

## Dr James Kaufman

## The 4-C model of creativity

## Speakers:

Nick Skillicorn – Innovation and Creativity Expert and Host of Innovation & Creativity Summit

Dr James Kaufman

Expert Interview transcript:

**Nick Skillicorn**: Hello everyone and welcome to another expert interview at the innovation and creativity summit 2017, I am very happy to have Dr. James C. Kaufman with me today and Dr. Kaufman is a professor at the university of Connecticut and author of the book creativity 101, its lovely to have you with us today

James Kaufman: Thank you for having me

**Nick Skillicorn**: For people who aren't aware of you and the research that you do, can you give us a brief background into how you got into creativity research and what your specialty is

**James Kaufman**: Sure I was a creative writer, I double as an undergraduate writer in writing and psychology, creative writing and decided to fall back on psychology and get my PHD. I decided to study the thing that has really made the most interest to me, I didn't really study creative but I was lucky to work with a professor who was big in the area. Once I discovered it I went with it

**Nick Skillicorn**: So is this what you highlight in your book, creativity 101, is it more built to the academic side teaching student or is it something that a layman can understand as well

James Kaufman: There is a term that we use called educated layman, like somebody who is not a lay person at the level of necessarily in plain reading, I don't know if you would like to get a nice glass of wine, cheese and read creativity 101 and if you did it's also is not terrible jargon, I do not go into the boring stuff I try as much as I can to avoid it and I try using a lot of examples when I told in much successful humor and I took it very well.

**Nick Skillicorn**: I think the important thing about books like this is that they give a view to creativity which is actually the scientific evidence which is right there at the moment rather than people's idea on how creativity works from their own experience.

**James Kaufman**: Yes, creativity is kind of a weird field in that it cost everybody its creative. Everybody has ideas all the time, the same way everybody is writing about, people don't see that, surround people who have their own period of nuclear physics and you end up with a lot of I don't know the right word, how will people know what writing is not right and everybody can say that they have a degree or something, so there is a lot of very good stuff and a lot of less good stuff.



**Nick Skillicorn**: And that's one of the reason why I wanted to put together this summit with experts like yourself and some of the other doctors who are actually studying the subject on a day to day basics and rigorously reviewing the evidence which is put out there because a lot of the people don't actually realize how much study is going into the subject and how many journal articles are written about it every month

**James Kaufman**: It's a growing topic and it's been studied for over seventy years and there is somewhat between six to eight journals dedicated to just to creativity research. In general whenever somebody says that one particular thing works and they are going to debate over it, they tend to not work because we disagree and debate all the time. Most of the disagreement is stupid things, it's weird to have a totally consistence where everybody agrees this is the answer, just do this one thing

**Nick Skillicorn**: Lets dive a bit more into that, I am personally advice that there are a lot of bad advice out there which is from people who say this is how creativity worked for me or this is how creativity work because I have read it on an article somewhere or this is how Einstein versus how mastiff was creative and they essentially give this list of motivational quotes about how they can do it so can you. What is the mix out there that you see that people could statistically true or claim old fashioned which are not backed up that are actually disproving by the evidence

James Kaufman: Certainly, any research that is too good to be true is too good to be true. Anything worth doing is one thing, it's a cost problem so if you want to be creative you have to mess your desk. So there is a problem with that studies even regardless of that, even if people who are creative tend to have messy desks, messy desks don't make you creative. It's the whole thing about how there is more crime committed than ice cream sell more, ice cream sells more cause crime, it means when there is summer your windows are opened and people can burglarize you, you want to buy ice cream. So there is a lot of stuff like that a lot of stuff that is based on one small thing, I mean anything in general about the basic environment, it's very weird and things like that were accidentally shown to be true. So have a plant nearby, or have your walls colored green, take a jog or whatever, all the stuff, for every study that says yes there are another study that says no, and another study that says no no this is not it at all.

**Nick Skillicorn**: If you don't mind can I run you through a couple of the myths of creativity, I will just ask you to basically say there is a lot of evidence to support this, to support this but there is basically no evidence to support this. So the first one is quite a common one, people say if you want to have better ideas, get outside, get outside and away from your desk and essentially put your mind in a bit more of a relaxed mood.

**James Kaufman**: It probably won't hurt but there isn't any particular study, most of the outdoor type studies are based on a very small end and they involve things like going on a twenty minute hike not just walking around. That will be an example of a harmless, not a harmless thing and it probably won't hurt you and that mean hopefully you are not getting you know counting on that change of location to give a deep insight, if you are just trying it and hey if it works for you, you do it. I mean it's not like you are injecting yourself with something poisonous.

**Nick Skillicorn**: That might lead us into the next myth which is a lot of people see great creators like people suffering from different things like alcohol or drug dependency, do those substance help you get in a more creative mindset.



**James Kaufman**: No. times and research, a couple of studies or show connections most show no connections almost all the genius stuff is anecdotes and most importantly again it's that chicken an egg, do well known creative people end up going on drugs and alcohol because they are rich and are just dealing with a lot of pressure

Nick Skillicorn: Are there any ones successful enough for us to remember

**James Kaufman**: It's not like we don't make a list of people who didn't have drugs or alcohol problems and there is been a number of studies that shows people will think they are creative when they are on drugs but they are not.

**Nick Skillicorn**: What about listening to specific types of music, either classical music, rock music, techno music anything

James Kaufman: If that works for you sure,

Nick Skillicorn: How about taking a shower

James Kaufman: I mean I think that it is a good idea in general, the reason I think taking a shower has a slight advantage is that it is an automatic, it's something that you do automatically, kind of like driving, brushing your teeth, where you are doing this things you are not thinking about it and so it allows your brain to just process stuff and if you have been already thinking about a problem and you have done your research and you are doing you are thinking about it and you are stuck, just do anything that is a little bit of an automatic process and frankly that could include I guess taking a walk or a shower it wouldn't hurt and it could potentially help.

**Nick Skillicorn**: What about to get over writer's lock and to get over other types of blank page problems to just sit down and focus on the challenge and start doing something until you get into what some people call a flow state.

**James Kaufman**: It doesn't sound specifically harmful, it's one of those is chocolate the better or the best ice cream flavor if you like it sure. Is their mounds of heavens saying that is why you should do a course or not. It's also something that I would say is against it

**Nick Skillicorn**: And then finally one of the very much more scientific ones that came out in the last couple of years and it might be a bit technical for some people but stimulating certain parts of the brain from the outside something called transcranial direct current stimulation

James Kaufman: I wouldn't do it; I will leave it at that

**Nick Skillicorn**: So going back to your work specifically, what you are known for in the field is the study and analysis of creativity but one thing that you are most famous for is something called four c model of creativity, could you tell us what that is and what the four C's are.

**James Kaufman**: Sure there's always this idea that there is a big C and a little C. in other words there is genius creativity and more everyday creativity. Along with Ron, we expanded that a bit more, we put a level below little C which we called little C which is this personally meaningful creativity that make her well learning, it may occur as a sudden insight and it's something that other people might not really think its creative, but might not just be meaningful to you but it start of the creative process and that it something that it may never even be expressed but it may start you on that



journey to that would end up to where little C would be other people would be able to recognize that is creative. If mini C is the time when you have bought a new guitar or when you are just tuckering with it, you are trying to okay what if I play these notes, that's mini C but the time that you can now play this songs and have other people choose to listen to you that will be a little c. Pro C is a more expert creativity level where you put in hours and years of deliberate practice and efforts and trial and error and meant perhaps being mentored and you have reached perhaps the level of expertise, it could reach level of expertise, so it could be something that you are now doing professionally or that you are generally recognized as being successful and in general that's the level that is visible and solid and good to aspire to in terms of I can actually do it. This big C or the way that we view it creative genius is really very retrospective, so we can guess people who we think will remember a hundred years from now but there is also a lot of luck, a lot of think and chance and good people that makes it very hard to predict. so like if I were trying to encourage somebody, I will focus on pro C and not big C because if you focus too much on big C, I mean frankly most of us aren't, that doesn't mean what we are doing is not important or meaningful or a good thing for the world. Some of the goal for the 4C model was to represent people where big C little c means either a Genius or everything else. And then we are trying to flesh out everything else apart

**Nick Skillicorn**: And what does the research told us about how people can actually use this model, it sounds like it's a bit of a theoretical model but if people understand the difference between the four stages, are there things that they can do to enhance their overall creativity or is it an accumulation of lots of mini C's and little C's that will eventually lead to a big C.

James Kaufman: There is for the mini c, the big application is at its education, it would be how you would respond to or reward a student or it will be being able recognize at this low level that frankly a lot of people don't recognize. For a little c and pro C, a lot of the things that will help you move up or things like a creative metacognition for example which is having an understanding your own creativity and knowing what your strengths and weaknesses are and being able to kind of predict what will other people think of this. And you can grow that via feedback, via mean practice always but also part of it is recognizing what are good times to be creative and what are less good times to be creative or the situations that will help you be creative, that will help you pass along your creative ideas, what are situations where you know there will be times when your boss or your teacher is not receptive and maybe don't share your ideas then and this is something that I see as a large component to advancing

**Nick Skillicorn**: what do you say to people who don't have the self perception of creativity though and it seems one of the problem with today's society that so many people if you ask them are you creative or can you express with your creativity or can you come up with good ideas, they will be afraid and say no I am not.

James Kaufman: One has to work on the creative metacognition, want us to fight arts bias, people say creativity is in the art not true and to emphasize not just things like business and science but everyday life, cooking and things that people do. I am yet to meet somebody who says I am really not creative who wasn't created of something, it's one reason why the idea of creative domains is very important to me and to a lot of researchers because we over look so much and then if people get the message that the only way you are creative either as a genius or if you paint, write poetry or



as a singer or act then most people will say they are not creative and they are not going to keep trying

**Nick Skillicorn:** Is there any research which has happened to find out why people have this fiat feeling of un satisfactory self creativity or this feeling that they can't be creative. You mentioned art bias is there anything that researchers found out about how people grow up whether or not certain people are born not creative or whether or not everyone has the ability

James Kaufman: I didn't see anything that indicates that people are born non creative. I think a lot matters on how we define and interpret creativity as a society, so there's a different model, the proportional model that talks about different types of creative contributions for example one that is a replication and that's the person who is at the art museum drawing their own version of painting or who I mean these day creates their own punch line to a mean that's not creative genius but it is being creative. There is a model I am actually working on right now about just these hidden pockets of creativity, things that people over look and we label them or some of the person off no label is not creative mean fan fiction. A lot of things that they are part of a typical days work but you can still be creative doing it I mean if you think about ways of sorting the mail that is faster or easier or more fun then you are probably creative at it but people don't think of that as being creative. I think it's largely social construct as to I mean I am not saying rely creative genius you know I think that one of the big things immediate is that they will just accept the word creative genius and they are not the same thing. I mean I am not saying everybody can be Mozart not true but everybody can be creative at something, you can try composing music or achieve some level whether its personal satisfaction, I think some level of accomplishment with a domain.

**Nick Skillicorn:** What do you mean by domain because this is something I have heard from some of the other speakers and I know that you have done quite some workings on it, how does the domain something affect someone's ability to generate ideas.

James Kaufman: According to another theory, there are some if you want to be creative, there are this basic initial requirements and this is just like having another basic level of motivation not a typed up motivation but just to get up the couch, a very basic level of intelligence I mean again not particularly high in an environment that allows it, this is a work with john bear and then we can kind of argue for this pyramid where you have what we call general thematic areas of this call them as broad fields but that's like a visual art or a written art or not an area but creative writing or business or social sciences, hard sciences, these are very large areas then under them will be what we call domains so psychology, anthropology, sociology orchard science, chemistry, physics, even under there are what we will call micro domains because these things aren't that simple, the same way that creative writing be writing poetry or writing short stories or writing creative nonfiction, even under poetry you will have sonnets and all sorts of smaller distinctions and they are different patterns associated, when I say patterns I men different cognitive strengths, different personality traits, different interests, different almost any attribute that you could imagine, these patterns associated with being creative whether you are talking underground at the domain or t the micro domain there will be a lot less difference at micro domains for example you know creative writers and journalists they are pretty similar but there are some differences whereas they say creative writers and engineers there might be a much larger difference



**Nick Skillicorn**: I don't mean to over simplify it but I am just trying to get my head around it as I am sure a lot of the viewers and listeners are, is this essentially saying that in order to be creative in a specific field you need to have built up a certain level of either experience or skill or knowledge about the things in that field like you can't write a good French poem if you don't speak French

James Kaufman: Absolutely that as well as the fact that certain people will be more suited for different things which again some of that's kind of like well of course but we don't really because so much work considers creativity to be more of a general thing, you are creative or you are not creative instead of are you a creative poet, are you a creative mathematician, when you know a lot about what's associated with general creativity but most people aren't creative in a general domain. Most people want to actually do something they do; most people don't say I want to be creative at anything. You know they will I want to be a painter, I want to be a scientist, I want to be an architect and that being creative in different areas you know for example let's say within psychology, a clinical psychologist and a talkative psychologist , if we think about okay emotional intelligence, somebody who is better at regulating their emotions understanding other people's emotion, somebody who is higher than that probably better suited to clinical than cognitive not only but that's kind of a little perhaps on that side somebody who is very high on analytical abilities, perhaps more cognitive and obviously I am generalizing but you know if you think about conscience or are you an extrovert or an introvert, are you really good at visual spatial authority or not are you interested in investigating anything. There is all this stuff that if you consider who you are, what you are interested in and what you are good at, that can help you lead towards maximizing creativity, we just don't have all the research done yet that would be a nice idea

**Nick Skillicorn**: In your view talking about the research again, what are the couple of highlights as far as either new studies or statistic or evidence which have come out let's say in the last ten years that you think have helped really pushed the field forward.

James Kaufman: A lot of work and this is a methodology, as some point the consensual assessment technique where it is a technique created by Theresa Mable a lot of us has used it which basically you have people do creative product and then qualified experts can evaluate it and the thing that's counter intuitive is that people agree you think everybody has their opinion on what is creative, what is not creative, we agree a lot more than you think and there is all the studies that have kind of pin pointed, so for example you know in an ideal world you want experts for a lot of things that is not possible and that you try to get complete novices some random under grads, they are not going to get it but if you get people with just some level of expertise, so let's that you are a teacher and you want to try to help give feedbacks to your students at a creative test and you are worried that your judgment isn't enough, I mean English teachers show pretty solid agreement with actual published authors graduate student in English literature or in creativity for that matter, it could be a matter of , let's say you are had three English teachers who decided to go for the big projects or students do they all go over them sign creativity, they will generally agree on a very high level and it all of a sudden goes from one person's feed back to actually this reflection this is a reasonable reflection of whether or not the level of creativity in this poem or a final project and a way of giving a very high level of feed back to students to help them grow and be more creative.

**Nick Skillicorn:** They not necessarily agree on the quality of the content but are you just saying that people in some domain knowledge who would agree on creative some contents.



James Kaufman: Actually they will agree more in the quality than you think will be specific pieces they will still disagree with them but if you are taking 40 to 50 then if you look at it at that level., they will come to a very high level agreement and it get you so you could pick just one particular one and maybe the ratings will be over the map usually though they will tend to converge and look at it as a larger unit. There's been a lot of very recent stuff looking at things like being creative with video games or just creativity in the digital world I don't think we even know that yet but we are finally starting. One of the most frustrating is that because creativity is one of the things that people don't necessarily assume that you need an expert which is understandable if frustrating, you have all these studies that have all this resources but they haven't consulted anybody in creativity so they used this incredibly flawed or downright stupid methods. So there was a recent study on creativity mental illness that you know clearly was a lot of money to run all these tests for these people and then measure e a use of creativity or and so the results to me were weird, they don't mean anything. It's a certain I would love to see more disciplinary work the same way I like to see cross cultural work but we are not rewarded for it, you know we are told to keep our silos inter disciplinary work tends to have a harder time being published and so everybody says they want it nobody wants to do it I mean most interdisciplinary conferences I have gone to have been people saying their thing, nobody understanding it, no attempted integration then you go home but with a nice location.

**Nick Skillicorn**: So we are coming up to the end of this session, but what I like to ask all the expert is that if you have got one tip, one thing you have learnt that really works that you could share with our viewers and listeners on how they can improve their creativity, what would it be.

James Kaufman: mine will be part is that all that stuff that seems too easy to be true is easy to be true and that inspirations is over rated it requires this boring domain knowledge and revision type stuff. So make sure that what you are doing is something you love because otherwise it's going to not be fun but I think that if you do what you love and you are enjoying it, you can keep plugging along for the unpleasant paths

**Nick Skillicorn**: Perfect and we are going to get links on screen to all of your resources and where are those links going to take people

**James Kaufman**: they will be to my personal home page, my department home page and probably what I update the most is my professional faceboook page and then I am also on twitter

**Nick Skillicorn**: Perfect, Dr Kaufman it's been wonderful having you here and I look forward to speaking with you again soon.

James Kaufman: Sounds good, Thank you for having me.