



## Collective Learning

Collective learning is one of the developments that made our species distinct from others. It is the human ability to use language to share and pool information. This ability helped us to innovate and to grow our knowledge and skills over time. But it is also possible for a 'glitch' to get in the system and for mistaken ideas to be spread through collective learning.



0:01

*Trevor Getz, Prof. of  
History at San Francisco  
State University*

Hello, my name is Trevor Getz. I'm a professor of history at San Francisco State University, and I'm here today to talk to three of my colleagues—Bob Bain, Sharika Crawford, and Craig Benjamin—about the concept of collective learning.

Let's start with a definition question. What does the term "collective learning" mean to you?

0:28

*Craig Benjamin, PhD,  
Grand Valley State  
University*

BENJAMIN: Collective learning is, as far as we know, a unique human ability to use language to share and pool information. For me, the difference, as defined by David Christian, is the difference between a, a stand-alone computer and a network of computers, who are all able to share information simultaneously.

GETZ: You may have noticed that this video is going in Era One, right at the beginning of the course. Why is collective learning such an important concept to have at the beginning of a course like this?

BENJAMIN: Collective learning really separates humans from all other species on this planet, even our closest hominid ancestors. So, when we think back to the ancient past, and we look at our hominid cousins and predecessors, we wonder what distinguishes Homo sapiens from even the most advanced, such as Neanderthals or Homo erectus, and it appears to be this ability to learn collectively and to share this information. So it's been the fundamental difference between our species and all others and has set human history off on a course quite different to that of any other species.

1:30

*Text Bubble: Why is  
collective learning  
important?  
Sharika Crawford, PhD,  
United States Naval  
Academy*

CRAWFORD: Well, it's clearly important in understanding how human beings were able to dominate over time. And maybe "dominate" is too strong, but perhaps were able to effectively combat, you know, the dangers in their own environment to their benefit.

How were they able to figure out where they can collect, um, certain types of foods? How can they grow, what animals to hunt? How can they start to create organizations which might protect their towns and their communities in places that really were hostile to the development of more sophisticated technologies and skills and tools?

BAIN: I would argue that collective learning is the most important advance in human history, because all the rest of human history fits under that umbrella of collective learning. No matter what you're talking about: the idea of government, the kinds of ways in which we govern ourselves, the changes in our family life, the changes in the clothing that we wear—all that's part of learning that we've collected in one community or another, or now maybe even the whole human species.

2:40

*Text bubble: Symbolic  
Language*

GETZ: Two scholars who think and talk about collective learning in their own work are David Christian and Yuval Harari. I want to ask you each about some of the elements of collective learning that they have identified in their work.

What do you think they mean by the idea of "symbolic language"?

*Ancient Language symbols  
inscribed on a clay tablet*

BENJAMIN: Both Harari and Christian make the argument that collective learning would not have been possible without the acquisition of symbolic language. Of course, all other species have some form of language, we know that. But there's something special about human language. It gives us the ability to discuss very abstract ideas. We're sitting in a room here, perhaps in the Caribbean, we could talk about Africa for the rest of the day. We could discuss some very obscure ideas of philosophy and so on. We could talk about things that never existed, because our language, these sounds that I'm making right now, have become symbols for so many ideas. As far as we're aware, no other species seems to have this abstract language ability. And its, uh, its ability to convey complex, sophisticated ideas, is the key to collective learning.

**3:44**

*Text bubble: Symbolic  
Language*

BAIN: You know, I love this idea of symbolic language. And one thing about symbolic language is, often people refer to it as spoken language. But symbols are far broader and more important, I think, than just the spoken language.

*Bob Bain signs "My name  
is Bob Bain" in sign  
language*

I'll give you a small example. Once upon a time, I worked with the deaf community in Cleveland. And I'll give you some symbolic language. Now, what I just said was, "My name is Bob Bain," but all those moves were symbols. And they're critical, because they allow us to communicate powerful ideas in incredible ways. So, it's not just spoken language. It could be gestures that have meaning, it could be images that have meaning, art that has meaning. Architecture could be part of symbolic language.

*Symbolic artwork made up  
of handprints on stone*

**4:29**

So, when we think about collective learning, we should always be thinking about things bigger than just what we collect using our language. Or we could think about language actually as being much bigger than just spoken words. It could be all parts of big symbols.

GETZ: Have there been times when human networks and collective learning have faltered or gotten smaller? Or have they always increased and expanded?

**4:52**

*Text bubble: Is collective  
learning progressive?*

BAIN: You know, the, the word "collective learning" also, almost implies that there is a kind of progress to it, things are getting better. We talk about people learning and, you know, students, for example, are learning all through life. And we think that, you know, from first grade to second grade to third grade, that there's growth and progress. But I want to add a slightly different take to this.

Um, Craig referenced this idea of multiple computers connected. The networking of computers. One of the problems about that is, a virus can get into a computer network, and then it infects the whole system. And often, I view collective learning as not just something that's positive.

So, for example, the concept of race developed somewhere in the, 500 or 600 years ago. And that concept begins to, uh—"infect" is the way I would describe it—our collective learning. And that becomes an imagined reality.

**5:43**

Race does not exist the ways in which people think about it, in biological terms. But if we imagine that to be so, it becomes real in its consequences, which is a famous dictum by a sociologist, W.I. Thomas. If you imagine and think of something

*Racist signage: a restroom sign that says “For use by white persons”; black and white photo of a sign stating “Colored Waiting Room”*

**6:30**

*Our planet from above*

**7:21**

*Text bubble: Where do you see collective learning in the world today?*

*Teenaged students studying on a laptop*

**8:16**

*Text bubble: Where do you see collective learning in the world today?*

**8:57**

as true, it becomes true in its consequences. And so there are a whole bunch of concepts, like race, like hierarchies that had slavery, for example, that had really negative effects. And they are a part of collective learning, because once those ideas get into the system, it gets passed on unless they're consciously defeated. So, in that sense, collective learning isn't necessarily always been progressive, at least not the way that I've been seeing it.

GETZ: Okay, so we've talked about collective learning as something historical in human society, but surely it's still around today— humans are still learning collectively. Where do you see collective learning in the world today?

BENJAMIN: Collective learning today is at an extraordinary level. The, the development of the internet, the, the development of various language apps, which means language is no longer a problem to communication, means that every human alive—almost every human alive today—is connected with this vast network of more than seven billion humans, and I don't know how many computers. So, surely it's this ability to learn collectively, which has defined our species from its very appearance 250,000 years ago, that will help us solve some of the momentous problems we are facing as a species as we move forward to deal with the challenges of the future.

CRAWFORD: You know, my colleague Craig had mentioned the internet as being a, a platform now, a technological platform, that allows, you know, people all around the world to share information, particularly with, you know, language programming, software like Rosetta Stone. But I was thinking of Khan Academy. My son—I have a middle-school-aged son—you know, when he's struggling with algebra, you know, he can go onto Khan Academy, and he can be with other students all around this world, whether it's in Canada or France or South Africa or Brazil. All of these young people are, can take advantage of the S.A.T. prep that they offer at Khan Academy. Or if, you know, they're struggling with their A.P. World History class, they have great, you know, curriculum and website access that really makes that an opportunity for everyone to share in a way that we hadn't seen, what, 40 years ago, 50 years ago? And which will continue to revolutionize this understanding of what collective learning really means.

BAIN: Another way to think about collective learning is to think about human culture. So, the definition I've always used about culture is, culture is a shared way of... A, a shared use of ideas, of material objects, and patterns of behavior that a people do because they're in a group, and that strikes me as a definition of collective learning. So, if one takes a look at just even the way I'm dressed, the clothes I'm wearing, the watch that I'm wearing, the language that I'm using, I didn't invent. It was part of the collectivity that I participated in—my identifying with my nation, or my identifying with my occupation. That's a culture, but it's also part of collective learning.

GETZ: Thank you all for joining me today in this enlightening discussion about collective learning.