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Do Students Care About Learning? A Conversation with Mihaly Csikszentmihalyi



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Learning to enjoy the intrinsic rewards of hard work is essential to successful human development, Mihaly Csikszentmihalyi, author of *Becoming Adult: How Teenagers Prepare for the World of Work*, tells us. Here he talks with *Educational Leadership* about how to help students seek out the challenging and engaging activities that will propel them on their way toward becoming productive adults.

Marge Scherer

In your study, you identified students who stood out from the crowd because they, more than their peers, could find enjoyment in both work and play. You also found students who were disengaged and passive about most of the activities they participated in. What was the context of your longitudinal study?

With the help from a grant from the Alfred P. Sloan Foundation, we identified 1,000 children who were in 6th, 8th, 10th, and 12th grades in 12 school districts from Orlando, Florida, to Long Beach, California, and everywhere in between. Nine years later, we are still following some of the participants as young adults, although a much smaller group of them.

We selected students randomly. We were not looking for children who enjoyed school or did not enjoy school. We just tried to get as much of a cross-section as possible. We developed questionnaires and interviewed these students, but we obtained most of our data through giving each student a programmable pager for a week. This pager would go off eight times a day, early morning to 11 p.m., at random moments. Whenever the pager signaled, the students would take out a little booklet and write where they were, what they were doing, what they were thinking about, their level of concentration, how happy they were, and how creative they felt when doing different activities.

They reported about 30 times during the week, so we received about 30,000 reports. And that allowed us to begin to see these children's experiences, the feelings and thoughts they had during the day, both at school and out of school. For instance, every time the pager went off, they had to say whether what they were doing was more like play, more like work, or like neither work nor play.

Was life more like work or play for these teenagers?

About 30 percent of the time they stated that it was like work; 30 percent of the time, they said that what they were doing was like play; 30 percent neither; and they reported that for

10 percent of their time, what they were doing was like both work and play.

In your follow-up studies, you concluded that students who often say that what they are doing is like both work and play are more likely to go on to college or make a successful transition to work.

Those students who say that whatever they do is more like work seem to do well in high school. Although they say that what they are doing is work and they don't enjoy it at the moment, they record on the response sheet that the activity is important to their future. So they understand that, "Okay. This is work. It's not pleasant. But it will profit me in the future."

Those kids who say that what they do is mostly play enjoy their activities, but they don't think of them as being important for the future. But the best situation is when a person sees a life activity as both work and play. Unfortunately, only about 10 percent of the time do students report this experience. Some kids never report that they have this experience. The worst thing is to frequently feel that what you do is neither enjoyable right now nor good preparation for the future.

You say affluent students are more likely to say they are enjoying their activities than poorer students. Did you see any differences in attitudes among other groups of students?

Males much more than females say that what they do is play. Caucasian students play more than Asians, Hispanics, or African Americans. The survey has a lot of markers in terms of ethnicity, class, and gender. We found that those who see what they do as play get into better colleges after they leave high school. College selection procedures favor kids who do well academically but who also are engaged in original or interesting extracurricular activities.

It's when they are participating in extracurricular activities that students most often say that they are both working and playing.

What is it about extracurricular activities that makes them engaging to students?

Students say that they are doing something that is important to them. The activity is voluntary to a large extent. Kids can choose to do things that match their own interests and skills. So they are doing something fun. But at the same time they are doing work to adult specifications. If you work on the high school newspaper, you have to observe the deadlines and you produce something that is real.

Our youngest son, for instance, was uninterested in school until he began to hang out with the theater group and started building sets, doing the lighting and sound effects, painting the scenery, doing carpentry, and so forth. Once he did that, he became more able to focus on everything. And now he's teaching at MIT.

His academic classes did not offer him an opportunity to meet serious adult standards, but the extracurricular activity did.

Explain what you mean by the flow experience, the title of your earlier book.

Flow describes the spontaneous, effortless experience you achieve when you have a close match between a high level of challenge and the skills you need to meet the challenge. Flow happens when a person is completely involved in the task, is concentrating very deeply, and knows moment by moment what the next steps should be. If you're playing music, you know what note will come next, and you know how to play that note. You have a goal and you are getting feedback. The experience is almost addictive and very rewarding.

Small children are in flow most of the time as they learn to walk and talk and other new things.

They choose what to do and they match their skills with challenges. Unfortunately, they begin to lose this feeling once they go to school because they can't choose their goals and they can't choose the level at which they operate. They become increasingly passive. We find that in Europe and the United States, about 15 percent of adults really can't remember any experience that seems like flow. A similar proportion, about 15 percent, claim that they have the flow experience several times a day.

We've published many articles on multiple intelligences and learning styles. Do you think people of a certain kind of intelligence are more likely to have the flow experience?

It depends on whether there are opportunities for your particular skill or intelligence. If you are musically inclined, for instance, and there is no opportunity to play music at your school and no other place to get the experience of playing, then you are at a disadvantage. In some cultures, there will be opportunities for one kind of intelligence more than for another.

The learning disability that may be an obstacle to experiencing flow is the inability to concentrate. Concentration is one of the hallmarks of the flow experience. If you have, for instance, an attention deficit, it may be difficult to get focused enough.

Have you found that any curriculum subjects lend themselves to more engagement than others?

Yes. There have been quite a few dissertations on this topic. Typically, students rate history the worst subject for engagement, whereas they rate anything having to do with computers high. And vocational subjects seem to be better than academic subjects for encouraging engagement.

Students get flow from group work, from individual tasks, and from quizzes much more often than they do from listening to the teacher or from watching audiovisuals.

We're in a testing culture now, with much emphasis on standards and high-stakes assessments. Is this new priority deflating students' love of learning, or is it beneficial because it offers challenges?

To the extent that the results of the tests are taken seriously, testing worries me. If a test is fair and not above the heads of most of the kids, then students can take the test as a game and a challenge. Flow is easiest to experience when you are challenged, have clear goals, and get clear feedback. Now, if you're listening to a teacher, all of those things are missing. There's nothing to keep your attention focused. Whereas in a test, you have to pay attention. There is a challenge. The goals are clear. You can lose yourself in the activity. Unless it's way too difficult or way too easy, you can enjoy taking a test. But that doesn't mean that one should take any test very seriously because test results don't correlate much with anything.

Not with higher achievement or success in life?

Not that I know of. I would be interested in seeing the evidence that scores on tests correlate with happiness or success in life.

What recommendations do you have for teachers who want to structure instructional activities to achieve more flow or more engagement for students?

The more they can show the relevance of what they're doing to the life of the student, the better. That's the first and most obvious requirement. You also have to make clear the goal of every lesson. The student must know what he or she is supposed to achieve at the end. And teachers need a way to find out how well the students are learning. Computer-assisted teaching can be quite useful because there you can see your progress and you can change and

correct your work as you move along. The fact that students feel positive about group activities suggests the need for more group work. There's too little group activity in high school except in science labs where two or three kids have to solve a problem or learn something together. There are many things that adults could do to make learning more engaging to students.

On the other hand, sometimes it seems to me that the best thing would be to forbid children to go to school until they can demonstrate that they have a real interest in something. Of course, such a system would be fair only if we had preschools for all children, where they could be exposed to a stimulating environment in a playful setting.

Education should be available to everyone, obviously. But education should not be an obligation, but rather a privilege that you earn by showing that you're curious about some part of the world. You get your education through that curiosity. The role of the teacher would then be to find the material that would allow the student to explore his or her curiosity. Because no matter what you're curious about, if you are really curious, you will have to learn everything else.

Whether the topic is bugs or stars or singing, there are connections. There is mathematics behind the music and chemistry behind the animals. Once the students are hooked on their interest, the teacher should be the gatekeeper to the enormous richness of information in the world. The role of the teacher is not to convey the same content to a captive audience, which becomes almost immediately aversive to most children.

I'm interested in how you became interested in the idea of flow. Was it an experience of your own that led you to find out more about it?

Essentially, I was interested in psychology. At the time, you couldn't get a degree in psychology by studying happiness or well-being, but creativity was something you could study.

So I studied creativity in artists. And I was struck by how these artists would get completely lost in what they were doing for long periods of time. And yet, once they finished the canvas, they never looked at it again. Most of them weren't trying to sell their art. The finished painting was an excuse for them to paint. The process of painting was the reward that motivated them.

So I started wondering, Does this happen in other aspects of life? It turned out that people play music for the same reason. They play music to go on the journey, not to reach the destination. In sports, it is the same. I thought that the experience that made the activity so rewarding would be different in music or chess or rock climbing. Instead, what was so surprising was how similarly everyone described how they felt, even though what they were doing was so different.

And for yourself, what are the activities that give you the experience of flow?

When I was in high school, I played chess competitively. I used to paint. I did serious rock climbing. Later, I wrote fiction for *The New Yorker*. All of these are wonderful flow activities. Now I get creative enjoyment mostly from work and from hiking here in Montana with the family.

What family characteristics are most conducive to inspiring a love of learning?

Modeling is the best strategy. If the kid grows up seeing that his parents and other adults have no interest in anything except making money, it's unlikely that he or she will learn that it's fun to study or learn new things.

It boils down to the essentials: support and challenge. By challenge I mean high expectations, high standards, allowing the child a lot of independence, exposing students to new opportunities whenever possible. Support means simply that the child feels that the family as a whole is interested in every member's welfare. If the mother comes home tired, the kids will

notice it and try to help her and so forth.

When their families give them both support and challenge, children are more likely to choose harder subjects in high school, get better grades, end up in better colleges, and have higher self-esteem in college or after college. If they receive support only, the kids tend to be happy and feel better about themselves, but they're not necessarily ambitious. They don't try to advance in school. They don't take harder classes.

If the family offers a lot of challenges but does not provide support, then the kids tend to do well in school, but they're not very happy. And if they have neither support nor challenge from the family, then it's bad all around. Support and challenge impart different strengths. Challenge gives children vision and direction, focus and perseverance. Support gives the serenity that allows them freedom from worry and fear.

Teenagers often have a great deal of anxiety that gets in their way when they tackle a challenge. What's the antidote to anxiety?

Well, there are several. One is tutoring or help in the subjects that provide the most anxiety; another is building up students' strengths. It's often the case that once the students find something that they are really good at, then the anxiety disappears in the other situations. The parents should monitor what the child is interested in and give opportunities to excel at those subjects. Going back to our youngest son, we weren't the ones who helped him. Once he found that he was as good as or better than others at something, it gave him the feeling that he could do other things, too.

We have an idea in education that we have to work on our weaknesses. To a certain extent, that makes sense. But it makes even more sense to work on the strengths. Because once someone has developed strengths, then everything else becomes easier. Second, if you feel miserable studying mathematics and you spend all your time learning mathematics, chances are you will never be very good at it anyway. If the child is good at photography, allow him or her to explore and develop those strengths.

So you wouldn't be a fan of the core curriculum that requires all students to master certain culturally important content?

No, I think that's kind of silly. Look at our presidents. President Bush was a low C student all his life, and so was Clinton until he got to be a Rhodes scholar. It's kind of hypocritical to expect that all children should be good across the board when most adults aren't successful at everything.

The important thing is to stimulate the curiosity, reinforce the curiosity, and build on the strengths of the child. And then you have a vibrant, lively community instead of people who have been stuffed with information that they don't care about.

Of all the students you interviewed, do any stand out as special examples?

Hundreds. One could write a shelf of novels on the lives of these kids.

There was a boy from Kansas City who, at age 12, was really in bad shape. He hated school. He had nothing that he liked. His self-esteem was low. He was in trouble with the school. We thought he would end up having serious trouble.

Then, in his senior year, when we looked at his booklet, we noticed that he had completely changed. He was happy. He felt strong self-esteem. He'd write that he was especially happy when he was looking for a valve or pipes at the hardware store or when he was carrying some rocks to his truck. When he was doing these things, he felt really positive. And we couldn't understand what he was talking about.

In the interviews, we asked him, What is this about looking for a valve or carrying rocks? He told us that he had a business building koi ponds. At some time in his junior year, he saw one of these Japanese fishponds in somebody's garden, and he became so fascinated that he built one in his own yard and one for his neighbor. And then he started building ponds commercially. At age 18, he bought a panel truck for his koi pond business. And he felt tremendous. He had to learn everything from plumbing to biology: how the fish live and what to feed them. He learned chemistry. He learned mathematics to understand water pressure and volume. Senior year he did great in school. He ended up going to a community college and taking technical courses. That is what can happen when a kid makes a connection between something inside and an opportunity outside. To me, that's how education should be. To educate means to lead out. And we don't lead kids out. We kind of stop them. To educate is to expose kids to many possibilities until they find a connection between what's really important to them and the world out there. And then we must nurture and cultivate that connection.

Did the act of writing the journals help the students in your study become more active in their pursuit of learning?

Definitely. Some psychologists use journal writing as therapy. Once you really have an idea of what you're doing, you have a chance to take charge of your behavior. Often kids are put in a dependent state in school; they are not supposed to take any initiative except in what the teachers want them to do. Television puts them in another kind of dependent state. Many come to tacitly believe that they have no say over their own development as human beings.

Writing things down and reflecting on them is one of those things that makes a person ask, Why am I doing these things when I feel so bad when I do them? Why don't I do more of those things that make me happy?

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