

10 Questions to Ulman Lindenberger

1. Why did you decide to join the Jacobs Foundation Board?

There were three reasons. The most important reason for accepting the invitation to join the Board was the perfect congruence between my research interests as a developmental psychologist and developmental cognitive neuroscientist and the mission statement of the Jacobs Foundation. As a developmentalist, I seek to identify human potential at the individual level, that is, I examine the various ways in which different individuals can develop in favorable ways on various dimensions. This research mission matches up naturally with "promise to youth," the leitmotif of the Jacobs Foundation.

The second reason is related to the first, and is more of a legacy reason. Since its inception, the Jacobs Foundation has had close ties to the Max Planck Institute (MPI) for Human Development in Berlin, Germany. The friendship and thematic accord between Klaus J. Jacobs, the founder of the Jacobs Foundation, and Paul B. Baltes, the founding director of the Center for Lifespan Psychology at the MPI for Human Development, has shaped the mission and, for many years, the modus operandi of the foundation. After Paul's untimely death, Jürgen Baumert, another director at the MPI for Human Development and one of the leading scholars and modernizers of educational psychology in Germany, joined the Board. In 2012, when Jürgen Baumert left the Board at the age of 70, I was asked to join. At the time, I was already acquainted with the work of the Jacobs Foundation. I still feel honored and happy to be among those who contribute to the mutually beneficial dialogue between the Jacobs Foundation and the MPI for Human Development.

Finally, there was a third reason, which is more biographical in kind. I spent parts of my childhood in Switzerland, and I love this country's unity in diversity, and its natural beauties. Whenever I visit Switzerland, I feel as though I am visiting another home.

2. How would you describe your work as a Jacobs Foundation Board Member to a schoolchild?

First, I would try to get a sense of the individual child I am talking to. Then I would try to find some dimension on which this child has changed in a favorable manner and that is accessible to her conscious awareness and reflection. For instance, she might have learned a new motor skill, such as riding a bike, and we could talk about the associated experience of mastery of a new ability. Then I would tell the child that the Jacobs Foundation Board consists of a group of people who share one big goal: That each individual child around the world is given the opportunity to acquire new skills and to experience that wonderful sense of mastery.



3. Which combination of skills, competencies, and experience do you bring to the Jacobs Foundation Board?

The scientific competencies that are most relevant for my work as a Board Member comprise developmental psychology, cognitive neuroscience, multivariate statistics, and, more generally, research design and methodology. My work as a Max Planck director and in leadership roles within the Max Planck Society also provides pertinent experience. But actually, the most important and enjoyable skill I hope to bring to the Board is a readiness to learn from the other Board Members.

4. Why is variability in learning- the Jacobs Foundation's theme of the Strategy2030 – relevant today?

Developmental psychology and educational practice need to overcome the notion of the average child. Averages are statistical constructs; they are useful for some purposes, such as comparing years of education across countries, but obstruct the view on the individual child. One kind of variability are the differences between children of the same age, which are often neglected, but sometimes matter more than differences in age. Another kind of variability are the fluctuations and long-term changes within each individual child. Taken together, these two kinds of variability lead to a multivariate landscape of between-child differences in within-child fluctuations and long-term changes. We need to fully appreciate this landscape to attain knowledge that can form the basis for interventions that improve learning contexts in ways that benefit as many individual children as effectively as possible.

5. What are the biggest challenges and opportunities in the Jacobs Foundation's direction of travel?

In my view, the biggest challenge and opportunity for the Jacobs Foundation is to foster an intellectual and social environment and atmosphere that allows for long-term productive reciprocal relations between basic research and developmental interventions. As the Argentine-Canadian philosopher of science Mario Bunge (1919–2020) noted, the applied sciences, or "technologies" in a broad sense, often pose the greatest challenges, as they require the contextualization and integration of many different strands of basic research. Running a well-controlled experiment in the lab to identify mechanisms of learning is less complex than designing settings that make effective use of such mechanisms in a social context, such as a classroom. Due to its structure and programs, the Jacobs Foundation is well equipped to address these complexities.

6. What are your key priorities as a Board Member and as part of a Board Working Group?

My key priorities align with those of the Board as a whole: creating evidence-based ideas for improved learning opportunities, offering quality education, and transforming education systems. I take great interest in basing these activities on firm evidence, especially in the fields I know best, which are developmental psychology and cognitive neuroscience.



7. Please complete the sentence: Learning is....

... the acquisition or alteration of behavioral repertoires through experience.

8. What does learning mean to you personally?

The aspect I like most about learning is the interplay between empirical inference and knowledge-based deduction, which has been studied in great depth by the Genevan psychologist and epistemologist Jean Piaget (1896–1980). You discover that things are the way they are, and only later do you understand that they have to be that way, given what you now know about the world. Or, conversely, you have formed expectations about the world based on what you know, and then you encounter facts that do not correspond to your expectations, and feel the need to revise your thinking about how the world works. I experience this never-ending interplay between induction and deduction as refreshing and pleasurable.

9. Who has inspired you throughout your career?

The sources of inspiration are manifold: my parents, mentors, and senior colleagues; close colleagues from my cohort; some junior colleagues; students; friends and family; and, of course, some of the books I have read. One should be open to drawing inspiration from any person and source. Having said this, I would guess that 90% of the in-person interactions that have inspired me can be traced back to fewer than 40 people.

10. Which book/s have you read you could recommend and for what reason?

Astrid Lindgren: The Brothers Lionheart (English) // Die Brüder Löwenherz (German) // Bröderna Lejonhjärta (original Swedish, 1973) A tale of brotherly love in the face of death, full of hope and beauty.

Erich Kästner: Lisa and Lottie (English) // Das doppelte Lottchen (original German, 1949) Identical twins meet for the first time in a summer camp: Nature and nurture in action, with a happy ending.

Lorenzo da Ponte: Memoirs (English) // Geschichte meines Lebens (German) // Memorie (original Italian, 1823) Mozart's master librettist narrates his life story; serendipitous and witty.