The Deliberate Creative Podcast with Amy Climer
Transcript for Episode #037: Zig Zag – An Interview with Keith Sawyer
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Amy Climer: Welcome to the Deliberate Creative Podcast Episode 37. On today’s episode I am talking with Dr. Keith Sawyer, who is creativity researcher at University of North Carolina in Chapel Hill. We are going to talk about his newest book Zig Zag, and this new creativity model that he has designed and developed.

I first stumbled across Dr. Sawyer’s work a few years ago, and he wrote a book called Group Genius: The Creative Power of Collaboration. This book was very influential to me. There was not a lot at the time -- I think this came out in 2007 -- and there was not a lot at the time about creativity and collaboration. And those of you that are regular listeners know those are two of my favorite topics. I think that as human beings, we have incredible capacity to be creative, and to be collaborative, and to use that to solve big problems.

Then in 2014, I reached out to Keith to help me with a paper that I was writing for my PhD. It was a paper on teaching creativity, and I asked him if he would be a mentor to me and help me understand creativity and teaching creativity specifically, and he agreed. He mentored me through that process, he gave me great resources and feedback and taught me more about teaching creativity.

During that time, as we were getting to know each other, he asked me about Climer Cards. He had this idea in his head for a deck of creativity cards called Zig Zag Cards. I shared with him my experience in designing Climer Cards, and then a year or so later I get this deck of Zig Zag Cards in the mail, which was so awesome. I love that -- being able to talk to somebody when they just have this idea in their head and then to see the end product later. They are beautiful, they are awesome. I highly recommend getting a deck of Zig Zag Cards. Of course, I will put a link for you in the shonotes. By the way, the shonotes are at climerconsulting.com/037. So you can head over there and you will see a link to his book and to the deck of cards. I highly recommend both. They are both really good.
Today, he is going to give us an overview of the Zig Zag model of creativity, which is a model that he developed based on all this research he has done about other creativity models. I think you are really going to enjoy the interview. So here is Keith.

Keith, welcome to The Deliberate Creative Podcast. Thank you so much for being on the show.

Dr. Keith Sawyer: Well, thank you. It is my pleasure.

Amy Climer: Can you start off and tell us a little bit about your background and what you do?

Dr. Keith Sawyer: I am a creativity researcher. I am a professor at the University of North Carolina. I primarily study creativity and learning, and in particular, in groups. I have done a lot of work with improvisational theatre and jazz ensembles to look at how do people create effectively together.

Amy Climer: You have also written a number of books, right?

Dr. Keith Sawyer: That is right, yeah. I have some of the more academic-style books for researchers in my discipline, but I have also written a couple of books that are designed for general readers who are just interested in enhancing their personal creativity, or enhancing the creativity of the groups they are in, or the groups they are responsible for managing.

Amy Climer: I know I first found you or stumbled upon your work from reading Group Genius, and I love that book. Just talking about the creativity and collaboration and how collaboration can really increase creativity.

Dr. Keith Sawyer: Yeah, thank you. That book came out in 2007, Group Genius. So really focusing on my research on collaboration, improvisation, and a large body of research by scholars working in the field. That was 2007 and gosh, I am just surprised, but also delighted that collaboration and innovation have become even more important. I am seeing even more books, more stories in the business press, more people calling me for consulting and advice. So it seems that 2007 when I wrote that book it was really just the beginning of increasing recognition of the importance of collaboration.

Amy Climer: I have seen the same thing. There is just like this huge increase in interest around creativity and innovation and collaboration and teams, which I think is awesome.

Dr. Keith Sawyer: Oh, absolutely. It is the way forward, I think. It is the way of the future and it is the way organizations are going to be successful.
Amy Climer: I feel like some of the problems that organizations have now, maybe versus what they were dealing with 20, 30 years ago, they are so much more complex, and they really need teams in order to approach those issues and those problems.

Dr. Keith Sawyer: Absolutely, and that should require so many things to change. Some of the lessons that organizations used, or leaders used 20 years or 30 years ago, they do not really work to foster collaboration. For example, getting your incentives right. Instead of rewarding individuals who have better ideas, you need to think about how your incentives will bring people together.

Amy Climer: Absolutely. Let’s talk a little bit about your more recent book, Zig Zag. As you know, the focus of this podcast is on deliberate creativity. I know that is something that you believe in, that creativity is something that could be nurtured and developed through practice. Tell us a little bit about your perspective and what you found in your research, and maybe finish up and tell us how this all wove together in the book Zig Zag.

Dr. Keith Sawyer: Zig Zag is my book with advice for everyday creativity in the workplace, at home, in personal life, and it very much emphasizes deliberate creativity. In all of the research that I know and that I have done myself, creativity is not mysterious. It does not suddenly appear surprisingly in your subconscious mind. There is a process. There is a set of techniques and exercises that can consistently lead to deliberate creativity. In the book Zig Zag, I have over 100 exercises and they are grouped into the eight stages of the creative process. The eight mental habits and practices that are associated with successful creativity.

The Zig Zag Model of Creativity [7:30]

Amy Climer: I know that you know that there is a number of different creativity models out there. I am just curious; how did you get to this model of eight stages versus four or ten? What led to these eight?

Dr. Keith Sawyer: That is a great question. And these staged models of creativity, the first one I can think of is from 1920s, so they go way back. It was when I was writing my creativity textbook. It is a textbook I use in an undergraduate class called The Psychology of Creativity, that book is called Explaining Creativity. My intention was to summarize and review all of the research on creativity. Part of that was one chapter that analyzed and reviewed all the research on the stages of creativity. So yes, I actually have a big table in the book where I have different models of creativity in the columns and then on the left side I list the eight stages I came up
with. Really it is just sort of an intersection of all of the different models of creativity. There is a lot of alignment across all of them, although they may have five or six stages. It is my way of capturing all of these models into one framework

**Amy Climer:** So did you take the stages from the other models and essentially -- I mean, I have seen the table and I have seen it all laid out and I love it. It is a great way to just see what has gone on from 1926 when [Wallas](#) published the first few stages, or the first model I guess, to more recent. Did you look at it and think okay, this one has four, but they are a little bit different than these other ones, let me go across and basically pull out every stage that you feel like existed.

**Dr. Keith Sawyer:** Right, and I did my best to retain the stages that were most aligned with contemporary research. Some of these are pretty dated. We got stage models of creativity based on 1950s psychotherapy for example, which is really pretty out of date given today’s contemporary research. So based on that understanding that I have of all the research in cognitive psychology, yes it is true. I emphasized the stages that I felt had a cohesive and consistent body of literature. So each of the eight stages I came up with, there is a body of research about what goes on in the mind when people are engaged in this one of the eight. It is that research that drove the techniques and exercises I came up with for the book [Zig Zag](#).

**Amy Climer:** Oh, that is so interesting. The research, is that in the book? I do not feel like I remember reading about the research so much.

**Dr. Keith Sawyer:** That is right, and it is because it is almost like a self-help book. It is practical, it is applied. So it is not the sort of book you would go to if you want to know about the research. That book, you can always read my textbook [Explaining Creativity](#), but [Zig Zag](#) is meant to be fun. It is something that you could just carry around in your briefcase or your suitcase or wherever you are going, and just open it up to a page and you are going to get techniques that you could use tonight or tomorrow.

**Amy Climer:** Can you give us an example of a couple of the techniques in the book?

**Dr. Keith Sawyer:** Oh gosh, let’s see, I have to choose my favorite. There is one I particularly like. Pretty much all of them I do myself, but because I do a lot of travel to do keynotes and consulting, I am always at the airport. And one of my techniques is called Strange Magazines, where I go out to the bookstore in the airport and I will pick magazines that I normally would never read about things I know nothing about -- to reveal too much information about me. Let’s
say that I do not have any guns, but there is always a gun magazine, so I might get that. I do not drive hot ride cars, there is always a hot ride car magazine. Then there are magazines that are more clearly for women like sewing magazines or cooking and dining.

I will try to buy four or five of these magazines. Then when I am on the airplane, I just skim through them pretty quickly, and I am looking for photos, primarily, and images that might spark some analogy with my own research. That technique of Strange Magazines, it is connected to a body of literature showing that creativity tends to come from combining very different types of things together. So you can be more creative if you expose yourself to very different bodies of knowledge or images or disciplines or professions, et cetera.

Amy Climer: Nice. I love it. Spend 20 bucks and then by the time you go to wherever you are going, you have some new creative ideas that could lead to who knows? Something big perhaps.

Dr. Keith Sawyer: Yeah. I just tear out what looks interesting and I leave the rest of the magazine on my seat when I get off the airplane.

The Eight Stages of the Zig Zag Model to Creativity [12:58]

Amy Climer: Nice. Let’s walk through what these eight steps are. Most of the listeners on this podcast have heard the four step Creative Problem Solving process, but it would be great to dive into a little bit of what the Zig Zag steps are.

Ask

Dr. Keith Sawyer: Sure. I start with finding a problem or identifying a really good question. In creative problem solving they call it framing problems, but you will find that stage in just about all of the stage models of creativity. Generally, in creativity, researchers call it problem finding to contrast it with problem solving. The reason why is that exceptional creativity tends to come from thinking about the problem in a new way, or formulating your question in a very different way.

A lot of times when you are stumped, it is because you are trying to solve the wrong problem or you have not identified the right question to ask. So if you keep going, you are guaranteed not to be successful because you are just going down the wrong path with the wrong question. So that is particularly important at the beginning of the process. So I do have these eight stages. I want to point out though that for me the process is not linear. When you are talking about stages, it implies that you start with step one and you go all the way through two, three, four to
the eighth stage. That is why I call the book Zig Zag because in my research when people go through the creative process, they wander around. It does zig and zag.

What I am calling the first step of asking good questions, sometimes it comes in the middle of the process. You might not identify the right question until you have been trying to solve a different question for a week or a couple of weeks. So you do not have to ask the right question right at the beginning. So that is what I mean by saying it is a zigzagging path and not linear. But that is how you have to write a book. It goes from page one to page 200, so books are linear.

Amy Climer: Yeah. I feel like that idea of these group stages is so prevalent not just in creativity, but in many models. People look at it and they think, “But wait, it does not happen in this line.” It is like, “Well, we had to pick some way to lay it out, but recognizing that it could be a little bit more of a spiral, a back and forth, or a zigzag.” I think it is great the way you explain that.

Dr. Keith Sawyer: Right, and that is one of the reasons that I decided to create a card deck based on Zig Zag where I have one technique on each of the cards. Because there you can take the Zig Zag card deck and you can shuffle them and mix them up, whatever one you draw could come from any one of the eight. You do not have to read through a card deck in a linear way like you would a book.

Amy Climer: Yeah, that is awesome. The card deck is beautiful. I have a deck and I love it.

Dr. Keith Sawyer: Oh good, thank you. Yeah, they came out really well with my creative team putting it together - graphic designer, illustrator. It is a new thing for me. Most researchers and authors do not have card decks.

Amy Climer: No, it is true.

Dr. Keith Sawyer: Of course, you have your awesome card deck too, and you were part of my inspiration with your card deck.

Amy Climer: Awesome, well thank you. That is cool to hear. So the first step is Ask, and then what is next?

Learn

Dr. Keith Sawyer: The second step, I call Learn. I gave them catchy one syllable names. Learning is based on this body of research that creative people actually know a lot. They master their disciplines; in some cases they spend as many as ten years before they come up with a creative
breakthrough. So I am emphasizing the importance of actually mastering, putting in your dues. But in the body of research on how people learn effectively for creativity, there is a certain approach to learning you have to take, which is to focus on deeper understanding and not just memorizing information. So there is a certain kind of learning for deeper understanding that tends to support creativity.

Look
Then I move on to the third step, which I call Look. Which is based on a body of research into how being aware of your environment can spark new insights and new questions. Some people might be familiar with this research on mindfulness. That is part of the research I draw on in this third step, which is just being aware of what is going on around you that could surprise you and spark some sort of new connection in your mind.

Play
The fourth step, I call it Play. That refers to a body of research on what is sometimes called incubation. You might think of it as imagination. It is a moment when you take time off from the hard work of learning, trying to ask a good question, and you let your mind wander. There is research on mind wandering. There is research on incubation that suggest if you work hard all the time, you probably will not be maximally creative. You need to have those moments where you just take some time off, take a walk, do something really different like a hobby or exercise and just freeze your mind.

Amy Climer: Then what is next?

Think

Dr. Keith Sawyer: The fifth step, Think, is about thinking of as many ideas as possible. There is a big correlation in creativity between volume of ideas and coming up with a really good creative idea. Creativity researchers, we call it divergent thinking or fancy words like ideational fluency, but it all refers to the same thing of generating a lot of possibilities before you focus in on one idea. Some people, they have one idea and they just get attached to it right away. They spend all their energy focusing on the one idea where it might not be the right idea. It is better to generate a lot of ideas at the beginning. These exercises that I have in the book, are all designed to help you generate lots and lots of ideas. So that I call Think.
Fuse

Then the sixth step is called Fuse, and that is based on research that combining ideas is often associated with creativity. But what I called earlier distant combinations when I was talking about Strange Magazines, all of these techniques in the fuse section of the book are designed to help you make these distant connections, some of them you call analogies. It is a way of bringing together very different types of ideas and combining them in your mind. Again, like all eight techniques, each one of these is based in a body of psychological literature of what is going on in your mind when you are engaged in this process.

Choose

The seventh step, I call Choose. Sometimes creativity researchers refer to that as selection. In this linear stage model, you have a step of divergent thinking I have already referred to, where you generate lots and lots of ideas. Then that is followed by a step that is called selection, where you look at all your ideas and you pick one of them that you are going to focus on. Well that linearity - generate ideas, pick one, and then execute it - that really is not the way most creativity happens because that is just too linear.

So when I think about the seven step, or choosing good ideas, for me the research suggest it is not really about picking one idea and rejecting the other ones, it is about elaborating or revising or refining or improving the ideas. And that makes it more iterative. It makes it more like you have the opportunity for a given idea to evolve and emerge into something else. Or even prompt a new way of asking the question, taking you all the way back to the Ask, the first step.

Make

Then finally, the eighth step, I call Make. That is externalizing your ideas. Getting whatever you are thinking into some visible form in the world. Again, it is a body of research into how people learn and how people think. That if you have something external, some representation of what you are thinking, whether it is a sketch, whether it is something you made with clay or play dough or toothpicks, whatever it is, having it in some external form, then you have the opportunity to interact with it.

That interaction, very often, it leads to something surprising and new that you would not have thought of if you just kept everything inside your head. Just sitting there and thinking is not the optimal way to be creative. Creative people are just always making stuff. They are always putting it out there. They know it is not going to be great the first time, it is just really rough. But
it is putting out something that allows you to have that interaction and start the zigzagging process that ultimately results in something great.

Amy Climer: Makes me think of the value of prototyping. Instead of just talking about a concept, let’s get out some cardboard and duck tape and let’s put this together in a really rough way and see if it works.

Dr. Keith Sawyer: Exactly, yeah. It has become more common in the past few years with the prominence of what is sometimes called Design Thinking. With firms like IDEO that practice design, have sort of reinvented themselves. No longer is just doing industrial design, but being expert in the process. Which when IDEO talks about design thinking, they are really talking about the creative process. It really is a zigzagging process. People are right about design thinking. Very much iterative, very much constantly changing, very much prototyping and that is the research that I capture with Zig Zag.

Amy Climer: I love hearing these eight steps laid out. And like I said before, a lot of listeners of this podcast know the creative solving process, and I can see the Zig Zag model is basically making it a little clearer. Like in creative problem solving, you have Ideate, but you have broken that down a little bit more into Play, Think, Fuse, Choose, and I can see where that specificity for people can be helpful. Like “oh, okay we have done some thinking, now let’s do some fusing, now let’s do some choosing.” Where I think in some of the other models that is all implied, and you have laid that out a little bit more clearly.

Dr. Keith Sawyer: Yeah. So like I said I think there is a lot of overlap between all of these models of creativity. In fact, I am looking at the table right now on my book. So I have got CPS with six stages which line up with six of mine, and then I have got Bransford and Stein’s model which has a different five stages, but they also line up. Maybe it is just a matter of emphasize, different models emphasize different things. For me, like I said, it is almost not even important whether it is seven or eight or five. What is important for me is just the message that it is cyclical. It is zigzagging. It is not linear. Traditionally, a lot of these models by creativity researchers, they have been fairly linear. We identify the problem, we generate lots of possibilities, we pick the best one, then we go out there and execute it. I guess that is my main take home message, is it is not linear.

Amy Climer: I absolutely agree. I totally agree with you. Because like you said, you get to a certain point and you might have to go back to the beginning or okay, well let’s re-ask this question. Do we have it quite right? I love that you have emphasized that. I totally agree with
you. Can you talk a little bit about, now that we understand the model, how would a team use this model to be more creative together?

**Hot a Team Can Use the Zig Zag Model to Be Creative Together [25:44]**

**Dr. Keith Sawyer:** I think that a lot of what we see in group creativity, in a way it is similar to effective individual creativity. Here is why I am inspired by my own research on improvisational groups. So one thing that fascinates me about jazz improvisation, I am a jazz pianist, and what I find really fascinating is that it is unpredictable. That is the nature of improvisation. The other musicians you are playing with, you do not know what they are going to play - the drummer, the bass player - but what you play has to respond to what they are doing. You cannot plan ahead. So what it means is you do not even know what you are going to play.

It is that improvisational flow that honestly you could think of it as zigzagging and wandering because there is no linear path in jazz either, because no one knows exactly where it is going. And you do not start by defining a problem and then coming up with solutions and then selecting them. You are constantly cycling around it. You play one melodic idea, maybe you stop playing it for, I do not know, 30 seconds and then something else happens and it makes you remember that melodic idea so you might repeat it, but you repeat it in a slightly modified way. It is in that sense that it is cyclical and zigzagging. So I think that is an effective group creative process. All of my writings about group creativity are inspired by this notion of improvisation.

Then I get to individual creativity and I emphasize that it is improvisational in the sense that it is wandering, it is nonlinear and it is unpredictable. You do not know when that idea is going to happen. But what both share, group creativity and individual creativity, when you are engaged in a process that is based on research, it is deliberate. It is deliberate creativity and you can trust that process that if you are engaging in a research-based process, a good idea will emerge. You do not know what it is going to be and you do not know exactly when, but you trust that process because it consistently leads to good creative ideas.

**Amy Climer:** Yeah, and I think trusting that process and also trusting the people that you are working with. You are talking about a jazz improv group and I am thinking okay, as a piano player, you need to know how to play the piano. And the bass player has to know how to play the bass. So going back to step number two, that Learn, where in your learning process you are probably really focusing on deeply understanding jazz and riffs and chords and what scales go with other scales. So you have this deep understanding and then because you have that, it allows you to do so much more and be more spontaneous.
Dr. Keith Sawyer: Absolutely. There is certainly a large body of knowledge that I would say anyone needs to be creative in the real world to have impactful creativity. You are contributing to an ongoing dialogue, you are contributing to a discipline. I mean, yeah maybe you could be creative, I do not know, let’s say you are sitting on a lawn and you decide you are going to start tying blades of grass together, and maybe you make a really interesting knotted grass sculpture thing. Yeah, that is creative, but is that going to have an impact on the world? You do not have to study grass knot tying for ten years to be able to do that. But I think most of us, and most of the listeners, we want to be creative in what we are doing in a way that impacts our profession or our discipline or the people around us.

Amy Climer: I love the example you just brought up of grass, because I am in Wisconsin and I look outside and I never would have thought of that in this moment because the ground is covered in snow. You are not in a snowy place.

Dr. Keith Sawyer: That is right. I am just looking on my window right now and there is a manicured lawn across the street on my beautiful Carolina campus and yes, the grass is green.

The Weekly Challenge [29:55]

Amy Climer: I love it. Keith, one of the things I do in every episode is offer listeners a weekly challenge related to what we just talked about. So I am wondering if you have a challenge you can give listeners this week related to perhaps Zig Zag or anything we have talked about.

Dr. Keith Sawyer: Let’s see, a challenge you can pose for yourself, that might be for a problem you are stamped?

Amy Climer: Yeah, or basically we have talked about Zig Zag, we have talked about creativity research. What is one thing listeners can do this week to apply some of the things that you talked about and to start being more creative either individually or in a team?

Dr. Keith Sawyer: Oh gosh, so something you can do in just a week, well that is a lot of the techniques in my card deck. One thing I would say is to go on a trip somewhere. You might think of it as a field trip. Go to, I do not know, an art museum you have never been to or a science center, drive to a small town nearby on the weekend. And do it mindfully where you are not just going there to have lunch at a charming restaurant, although you might do that too, but you are looking for things that are different. Something that fits together in a way that you are not used to. Look carefully at what you see wherever you are going and think about how was it designed?
What were people thinking to make it this way? Why is it not like the way things I am used to are? So just get out of your everyday comfort zone.

Another, I guess related thing, is to go and meet people you would not normally meet. Again, when you are at an event, whether it is at work or whether it is at a reception or a conference, your natural instinct is to go out to people you have met before and interact with them. Next time, try to not avoid those people, but make a point of introducing yourself to someone you do not know who they are, or start a conversation with someone who is from a very different company or institution. I guess both of those ideas have that same characteristic of getting you outside of your everyday and exposing you to very different types of stimuli, very different types of information. A lot of the best creative ideas come from what I might associate with my third step of Look, of being aware of what is going on around you.

Amy Climer: Awesome. Basically go do something different this week that you do not typically do. I would also add to that challenge and tell people to go buy a deck of the Zig Zag Cards or the Zig Zag book and read more depth, get more information. And if you have the cards, I would assume that these two examples you just gave are probably in either the cards or the book.

Dr. Keith Sawyer: That is right. They are both in the card deck, which is available on Amazon. The book has over 100 techniques, my card deck has 54 cards if you include the two jokers, so about half of the techniques. Another thing I tell everyone to do, but it does not seem to be working, I think everyone should learn how to juggle. It is not that hard, you can learn it in a couple of weeks, and most people just do not know how to do it. That is on one of my creativity cards. It does not have to be juggling, but take up something where you can just dabble in it and still learn a little bit.

A lot of people tell me, “I would love to learn to play violin, or I would like to learn to speak Italian.” Look, that is going to take you five years and if you have got to spend five years, then you are just never going to get started, it is just too intimidating. But you pick something really small that you can learn in a few weeks or a month. Anyone can learn to juggle in a month. It does not have to be juggling though, just pick something. Pick anything. Just do something, learn something different.

Amy Climer: I love it. I actually tried to teach myself to juggle. This was probably about ten years ago. And at the time I worked at University of Wisconsin and so I took the bus. So I would go stand at the bus stop and practice juggling. I never got that good. I could do like five or six
rounds, or whatever we call it, like five or six times and then it would fall apart. I guess I should pick it up again and put a little more effort into it.

**Dr. Keith Sawyer:** Great example. Yes, you can use those little moments in your day like waiting for the bus. That is one thing I hope people will take my card deck around with them and keep it in their purse or their briefcase and just pull it out when you have a few minutes and draw a card and work on that activity.

**Amy Climer:** Yeah, it is great for a meeting. You have a lull or maybe a way to kick off a meeting with it too. So Keith, one of the things I will do is I will put all the references you mentioned in the shonotes for listeners to find and they can download them. But if people want to learn more about you and your work, where can they go?

**Dr. Keith Sawyer:** My website [keithsawyer.com](http://keithsawyer.com) has links to just about everything, including the deck, [ZZdeck.com](http://ZZdeck.com), and all the various books and the research I have done, my consulting, my keynotes. Yup, [keithsawyer.com](http://keithsawyer.com).

**Amy Climer:** Awesome. All right, I will also put that in the shonotes. Keith, thank you so much for being on The Deliberate Creative Podcast. I really appreciate it.

**Dr. Keith Sawyer:** Thank you. Is it my pleasure.

**Amy Climer:** That was so interesting. I love talking to Keith Sawyer. I always learn something new. Thank you Keith for being on The Deliberate Creative Podcast, I really appreciate it. If you enjoyed this episode, would you go over to [iTunes](https://itunes.apple.com) and would you write a review, let everybody know how much you love The Deliberate Creative Podcast and how much you love this episode? Keith would love it as well. And share this on Twitter, Facebook, wherever you share things, spread the love. I would love to get more listeners on The Deliberate Creative Podcast, and I know Keith would love to have more people learn about Zig Zag. Again you can go to the shonotes [climerconsulting.com/037](http://climerconsulting.com/037) and you can find the links to Keith Sawyer’s website, Zig Zag book, and the Zig Zag Cards.

Thank you everyone for listening today. I hope you enjoyed it. I will see you next week. Bye.