking about it, do you have a recommended reading list? You mentioned *Mindset* by Dweck. Is there anything else that you recommend to coaches?

I like *The Sports Gene*, I think. *The Genius in All of Us*. Have you read that?

I haven't yet. I think I've heard of it.

The Talent Code. I don't know if you've read that.

Yep, I have.

A book that's way old is *The 7 Habits of Highly Effective People*. That changed my life.

Yours and a lot of other people's.

Yeah, he sold millions of copies. Have you read *Moneyball*?

I'm literally reading it right now. I've seen the film and I know the basic story, but I'd never gotten around to reading the book.

The Five Dysfunctions of a Team.

I've heard of that one. I think that one's on my list.

You know Bill Walsh? He wrote a book *The Score Takes Care of Itself*.

I think somebody else mentioned that. I know Walsh has been mentioned before, but I'm pretty sure that book came up as well.

He wrote two. One of them was kind of all about football, and the other one was just more about coaching. *The Score Takes Care of Itself*. I quite like the fact that he says, "We're going to do things perfectly."

That was his standard, perfection. I wonder what's the definition of perfection? There must be something that you want to have exactly the way you want to have it.

Did you read *Outliers*?

I haven't yet, but again, it's on my list. I know the basic idea.

Yeah, that's all that's going to come off my head right now.

That's fine. Complete shift of focus here. You spent a season or two ... was it two seasons in Switzerland, or just one?

I spent a season, and then they made me their national team coach and I coached in the World University Games in Shenzhen, or however you say it. They were trying to get somewhere in the European Championships, and I coached against Croatia, and we lost against Croatia in a five set match. My outside hitter blew his ACL out to start game five. I was in Switzerland for two different summers and a regular league season from whenever, October to whenever we were done, April.

How did you find that experience in terms of coaching players from different cultures?

Like lots of things it's a long story here I'm going to tell you. When I retired as the coach at the university, Mike Wilton, and he was a former graduate student of mine. His assistant coach was his son. His assistant coach left to go chase a girlfriend to the mainland. Wilton called me and said, "Carl, I've got a job opening. Do you want to come and be a coach?" [This was at Hawaii]

I said, "I'll do it for the fall semester because during the winter semester I want to be skiing in Provo, Utah.

He said, "Okay."

Fall semester of 2005, I guess, I was his assistant coach, and he said to me when I went there, "You do what you want, I'm going to listen." That, of course, is attractive.

There was a guy on the team named Lauri Hakala and there was another guy, he was from Finland. He's now the assistant coach of the Fin men's team, and another guy, Matt Carere, who was a Canadian. They both ended up making All-American after I was there, and they weren't any good at all before I went there. I did that, and then he wanted me back a second year, so I did it again, and then I had a chance to go to Switzerland.

I'm telling Lauri, we were just talking on the phone, he hasn't graduated from school yet. I'm telling him, "Hey, I'm going to go to Switzerland and coach."

He phones me back the next day and says, "I want to go."

I said, "Well, it turns out we need an opposite."

Lauri is 6'2 but he can get on the ball in a hurry. So I said, "Yeah, that's good, we'll make you an opposite."

Two days later Matt Carere called and said, "Listen, I want to go."

We needed an outside hitter and Matt was an outside hitter, so those two guys came to Switzerland with me. They told the other guys when we got there and were having our meetings, "Just do what Carl tells you and it will work out just fine."

If you watched the Swiss team that I coached you would look at them and you would say, "Gee, that looks like BYU."

I had help. I had Lauri and Matt telling these guys. Some of them... There was a 32 year old Polish guy. There were some Swiss guys that were in their thirties that had been playing for a long time. Switzerland is not Italy, of course, or Russia. Anyhow, there were professional volleyball players there and I changed the way they played and it wasn't hard at all because Lauri and Matt said, "Just do this. Just shut up and it will be fine."

It's always great when you can have your own players evangelizing your philosophy.

Yeah, it was wonderful.

You've coached women a little bit, though not nearly as much as you've coached the men. Is there any difference in how you approach coaching them at all?

Not really. You don't have them hit out of the back row, so that's different. The women want to get better and they can play. The fundamentals are basically the same, some of your systems are a little different.

You talked about how in the collegiate game in the US these days everybody basically plays a very similar system to the way the US national team plays, and Mark made the observation that when he scouts teams he knows without even having to look at them, on the men's side, that about eighty percent of what they do is the same. There's only about a twenty percent variation from team to team, whereas if you look at women's teams - this isn't the US but it's globally - the styles of play are considerably different. Not even just necessarily from country to country, but even within countries, as you say, with the US. Do you have any theories on why that would be?

No, no theories. My basic one would be Japan got here way back when, and now we've still got a lot of Asian stuff going on. If Karch keeps coaching, a bunch of that variability is going to go away.