"Front and Center"—with host Alonzo Fleming and guest Adrian Apollo, Wednesday, August 25, 2004. Broadcast live on KIRV AM-1510, Fresno, California.

[Excerpts of main points:]

Fleming: My guest in the studio is Adrian Apollo. Good afternoon young man.

Apollo: Good afternoon, sir.

Fleming: And Adrian—I called and spoke with him on Sunday, I believe it was, after reading an opinion piece. Was it an op-ed piece in—

Apollo: "Valley Voices."

Fleming: "Valley Voices" in the Fresno Bee. Is that printed every Sunday?

Apollo: Every Saturday.

Fleming: –or every Saturday, right. So they have different ones every Saturday.

Apollo: (Agreeing.)

Fleming: Well, Adrian's piece showed up this past Saturday, and it just intrigued me to the point that I had said, "I gotta call this gentleman and get him on this program." And seeing how ... our kids are going back to school right now ... school and education is on people's minds. And this is what he wrote. He wrote an article that had to do—Well, actually, it's entitled: "It's time to toss our outdated schools systems."

Apollo: That's *The Bee's* headline, not mine (laughing).

Fleming: That's not yours?

Apollo: It kind of set me back the first time I saw it.

Fleming: Oh, really?

Apollo: But I'm getting—It's growing on me (laughing).

Fleming: Well, I pretty much like it (laughing). I like this, personally. I like the headline, personally, because, I mean, actually in the article it actually makes that point. If you looked at it in its total, it does make that point.

Apollo: (Agreeing.)

Fleming: Let me read—Well, first of all, tell us a little bit about yourself, Adrian.

Apollo: Well, I was born in Illinois and moved out here with my mom and two brothers when I was 13. Got a math degree at Fresno State. Master's in linguistics at Gallaudet University, which is a university mostly for Deaf students. I studied the linguistics of sign language.

Fleming: Hmm mmm.

Apollo: And I taught American Sign Language at [Fresno] City College for a short time, but I developed an arm injury from overuse—tendinitis—I had to quit that profession, so I'm back into math now...

Fleming: Well, let me read to the audience—And by the way, if you're interested in calling in to the program with a question or a comment, the number is 229-5478. Listen to this. I'm going to read some excerpts from his opinion piece entitled: "It's time to toss our outdated schools systems." What would you have entitled it?

Apollo: ...I would use the word "update" or "It's time to renovate" or something like that.

Fleming: So you don't think the system in and of itself is outdated on the foundational level. Is that right?

Apollo: It's not totally defective, but we do need to make some major changes.

Fleming: Let me read some of the excerpts from the opinion piece: "Imagine President Bush announcing the beginning of a new campaign trip whereupon he waves, turns and then hops on the back of the Beverly Hillbillies' old jalopy. Or picture Neil Armstrong and Buzz Aldrin walking past the television cameras in their spacesuits for the first trip to the moon and everyone applauds as the climb aboard a biplane built (laughing) by the Wright brothers.

Fleming: (cont.) "Bill Gates didn't strike it rich by working with mechanical adding machines, and Dale Earnhardt didn't become famous by racing one of those tall, old-fashioned bicycles. All that sure sounds ridiculous, yet most every morning, kids wake up and are sent to schools run in much the same way that schools were run a hundred or more years ago.

Fleming: (cont.) "When most kids lived on farms, they attended one-room schoolhouses. Later, when the population demographics shifted and most people lived and worked in cities, our current system was developed. Now that we are transitioning into the Information Age, we are overdue for another educational overhaul." And let me just hit a couple of the high points here that I saw. Well, let's start there first of all. You say here—you compare famous people and their accomplishments and you attach the tools that they were using to accomplish those things, and then you suggest that our system is outdated.

Apollo: Well, yeah, the system really is an outdated concept and it really was set up for different social conditions that don't exist now. And the kids growing up now are not like the kids a hundred years ago who were able to thrive in this kind of system.

Fleming: So let's start—What do you think education is? What is that, when someone says "I'm educated," what does that mean to you?

Apollo: That's very interesting that you should ask that question (laughing), because I could talk for hours.

Fleming: (Laughing) Well, we only have one [hour], but you know—

Apollo: ...Learning is a process of integrating what you perceive all around yourself in the world. And you have to know how to integrate your concepts correctly in order for the thoughts to relate to each other and to make sense.

Fleming: (Agreeing.)

Apollo: Now, unfortunately...the educational theorists...don't really understand the issue and there really isn't... [a] theory of education that recognizes how the brain forms concepts, how the brain forms complete ideas with those concepts, and how that knowledge...how that understanding can help us develop curricula and make it so that when kids learn, they see the relationships between everything they're learning.

Fleming: (Agreeing.)

Apollo: As it is right now, everything is fragmented—I mean, I'm sure you can, you've had experiences like this in school. You've seen students who got straight A's, then when you met them when you were older as an adult ... you seemed to be much smarter and they didn't seem to be quite with it.

Fleming: I remember a teacher who when I for some reason personally could not operate in the school system, I became discouraged and he said, "Well, there's some people who get A's in class and others who get A's in life," so I can identify with what you just said.

Apollo: Well, that's because of the lack of [this kind of] theory...

Fleming: Which is important. I kind of got that sense when I was reading further. For example, one paragraph says, "The first thing that has to go is mandatory participation."

Apollo: Right.

Fleming: "Go ahead and force the kids to be at school, if they need to be babysat, and their parents agree to it. But how can you force a kid to learn? What's needed is enticement, not enforcement." Now I believe that a mind changed against its will is of the same mind still. (Laughing) ...

Apollo: Well, and like Albert Einstein said—I don't remember the exact quote—but: the mind is like a delicate flower.

Fleming: (Agreeing.)

Apollo: I mean, you have to be very careful not to trample on it.

Fleming: Yes, so here you seem to suggest throwing out the model of education that we have. I mean, we're talking about mandatory participation. If your kids don't show up for 180 days, or whatever it is...they send the truant officer. There's an enforcement issue.

Apollo: Right.

Fleming: But you're saying it should be enticement as opposed to enforcement...

Apollo: There's no such thing as a kid who does not want to learn. I mean, it's part of life. It's growing up. It's universal, unless the child has some severe problem of some kind...

Fleming: This is what intrigued me: "Get rid of the grade levels, tardy bells, class periods, classroom assignments, letter grades and grade-point averages." You wanna work with that a little bit?

Apollo: (Laughing.) Kind of controversial.

Fleming: Now I like that—Before you do the number is 229-5478, if you want to ask Adrian a question or make a comment, I'd love to hear from you. Would you take some calls?

Apollo: Sure.

Fleming: OK, 229-5478. What do you mean, man? You mean to tell me my 4.0, you're trying to get rid of that? I mean I take pride in that 4.0. I worked hard to be on the dean's list every semester.

Apollo: Well, I graduated with honors, too, but it means a little bit to me, but not much really, because I learned how to take tests well. And I'm the first person to know that I wasn't the best student...

Fleming: You go further here. You talk about: "Much is done as independent study with teachers helping to smooth over the rough spots." Now I've dealt with students, thousands of them myself and I've taught in several honors-level-type school systems where it was just expected, you were expected to achieve at a very high level, but I found that the independent studies in just about every system I've worked in never worked. You

wanna address that. It seems like it's too little, too late when you start dealing with independent studies.

Apollo: Well, we've already—when the kids get into the system, first grade, second grade, third grade, that's when they start to be acclimated to the system and after that, you know, they're different people. But if we had the system that I envision here from the outset and kids were raised differently, they would thrive on this sort of system.

Fleming: OK. In teaching mathematics, teaching and understanding mathematics, how would your model of education be different than say the current model, just for that particular subject area. That's a very close-to-my-heart area, too, but I'm curious to see how would your model be different?

Apollo: Well, to tell you the truth, there isn't much of a model for teaching math right now. Most of math is taught implicitly by having the students mimic what the teacher's doing, not really *analyzing* what's happening, but learning the same way kids learn languages when they grow up. You're not teaching them formal grammar, but they absorb the language. Math is taught that way. It should be taught partially that way, but we also need to deal with a more conceptual level and "this is how it works."

Fleming: Right.

Apollo: But the reason it's not taught that way is because the teachers themselves don't really understand the conceptual basis.

Fleming: It should be taught at more of an intuitive level.

Apollo: Part of it, skill building. But also as the kids get older, the conceptual—What are these? What are numbers and what's going on? What is an equation? What is a variable? What does it mean to multiply two negative numbers? Very few teachers could give you answers for that.

Fleming: And why? Why do you get, for example, a positive number when you multiply two negatives?

Apollo: Exactly...

Fleming: What makes a good teacher to you?

Apollo: I suppose the basis of it has to be enthusiasm and open-mindedness—willingness to be patient. Those are the major ones, the major qualities. And I'm constantly trying to learn to be more patient.

Fleming: It says here: "More and more parents will be telecommuting, or doing their work at home, so why not allow kids to do their learning at home, too? They can always send an e-mail to the teacher if they get stuck on something." That is 21st-century if I

ever heard it. 229-5478 if you want to ask Adrian a question or if you want to make a comment of your own. I'd like to hear from you. I think this is very important for us to consider, you know, education. What really is education? Why are we sending our kids to these schools and what's the point? I mean if it's just babysitting that's one thing. If you just need a babysitter, that's one thing, but if it's a desire to prepare them for the future and prepare them for themselves then that's a whole 'nother issue.

Apollo: Right, and you know, if you were to talk to some school administrators in candid moments, they would tell you that basically the biggest thing they're doing right now is keeping some of those kids off the street and I think that's a horrible attitude.

Fleming: Going back to the idea of formal education, you say the students should be allowed to telecommute for their education. How would that work, for example, for an unmotivated student? Now right now we have compulsory education, and you have little Johnny sitting here, "Oh, I don't have to go to school? OK, fine." How would that work under little Johnny's situation?

Apollo: Well, but it's in the nature of the childhood experience to be curious and to want to learn. This phenomenon of unmotivated students is a product of our current system. It's not a contingency we'd have to worry about if we had a better system.

Fleming: I mean, that's just the—Man—Did I pay you to say this?

Apollo: (Laughing) No, sir.

Fleming: (Laughing) I wanna make sure, because I need to pay you some more.

Apollo: Well, I just met you today.

Fleming: But you know, so it seems that this way of thinking, this way of education that you're talking about, actually realizes the potential and the nature of the child, as opposed to trying to get a system that—What is it? One shoe fits all? One size fits all system?

Apollo: Right.

Fleming: The system is able to bend and mold according to the development of the child. Is that—could I say it that way?

Apollo: Sure. The child's education [should be] tailored to that individual child, which only makes sense. Clothes are made that way. Why not learning?...

Fleming: If you could wave your magic wand today and education would look like you want it to look, what would be the first thing you would do?

Apollo: That's a very complex question. You know, like I said in the article, let's try getting rid of mandatory participation first. If there are kids in the room [who] don't want

to pay attention, don't try and force them. Send them to a different room. They're going to be doing something in that other room ... that's education based. You know most people nowadays are really learning *in spite of* the system.

Fleming: Yes.

Apollo: And I guess now's a good time to say that not all—the whole system—not every part of the system is bad. I'm talking about the system per se. I'm not talking about individual teachers or individual school districts. There are a lot of good people out there. There are some good districts. But I'm talking about the system per se. There's some—

Fleming: The presumptions that the overall system is based in.

Apollo: Right. Right. And there's some really good teachers out there and I've had some really great teachers.

Fleming: ...But the power of technology has just caused us to be able to outstrip the current education system. Technology has made it possible for us to learn anything we want to learn online. I mean, we can talk to anybody all over the planet. We can discuss and do just about *anything* right from the comfort of our home and offices. Why is education being limited in that we still have the ditto sheets? You remember the ditto sheets? I mean, that's still in school right now...

Apollo: The answer is because we have an entrenched establishment. Now you wouldn't be surprised to find out that I didn't receive one call from a single school administrator after my article appeared last Saturday, because they're gonna be in favor of the status quo...

Fleming: Well, I want to thank you Adrian for coming onto the program today. It was just a pleasure meeting you. You are a very interesting person and I'm just thankful that you came onto the program.

Apollo: Happy to be here.

Fleming: OK, thank you. Adrian Apollo, my guest, of Apollo Tutoring, an educator, mathematician and a philosopher in his own right. Well, ladies and gentlemen, it's time for us to cut out of here again. Join us tomorrow. What's tomorrow, Thursday?...The week is still not over, but hey, listen. We love you and we look forward to talking to you again tomorrow. Until tomorrow, this is Alonzo Fleming signing out. Bye bye.

[Paul Hardcastle singing: "If You Knew"]

... like a bunch of those did My family was all dysfunctional, kid My father went to jail My mother lost her dome Me and my little brother movin' in and out of foster homes

Roaches, rats, raised wit' 'em son Like you do your dogs and cats, we played wit' 'em, son

Life was hard Who said it was easy? Steady sinking, wishful thinking I can get my palms greasy... fasheezee

How was you livin' back in seventy-four?
Were you filthy rich? Well, I was filthy and poor
Had an empty dresser drawer for a baby bassinet
Me, Anthony, Tony, plus my little sister Antoinette
Plus four more, but they would come later
The struggle for them was much greater, believe it
Meesha, Jamie, Harvey, Sam
'Cause we all got separated don't mean that we still ain't fam
We from the same womb
I'll never steer you wrong
So chill with all that fightin' and keep your head strong
And get your act together
It's all about the kids
Don't give up until they close your eyelids

One day when I was chillin' at Kentucky Fried Chicken Just minding my business, starin' at...

[Female announcer's voice – music fade out...]