

Theoretically Speaking: An Interview with Mihaly Csikszentmihalyi on Flow Theory Development and Its Usefulness in Addressing Contemporary Challenges in Education

Karen Stansberry Beard

Published online: 5 November 2014
© Springer Science+Business Media New York 2014

This article is based on an interview with Mihaly Csikszentmihalyi. Csikszentmihalyi is the founding father of positive psychology and the creator of flow theory, which he has studied for over four decades. Flow was first defined as a holistic sensation that people have when they act with total involvement (Csikszentmihalyi 1975). It is a very positive psychological state that typically occurs when a person perceives a balance between the challenges associated with a situation and their ability to meet the demands of the challenge and accomplish. The nine elements of flow include *challenge-skill balance*, *action-awareness merging*, *clear goals*, *unambiguous feedback*, *concentration on the task at hand*, *sense of control*, *loss of self-consciousness*, *transformation of time*, and *an autotelic experience*.

Flow is informative and instructive and thus a useful theory for educators. Seligman and Csikszentmihalyi (2000) stated, “families, schools, religious communities, and corporations, need to develop communities that foster these strengths” (p. 8). Understanding flow theory development and its usefulness in practice was the primary motivation to pursue this interview.¹ In response to the critical need to advance equity and excellence in education and improve life quality of marginalized populations rigorous exploration of what works is required, particularly as educators reconsider pedagogy, access, and creating climates conducive for teacher and student engagement. Csikszentmihalyi (1990) claimed that, “wherever there is a need for the improvement of life, the flow theory can point the way” (p. 5). Exploring flow theory in an attempt to unlock ways in which flow can be made more available to students was also motivation for this interview. As such, this interview explored (1) the evolution of flow theory, (2) the relationship between flow theory and educational practice, and (3) the usefulness of flow in practice toward addressing contemporary challenges in education.

¹This interview (conducted Spring of 2011) is submitted now in recognition of Csikszentmihalyi’s 80th birthday (September 28, 2014) celebration held September 6–7, 2014 at the inaugural WPPA Conference at Claremont Graduate University.

K. S. Beard (✉)

Educational Administration and Policy in the Department of Educational Studies within the College of Education and Human Ecology, The Ohio State University, 315 B Ramseyer Hall, 29 W. Woodruff Ave., Columbus, OH 43210, USA
e-mail: beard.46@osu.edu

The Educational Challenge

Linda Darling-Hammond (2010) identified two achievement gaps of greatest concern to American educators. The first is the gap between white and more affluent students in the USA and students of color and those in poverty. The second is between US students and those in other high-achieving nations that have made greater and more equitable investments in education over the last 30 years. Reporting from her findings, the USA ranked 21st out of the top 30 nations in Science and 25th out of the top thirty in Math, while in the lead (percentage) of children in poverty and 1st in the world in incarceration. The data illuminated the challenges and the difficulty of our times—once a notably strong, vigorous, and vital education system now seemingly a system in peril.

The evidence of “what is” is disconcerting, but it also provides opportunities to consider positive changes toward “what could be.” This interview focused on the practical application of flow theory as educators work toward improving student achievement, promoting conditions conducive for learning, and (ultimately) enhancing quality of life opportunities for underrepresented students. Education provides an appropriate mechanism through which life quality can be improved. Thus, interrogating complexities that hinder student engagement is as critical as the exploration of what works when tasked with increasing student engagement. Negotiating the interstices that emerge from the dualism of theory and practice creates an interesting and sometime sacred space for problem exploration and problem solving. Theory informing practice in a positive and practical manner is of great value to educators.

The Interview

In the Beginning

KB: How did you get started working with the flow construct?

MC: Essentially, when I became interested in psychology I had a very broad interest in how humans developed and in how people could craft a life worth living for themselves. Partly, because in WWII when so many bad things that happened. We lost everything, one brother was killed, and another was taken prisoner to Russia. By the time I was 10 years old I was convinced that grown-ups didn't know how to live a good life. So I read books—on philosophy and religion. All of them had something interesting to contribute, and I enjoyed that, but I still felt I needed something more systematic and more applicable to everyday life, so I became interested in psychology.

I came to the United States at the age of 22. I had not finished Middle school or High school. I was working most of the time doing different jobs in Italy in order to survive but I was always convinced that I really wanted to understand human behavior, human life. I came here and passed my qualification exams, even though I hadn't finished, hadn't even started High School. I got into college and studied Psychology. I was very disappointed because at that point in time, Psychology assumed that human beings only acted for the sake of reinforcements, which were coming from outside, and the model for human behavior was based on rats running in a maze.

It's true that if you live in a maze and you have nothing else to do, food is the only thing that varies, that changes, that is interesting in any way. So rats learn to respond to food in a maze. But, I thought, humans are in a different situation. We live in an open environment surrounded by many interesting opportunities. I decided to study human behavior that

was as different from that of rates in a maze as I could find. I did my dissertation on artists, on creativity and art.

I followed artists working in their studios and tried to understand how they got their ideas for doing art. I was most interested in the fact that these people would spend weeks and weeks working on a painting and they would forget everything while they were working. Then they'd finish a work of art, and instead of enjoying it, which is what you would expect from the theories of psychology...that you work in order to get something rewarding at the end. After 10 minutes or so they would put it against the wall and start a new painting. They weren't really interested in the finished painting. So, I wondered, that doesn't fit the theories of psychology, which say that people strive in order to achieve something. Here, people strove more than anybody I knew who worked in a regular occupation. They were completely immersed for hours. But when they finished, the object, the outcome was not important. Apparently, what was important was the striving, the process.

The Evolution of Flow Theory

At that point I was already teaching in college. I asked, okay, so what else in life has that same characteristic? Immediately I thought about play. Playing is not for the sake of getting something, but it is for the process and enjoyment. I started looking at and studying adults who spent a lot of time doing things that didn't bring them any kind of external reward: chess players, mountain climbers, long distance swimmers, etc. And what was so remarkable after a while was how similarly people who were doing these different things described why they were doing it. The feeling of how it felt to do chess or music or mountain climbing sounded very similar. It was not like each game or each activity produced a different feeling that's rewarding. They all produced the same kind of rewarding experience.

KB: Enjoyment?

MC: An experience of enjoyment.

I wondered, what does this feeling consist of? So I started analyzing the interviews, then after that, developed questionnaires and surveys based on them. We found that people recognized the same quality in the experience whether they were in Japan, Europe, or South America, or Africa—the same things resonated with them, even though they may be doing completely different things. When they really enjoyed what they were doing, their experiences were the same. Pretty soon, colleagues from abroad noticed and said, oh okay, let's study this. It was interesting. It was new. It contradicted the major theories of psychology and motivation.

That was the first phase. The second phase, was to see if this feeling was available to people when they work? Or when they study? So instead of studying games and art, which are in a way constructed to give this experience, what about people when they enjoy their work, when they enjoy study, when they enjoy company. Are the same dimensions present? And that turned out to be the case, regardless of gender, age, or ethnic background people seemed to experience the same kind of feeling. That's when it became really interesting. It switched from just understanding and describing. The question then became, how can you make it happen more often in everyday life?

So I targeted especially two aspects of life: work and school, because we spend so much time there, and most of the time, people are not really happy to do these things and yet it is possible to experience flow working and studying. So, I figured well if you can make school or work more like art or play, we would all be much better off.

KB: In your book, *Good Work* (2001) on page 5, you and your colleagues you say that flow occurrences happen more at work, and in school?

MC: Well, not so much in school, in work, yes, at work, yes!

KB: Explain that to me, because it seems to contradict where we started with play and doing artistic things we enjoy and now, we're finding it (in actual occurrences) happening more at work.

MC: Yeah, because you see, you find it more often partly because people spend more time at work. But, also, because work is really structured much more like a game than everyday life is. At work, you have clear goals, immediate feedback, you can use your skills and if the work is at all reasonable, you can experience flow. Whereas at home... people want to get home as soon as possible from work, they don't want to stay on the job, they want to go home. Then they get home and wonder, "what am I doing here."

KB: They become passive?

MC: They are bored and passive. Unfortunately at home most people have no expectations, no goals, or challenges that use any skill, and so they watch TV. If you like to cook, that could lead to a flow experience. If you like teaching your kids, then that can lead to flow. But when we did a study of average American families during the week, we found that they hit bottom Sunday, between breakfast and 2:00 in the afternoon. That was because it is the least scripted part of the week, and there was nothing waiting to be done. After 2:00, after they read the newspaper or so, they may decide to visit the in laws, play a game of touch football, or whatever. Then they get back into some sort of script. Unfortunately, a lot people are unable to turn free time into something enjoyable.

KB: That's interesting. You stated in a previous interview that there are two dimensions of complexity you always find in evolution. They are differentiation and integration. You stated:

We want a future, where people are free to develop whatever unique blueprints they carry in their genes and we want the freedom to blossom as much as possible, but at the same time, we want each person to see that they are part of something much greater. Integration starts with feeling you belong to a family, an ethnic group, a church and a nation.

Thinking about differentiation and integration, can you tell me a little bit more about that, or how it would be applicable to the management of schools?

MC: Yeah, the best example I can think of is a school in Indianapolis, where every child at the beginning of the school year is interviewed on video camera about what they really want to learn, why they want to learn anything for a grade, and what did they expect. After a while, the kids give some colorful and idiosyncratic story as to what he or she wants to learn and why. That becomes part of the student's record. During the year you add to that tape every time a child does something, a project that is related to their personal goal—because they are expected to develop the interest they have and the reason they want to learn. They give them appropriate stimulation and appropriate challenges. At the end of eight years, the kids have a library of videos where he could see how he progressed what his interests were, and how he built on them over time. This would be the differentiation part of the school.

The school also integrated the diversity of the children's goals. In addition to all of these individual themes that the children have, they have a common theme for the whole school, from Kindergarten to the 12th grade. The theme could be: Working in harmony. In which case, in mathematics you learn the harmony of numbers, and the beauty of being able to manipulate

numbers so they always end up in the right way in the equations, and in music you learn the harmony of sounds. In social studies you learn about the history of wars and peace, especially peace and how we learn to work together in Sociology. That is an example that would avoid the kind of fragmentation of knowledge that we have now.

It gives students the realization that knowledge is essentially about the same world in which we live, the same universe. It's just different perspectives. At the same time it maintains the rigor of individual disciplines going into depth in a particular area, but it is combined. It's like an orchestra. An orchestra is good, when each instrument plays their own role, that's differentiation. The important thing is that they all start and play together in harmony. That's integration.

This is true in families. We found that families are much more effective when they respect and encourage the individual differences of their children, but at the same time, they expect and provide common goals and common support when they are together. In every aspect of life, this differentiation and integration leads to higher complexity.

KB: You speak about flow, and optimism and hope and flourishing, and it's relatedness to positive psychology. Can you tell me how flow is related to optimism, hope and flourishing and ultimately positive psychology?

MC: Well, positive psychology is something I started with Marty Seligman 16 years ago. From the beginning we thought positive psychology dealt with: on the one hand, positive traits of people and how to develop character. Positive affect is one, and then *engagement* with the world is the other. How you find positive ways to relate to your environment and the opportunities of life? And then the third one was the meaning you give to your experiences. These three parts are essentially what positive psychology is. The middle part, engagement is essentially flow. So flow would be one of the three major components of positive psychologist.

KB: Are engagement and flow synonymous?

MC: I think that engagement is a broader concept, but the best manifestation of it is perhaps is flow.

The Relationship Between Flow, Theory Development, and Educational Practice

KB: I'd like to talk more about the research and how to best consider flow in education and educational administration. In my dissertation, I compared two different models of flow. One was the Marsh and Jackson (2000) Model, which was based on your definition and understanding of flow, using all nine components present as the flow experience. The other was Quinn (2005) conception of flow, also based on your components. He believed however, flow encompassed four antecedents and four consequences with the definition of flow being the one—*merging application and awareness*.

MC: There is no way to decide this except to try. You know you try one way; you try another, and see which one works best because there's no outside measure of authority that can tell you which is it definitively. For instance we changed our theories as a result of our research. The original model of flow was that it happens in the diagonal between challenges and skills.

KB: The flow channel?

MC: Yes. The channel. Well, that is true in some respects, but when you look at people in everyday life, you find the flow doesn't occur at the lower end of that diagonal, only further up, roughly *above* the average challenge and average skill for that person. We

tried and tried and we were convinced by the data that actually the tail end of the diagonal, the lower end is best described as apathy.

In other words people are not anxious, they're not relaxed, they're just kind of non-functioning, couch potatoes. So that change was not the result of theory, it was the result of theory confronting practice and being informed by it. So this notion of what really is necessary to have flow...I think you can work with either one of those two and just see which one seems to be more supported by the data. In my mind, they're not that different. I think all nine components are important. It's true that the first three or four may be conditions. I believe clear goals and immediate feedback, balance of challenge and skill, can really be considered conditions more than parts of the experience. I agree that, *deep concentration*, which becomes *action and awareness merging*, those two, actually *deep concentration* is the origin of all the others. It's the origin of *becoming one with the activity*. It's the origin of *feeling in control*. It's the origin of *forgetting yourself*. It's the origin of *forgetting time*. All of these depend on the fact that you are *focused* on what you're doing. I think that is the essential one from which all the others come. So if I were to measure just one, I would measure that. *Concentration* that leads to a feeling of spontaneity, effortless behavior—the kind you don't have to think about it, you're just doing it.

KB: I interviewed elementary school teachers in rural, urban and suburban districts in Ohio. The Jackson Model held up slightly better for elementary school teachers than the Quinn Model. Which led me to believe that at least most of the components need to be present in some way, or become part of the experience in some way as teachers find enjoyment in their work.

MC: Yeah, I think it's good to go with more because for some people, even though they experience it, they don't know that they are experiencing it. For instance *forgetting yourself* creates a lot of problems because people are not sure what is meant by it. People think "if I'm not aware of myself I must be pathological."

KB: That's the one component as I describe flow research that people ask how I accurately measure it. In Experience Sampling Method (ESM), participants were buzzed or asked if they were experiencing flow during an activity, people say it is such an elusive state that when they become aware, they would come out of flow.

MC: That is unfortunately true, but our instructions are: "at the moment just before the signal, how did you feel?" They can vividly remember, because that was only half a minute to ten seconds before. If we ask the same question at the end of the day so many other things color their memories. I still think that while the buzzing is disruptive in some ways, it's much better than any other measure.

KB: What are your thoughts about using questionnaires to tap into the flow experience?

MC: There have been surveys made by Gallup and by the Allensbach Institute in Germany where they surveyed 17,000 people with just one question and the question is usually something like: "Have you ever been involved in something that attracts you so deeply that you don't notice time passing?" It was just one item like that. They find some good stuff that way too. I don't like to do that myself, but it could be quite useful. If then asked how often they would feel it—so you learn for instance, West German's are much more likely to be in flow than East Germans who have been under communist rule for 50 years. It's just harder for them to have flow experiences. I'm not as interested in those questions although those are legitimate questions. I've always thought the method should be adequate and relevant to the questions asked.

For a long time I wasn't interested in using physiological measures because I thought it's hard enough to understand what people say. Knowing that something happens in your brain that's not going to help you really understand much. Whereas with the good old self-reports I think we have a good handle on the actual experience.

KB: How has flow been measured?

MC: Well first I started with simple interviews. I interviewed chess players, rock climbers, long distance swimmers, musician, painters and the question was simply, could you tell me what you feel like when what you are doing goes well? Always the question is around when this thing is going well, how do you feel? Those interviews were very rich, and interesting, and they were replicated in Japan, China, India and three or four European countries. Italy first, then Germany, and France and the answers essentially fell into the categories mentioned without any prompting. The categories came later after analyzing the interviews. So that was first, interviews.

Once we had the categories we could write questions for questionnaires or surveys, which tapped into the elements. What do you feel? Were the steps clear? Were goals clear? Did the feedback let you know how well you were doing? We tried to use as simple language as possible. There were interviews, questionnaires, surveys and then the big change in 1972. That was the beginning of the use of these electronic pagers in The Experience Sampling Method. That allowed us to really understand in more detail how things are.

Studies in schools...we found, when students wear these gadgets there are enormous differences between classes, even if you look at 10 different schools. For instance, history class is usually the bottom of feeling involved, excited and interested. Whereas Art is on top and computer sciences are on top. Then the other subjects just fall in between. The same thing is true for pedagogy. Group work is always top. Students work in a group on a problem, are beeped, and fill out the questionnaire. They don't think "I'm doing the group work." They just fill it out like they have filled out all of the previous ones. But when we analyze the data, we know they were in group-work because they write down where they are, and what they are doing. When we aggregate all the responses from students, they are so much more in flow, than when they are lectured, which is about the lowest, or anything else, including videos. During video presentations there is almost no flow there. We found that there's more flow taking tests or exams.

That method has been very useful and now I think after ESM they are beginning to work more with understanding physiological changes. I mentioned this morning about Hitachi this Japanese firm that is making little metal tags that you wear in a necklace. It takes your heart beat, blood pressure, movement—how much you move, trying to see whether there's a particular signature of physiological change detectable. In experimental situations some of our colleagues have shown that when you're in flow many changes happen. For instance, if you ask professional piano players to play their favorite pieces, and the pieces that they don't like to play; during this type of performance they measure all their vital signs and find that by the signs that breathing becomes deeper and more regular in flow. Heartbeat slows down because there are these muscles called the *zygomaticus major muscles*, used for smiling. It pulls up the corner of your smile. Those muscles are active even though you don't see them. They are working under your skin without you knowing it. You can't tell from looking at them. They found that the *zygomaticus major* is highly active when you're playing something you like. So these are some of the ways physiological technology is beginning to illuminate flow. I still think I would talk to people and find out what they've experienced because that's the bottom line, the experience.

Toward an Understanding of the Usefulness of Flow Theory in Educational Administration and in Addressing Contemporary Educational Challenges

KB: I've recently started thinking about flow and positive working conditions. I am studying to see if flow is available to principals and superintendents. I got the idea after a recent interview with a superintendent who was successful in closing an achievement gap in her district. I wanted to find out how she did it. As she talked, she described all of the components of flow, unprovoked. That's what brought me back to flow theory because it is useful and meaningful for good work in complex situations. In your book *Good Works*, Gardner, you and Damon (2001) noted that you were "convinced that the challenge of 'good work' confronts every professional today" (p. ix). Flow seems to bring desirable results when there is a specific goal in mind and work intentionally toward that goal. This woman literally described every component of flow, including *time transformation*. She said, "I had to rethink, reconfigure time. It couldn't be a constant anymore. I needed to make it a variable." When she tapped into time, I knew flow was useful and instructive even in the management of large districts and schools.

MC: I think a good worker in every field enjoys what they do otherwise they stop at the boundaries of what needs to be done. They do only what's needed. But if you are actually doing something good beyond normal expectations, it must be because they've experienced flow. A principal may tell you it's a good day when nobody's bothering me, when there aren't many fires to put out. They might say they had time to prepare the budget.

Hopefully, they tell you about some enjoyment, but if all they can think of are external reasons or obligations because they're overwhelmed by the job, then you may not get to the enjoyment. You will only get to survival mode. So you have to go one level below survival to ask "out of all these things, what do you enjoy doing." If they say, well really all I enjoy is peace and quiet, you find that when people are in too much in anxiety, their preferred mode is to be bored when they don't have to do anything, instead of finding a mid-point. Hopefully a principal will have things to tell you that they enjoy doing. Then when we ask why they enjoy doing it, we get to understand how they make meaning.

KB: You said earlier, the more complex a situation, the more people want to do good work.

MC: Yeah, as long as it is complex. But, if it gets to be complicated and a person doesn't know what to do, then it's not good. Complex, yes, where you can integrate yourself in the activity *and* are free to act out your skills.

KB: Educators are facing many complex situations in very challenging times. I believe as you've said, that whenever the goal is to improve the quality of life, flow theory can point the way. I've shared Linda Darling-Hammond's (2010) findings with you. What do you think about the usefulness of flow theory as educators consider these statistics and improving life quality?

MC: Well I think, some of these disparities are not related to flow, but others are. Incarceration is partly due to the fact that young men don't have interesting positive challenges, or opportunities in their lives, so they end up trying to make flow happen by going beyond the boundaries of the law and are incarcerated for it.

The investment in education is not just monetary, because in terms of money, we are not doing that much worse per capita, in fact, probably more. But the fact is that the schools in the countries that are successful in those ranking of achievements, like Finland and Singapore, the schools are much more integrated with the community, and with the family. The students feel

that they are not just being sent to an anonymous, faceless institution where they're lost among other kids, but it's part of the extension of their family. There are problems with some of the highly achieving countries, as you know. Like Japan and South Korea where kids commit suicide if they fail because there is so much pressure and expectation that they perform. Parents feel a lot of pressure and the students are not often convinced, that doing well in school will make them personally happier. Those kinds of problems are huge. They are only partly with the schools, but really it's a societal issue having to do with expectations and trying to get kids pushed through the system as cheaply as possible. Not cheaply so much in financial terms, but in terms of the investment of the most important resource, which is *attention* on the part of the parents. If that's not there, you can pay a lot of money for a school and it won't make any difference.

We just did a study of colleges recently, where the educators nominate the most successful colleges in the county, and then we chose 10 of them to study in depth. One was Princeton, an east coast ivy league, which was expected. The other was Xavier College in New Orleans, which is an all-Black college. The endowment of Princeton was four hundred times that of Xavier, four hundred times! The student experience though, was much better at Xavier than at Princeton. Essentially the kids at Princeton felt that they got a good education from a great institution. They didn't feel that it made them feel very good about themselves, or about life in general. They weren't particularly happy about themselves. At Xavier the kids were enthusiastic, they felt that they got a good education. They knew they didn't have the imprimatur of an Ivy League, but otherwise they were very excited and happy with their lives.

KB: You stated that having become aware of ourselves, we have to decide for ourselves to what end this information should be directed, and where it should be going. When you tell me about these two different schools and the way that we're schooling versus other nations, and about investing psychological capital and attention. Tell me about living the good life.

MC: Well I think there are many ways to summarize it. Maslow's Hierarchy of Needs says that you have to have the basics, to survive. You have to have security, and you have to have a feeling of belonging, and some self-esteem, etc. Those often are lacking—not even the base is there. Too many people stop half way up and say “okay I have a good life,” meaning that they have enough to get by. They have a new car and a big screen TV, and so they can slow down. I made it. That's it. I think that's very sad.

Life is a constant supply of mysterious, interesting, intriguing, advanced ideas. The problem is there is almost too much of that. But you have to begin to focus on some reasonable things that you are interested in. It could be plants—one of my favorite people I interviewed for a book on creativity was E. O. Wilson, this biologist who at the age of 65 was starting a seven volume series on ants. He had 4,000 drawings of different species of ants, which he made himself, each one with a big illustration of the ant, and then a long history of how these ants live. He started his studies when he was six years old on a Georgia farm. There were red ants, fire ants coming through and eating stuff. He got so fascinated by these fire ants that all his life he has worked and become the world expert on all kinds of ants. No question. There's nobody like Wilson about ants. But other people are interested in the galaxies, in the oceans, in plants, in people. There's so much and if you think that you have reached the peak of existence just because you're comfortable, then you sadly undervalued what life could be like.

KB: I agree! We are facing complexities such as: high stakes testing, curriculum access, college preparedness; tensions over student access to high-level classes and tracking. In education we're trying to bring more children to the table of opportunity, and true higher

education opportunities with the expectation, it should improve life quality opportunities. There is resistance in that work.

MC: By? From?

KB: Well that's a very good question. I think some of it comes from teachers challenged to do things differently, some of it comes from administrators challenged to organize school experiences differently, and some of it could be a supply and demand issue. But, in school after school, the children selected to participate in high track classes typically do not represent the children from a broad spectrum of children that we serve. In other words, our minority students are consistently left out of high track curriculum and classes.

MC: That's quite easy to see that it's wrong, if the kid is able and willing. That's obviously not a fair way of educating.

KB: I started thinking about engagement and the very first element is your challenge skill, balanced component. When children don't have an opportunity to find flow because they are tracked away from high challenges, challenges slightly above their skill, which make their work more interesting and capture their concentration. I wonder if there is something instructive here to help educators reimagine and open up opportunities through access.

MC: Well, yeah. I mean the answer is not easy. If there were enough good teachers to teach it, they should be open to everyone. If there aren't then they have to develop a system of deciding who would most benefit from those practices. Probably those who benefit are those who are interested and able to get into a high level course and that is often the way. The issue is not so much the lack of potential or ability to learn calculus—for instance, but it's often that in your family and your experience you didn't feel any reason or pressure to learn calculus. It's not something that you see is worth exerting yourself too much to do. That is often the case. I'm not saying it's always the case. In many cases the problem is that the environment can just get screwed up, it is not ready to recognize and support high talent, and then there is this general feeling as the kid grows up that “well, I'll just get by and get my degree and go make some money.” So it's hard very often to get—I mean even in college, even in med school—young people without a background of academic culture in their family really interested in studying for its own sake, you know? They may do it because it's one thing that leads to a better job. This is something that has to start quite early. There has to be the recognition of talent, early if possible. In some cases, it's easy to do, in others it's not. In music for instance, you can tell when a child is talented quite early. In math less so, in science even less so, and literature even less so.

Education really needs to take the whole child in to consideration, not just the cognitive side. In Montessori schools, from day one children are held responsible for the wellbeing of their classmates. That may not get them good SAT or ACT scores, but for a good life it's probably more important.

KB: I thank you for what your work has done for me, and my work. Is there anything I've neglected to ask, that you would advise me or any other educational administration researcher or practitioner for that matter?

MC: Well, I just think that you need perseverance and dedication, and knowing that whatever little step forward you make it's going to be a step forward that will help others.

Conclusion

Csikszentmihalyi offered valuable insight in flow theory development and its usefulness in education. As educators work toward increasing student engagement, raising achievement, restoring creativity, and maximizing learning opportunities, flow theory is a beneficial informant. Educators facing complex situations in challenging times should embrace what 40 years of research on flow theory and its independent elements offer, particularly as educational administrators and teachers pursue optimal teaching and learning conditions where deep concentration is essential.

Understanding the importance of the work needed to positively impact the state of affairs as described by Darling-Hammond (2010), flow theory is instructive. The breadth and depth of this scholar's knowledge was remarkable. Equal was his ability to draw on application, exemplifying each point with clarity, demonstrative of his sophistication. He spoke in this interview to researchers, teachers, educational administrators, and to the contemporary challenges, the work in front of all. His precise discrimination between complexity and complication, differentiation and integration, the complimentary nature of qualitative and quantitative, and theory and practice, as well as the specific nature of *loss of self-consciousness*, is particularly useful in the continuance of flow exploration and the "constant supply of interesting and intriguing advanced ideas."

Ordering engagement through high challenge and high skill is informative and worthy of continued exploration as educators consider curriculum access and the practice of tracking. Csikszentmihalyi's sophistication in response contributes to positive psychology, teaching and learning, educational administration, educational policy, research theory development, and the creation of climates ready to recognize and nurture talent. Csikszentmihalyi's insights are especially useful to educators and educational administrators willing to address Darling-Hammond's (2010) findings, seek to do good work in difficult times, and strive to provide all students with an opportunity for a good life—a life worth living. People who do good work are concerned to act in a responsible fashion with respect toward their personal goals; their family, friends, peers and colleagues; their mission or sense of calling; the institutions with which they are affiliated; and lastly, the wider world – people they do not know, those who will come afterwards, and, in the grandest sense, to the planet or to God (Garner et. al 2001, p. 3). As studies of flow embark on physiological changes (in the moment of the experience), the possibilities for continued research are boundless.²

Acknowledgments I would like to thank Dr. Csikszentmihalyi Mihaly and Isabella Selega Csikszentmihalyi for welcoming me to the charming city of Claremont, CA; Claremont Graduate University; into their home, their garden, and their minds; and in to flow. It has been an amazing journey and I have thoroughly enjoyed it.³

² Validity of the interview relied on an exhaustive transcription process. The interview was tape-recorded and audio-recorded even while I took notes. I transcribed the interview and then employed a profession transcriber. After comparing documents, I sent the final collaborated transcription to Csikszentmihalyi for a member check. Aware that the writing does not always capture what was spoken, it was important to capture his authentic responses and intended meaning; this careful transcription process was necessary.

³ The opportunity to interview Csikszentmihalyi came after completing my dissertation as I sought to introduce his theory into educational administration. Knowing he explored flow theory in other fields, while I found great challenges introducing it into the educational administration literature, on a Sunday afternoon, I sent him an e-mail. Expecting not to hear back, or possibly getting a student response on his behalf, I was exhilarated when he e-mailed me back within the hour inviting me to his home to have the conversation. My then dean (at Miami University of Ohio) supported my travel and research. I moved to The Ohio State University where my travel and involvement in the first WPPA conference in Claremont California was further supported. I shared my research and celebrated Csikszentmihalyi's life, birthday, theory, and four-decade contribution to psychology and (founding of) positive psychology.

References

- Csikszentmihalyi, M. (1975). *Beyond boredom and anxiety*. San Francisco: Jossey-Bass.
- Csikszentmihalyi, M. (1990). *Flow: the psychology of optimal experience*. New York: Harper and Row.
- Gardner, H., Csikszentmihalyi, M., Damon, W. (2001). *Good work: when excellence and ethics meet*. New York, NY: Basic Books of Perseus Books Group.
- Darling-Hammond, L. (2010). What kind of change can we believe in? Toward an equitable system of good schools. American Education Research Association Distinguished Contributions to Education Research Award (2009) Lecture. Denver CO.
- Marsh, H. W., & Jackson, S. A. (2000). Flow experience in sport: construct validation of multidimensional hierarchical state and trait responses. *Structural Equation Modeling*, 6(4), 343–371.
- Quinn, R. W. (2005). Flow in knowledge work: high performance experience in the design of national security technology. *Administrative Science Quarterly*, 50, 610–641.
- Seligman, M.E.P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5–14.

Copyright of Educational Psychology Review is the property of Springer Science & Business Media B.V. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.