Excellency, Dear Mr. Chrobog,
Dear Colleague Mr. Sinn,
Ladies and Gentlemen,

This afternoon, the Young Experts Group presented an education policy problem with the aid of some illustrations. I would like to follow up on this presentation. The first image showed the "House of Education," with smoke rising from its windows. Next to the left window, it said "Content," next to the right "Teacher." Via some intermediate steps, we were led to an "EdVenture House," a gathering place designed for those who were convinced that the "House of Education" needed help. Both images were connected through a creative proposal to work around the bureaucracy with the goal of first putting out the fire and then initiating innovation processes.

It is to these innovation processes that I want to address myself this evening by talking about "Learning in the Age of Acceleration." In a slightly modified version, I owe my talk to a good friend of mine, Father O'Donovan S.J., president of Georgetown University from 1989 until 2001. He had studied in Münster with Karl Rahner. In 2001, he was invited by the German Bishops’ Conference to give a lecture about the meaning of the Sabbath and Sunday. In this context, he drew a link between acceleration and education. Today, I would like to follow up on one of his thoughts and take it in a somewhat different direction. It is a thought I find to be extremely productive. It is about the distinction between "world knowledge" and "personal knowledge."
Until the 18th century – this was his explanation for the difference – Europeans thought it possible that an individual could know everything there is to know. Such a person was considered to be a polymath; Leibniz, for example, was such a universally educated man. Today the world knowledge is so vast that no one individual can possess it all. This means that there is no longer a direct relationship between the gigantic data sets of world knowledge and our personal knowledge. By “world knowledge,” we mean the entirety of knowledge, which we could also call “objective knowledge.” The term “personal knowledge,” on the other hand, describes the knowledge that helps us to master and shape the life we have chosen and to achieve the goals we have set for ourselves. The increase in world knowledge is not linear, but exponential. The acceleration accelerates. This acceleration of knowledge is one of the three accelerations that increasingly confront us with difficulties and that I would like to focus on in my talk. The other two are the growth of the global population and the increase of options available to us.

Because our knowledge continues to increase ever rapidly and defines our lives ever more strongly, we have for some time been talking about a “knowledge society.” What exactly is meant by that is not quite clear. What is clear, however, is that the information that is stored in the world knowledge becomes our knowledge and thus a part of our knowledge society only when and to the extent that we make it our own. We have to assimilate this information and translate it into our subjective knowledge. In short: we have to learn – basically as long as we live.

The idea of a knowledge society works on different levels. On the one hand, it contains an imperative. According to this imperative, it is our task to tap the generally available, encyclopedic amounts of knowledge to acquire our personal knowledge – knowledge that we need to live our lives and get about our work. On the other hand, the idea of a knowledge society also contains a programmatic task. This programmatic task, with which I am concerned, is to find answers to the question of what kind of knowledge we should acquire from the infinite world knowledge and assimilate as our personal knowledge. In practical terms, the key issue is what criteria we should use for selection. Those criteria are generally determined by the purpose for which we want to, or should, use the selected knowledge. Without
selection, the objective knowledge remains worthless to us. I am therefore concerned with an inquiry into the criteria for the “right” selection of personal knowledge and the conditions for the acceleration of the entire knowledge.

It is not just world knowledge that is increasing exponentially, but also the number of people – the global population – who tap into it to gain their personal knowledge. When I was born, the world’s population was under two billion people. Today, it is at some seven billion people and growing. What has been happening in the last few decades and will continue to happen is a revolutionary transformation of life on this planet, a revolution without historical precedent.

To this day, Europeans have failed to really comprehend the meaning of this revolution and its far-reaching consequences. They are not really aware, in a politically effective way, of the fact that they have come to comprise only 6 to 7 percent of the global population. During the past 500 years, Europe was the dominant power of globalization. This power has waned. Europeans today have rather become objects of globalization. Europe has to make up its mind whether it is ready and willing to acknowledge, and shape, the political, economic, and cultural dimensions of this historical transformation. Europe can see itself as an indispensable part of the global population and formulate its European identity and claims accordingly. But it can also give in and see itself as an object of globalization, dependent on the decisions made by other powers.

Now what drives the constant change and the seemingly infinite increase in world knowledge? Is it the competition, the markets where this competition is taking place, the rising tide of innovation, the increasing transparency of life, the so-called value change, a general belief in progress – or is it the hardships and poverty that we have to overcome? It is probably a combination of all these and other causes.

Our experience in the last 30 years has been that the principles of the market and of competition increasingly reach into areas of life that had not been understood as “markets” in the past. We talk of an economization of virtually all areas of life, meaning that these areas are increasingly defined and shaped by economic principles and laws. In this context, Habermas once spoke of the economic colonization of
life. For years, I myself have been interested in and studied the consequences and significance of this economization of non-economic issues and areas.

Surely you have noticed that we have become used to evaluating also education and structural issues mainly from the perspective of their economic usefulness. It has become a standard yardstick to measure their contribution to economic growth. This is an interesting and important, though in my opinion also rather dangerously narrow view of what education, schooling, training and lifelong learning are really about. Even our women politicians in charge of family affairs attach special importance to the growth-promoting impact of their financial measures. If economic considerations and evaluations are thus applied to virtually all areas of life, we marginalize at least two non-economic issues that are key for both education and human co-existence: culture and religion.

The trend towards the economization of all key issues and areas is also significant for the affected institutions and their evaluation. How, for example, to explain the fact that, at the time when my generation started families, family policy dealt with the relationship between family and work, while today the debate focuses on the relationship between work and family. In the past we obviously thought that the demands of work had to be compatible with the demands of the family. Today it is the family that has to adapt to the demands of work, i.e. family life has to be adjusted to the demands of the job. In this context, and given the demographic developments, it has become quite common-place to point out that our prosperity can only be guaranteed by tapping the full labor potential of women. The North Rhine-Westphalian Minister-President sees the expansion of day nursery and day-care facilities in her state as a precondition to making better use of the economic value of mothers. This apparently means that mothers should participate in production and therefore put their children into daycare as soon as possible. In Saxony, this resonates with a historical slogan: More women into production! Do such developments make sense? Hardly – when looked at with a view to the long term.

To put it differently: We have to make sure that learning and education in times of acceleration are not reduced to their economic usefulness. Education is first and foremost about building character
and thus laying the foundations for an individual’s capacity to live in freedom. Only when education and knowledge have provided all individuals with the capacity to live their lives in liberty and responsibility and to shape their environment as citizens together with others, education has served its goal. Only then can we trust that the knowledge we select from the infinite world knowledge, by ourselves or with others, is fundamentally compatible with the conditions of an order based on the principle of liberty.

This leads me to the second aspect of our considerations: to the different speeds that define our lives, i.e. the speed of the economy and the pace of our lives. Professor Sinn talked about our work as members of a commission that focused, among other things, on this very issue. The goal was to liberate the average life-span, which is currently about 80 years, from its presently rather strict three-part structure – 20 years of training and education, 40 years of work, 20 years of retirement – and instead make possible fluid transitions that more closely correspond to the needs but also the opportunities of today’s lives.

The economic speed is accelerating; a case of accelerated acceleration. Despite ever-shortening time intervals between products, one talks of product generations. A new iPad, a new computer or car model that will enter the market in three or four years is already considered to be the next generation. This idea of a generation obviously cannot be translated to human life. The pace of our life is given. We cannot influence it. Even if the half-life knowledge becomes shorter and the speed of the economy, of production, is accelerating, this does not mean, as Leo O’Donovan pointed out in his lecture, that children or young people grow up faster because of it.

As a consequence, we have to account for the discrepancy in speed in other ways. We have to organize the relationship between the rhythm of the economy and the rhythm of life in a way that accounts for both speeds. First, that means we have to make sure that human life does not get subordinated to economic speed. Wherever this is the case, people pay the price with exhaustion, psychological disorders or physical problems. This is not compatible with either human dignity nor with economic reason.
Second, we should distinguish between knowledge that ages quickly and thus has to be constantly renewed – production knowledge – and the amount of knowledge that I would like to call long-term useful or enduring knowledge. The latter includes key competencies of personal knowledge: language, grammar, foreign languages, knowledge that does not age such as basic arithmetic, the ability to express yourself verbally and in writing – skills without which we cannot live together successfully nor engage in fruitful social or political debate.

Today, however, there are more and more young people who do not know basic arithmetic or are unable to write an error-free résumé when they take an entrance exam. If they cannot overcome such deficits – on their own or with the help of others –, they will hardly have a chance to live a fulfilled life in a knowledge society. The contradiction between the wealth of our country and these findings could not be more striking.

To prevent such developments, we have to redefine education and learning. One of the key competencies is learning how to deal with ever-faster changes. Education and training have to focus on developing the skills that it takes to deal with change and transformation: we have to have learning contents for the long term, and learn how to learn – in the final analysis, lifelong learning.

This includes a set of skills that are generally indispensable: the ability to concentrate, diligence and perseverance, technical skills how to access world knowledge, how to search and find information, how to select and structure information from the wealth of data in a way that we will get answers to complex issues, and how to use the technology it takes to do so. I am currently trying to access knowledge with the aid of Google as well as other systems and data bases, and it is interesting to discover how difficult it is to retrieve this knowledge. That means, I too have to acquire the technical skills to gain access to new knowledge which may be out there in huge quantities, but remains completely useless to me if I don’t have the skills to retrieve it. Having access to this knowledge is in turn a prerequisite for participating in world knowledge beyond that which I have been able to assimilate as personal and professional knowledge.
But the computer and all the new ways of virtual participation in social and knowledge networks are useful instruments only as long as they remain aids and do not become alternatives to learning and knowing. Those who know how to express themselves in language, how to write and spell correctly, how to do basic math only with the aid of their computers forfeit the opportunities that the new technologies are offering them. The young people who proudly declare that they no longer need to know how to write, since the computer is doing it for them – something one hears quite frequently – thus lose the ability to formulate their own words and sentences and speak out on more complex issues. With this attitude, they basically trade off an easy approach to learning in the short term against a narrowing of opportunities in the long term. It is the task of education and training to prevent this from happening by teaching them how to speak and use their own language.

What follows from all this is that it takes technical skills to transfer information and data from the huge store of world knowledge into one’s subjective knowledge, to convert world knowledge into personal knowledge. But it also takes social skills, the ability to work in a team, to take initiative, of one’s own or with others, to take responsibility for oneself and others – in short, it takes responsible freedom, as our Federal President never tires of pointing out.

Learning and practicing to take responsibility for oneself and others also includes the ability to deal with the rapid increase in options provided by the markets, and choose responsibly from them. When I was a child, there was no comparable plurality of options from which a young person could choose – provided you even had the money. But this meant that we also didn’t have the agony of choice. The fact that some fellow classmates owned a watch while others didn’t did not make the “have-nots” feel excluded or poor or lonely.

Today, young people and their parents are confronted with a rising tide of options, sweeping towards them with more and more offers in its wake: “Buy me.” Our economy, our electronic media, our social networks: they all live from the never-ending stream of commercials and advertisements. Advertising represents an ever-larger share of economic growth. How do you deal with the need to choose and decide? What support do we give young people while they are in school or training for a job? How can we make sure that the competition to
consume does not define children’s and young people’s “social status” as early as in preschool and school? How can we prevent the exclusion of children whose parents are less well-off or have different ideas about education?

When a society deals with an increase in options in a sensible way and with a view to future needs, it is not so much an economic but a cultural achievement. It also involves the competence to take decisions that are good in the medium and long term, to put aside current desires for future ones, i.e. to make decisions in favor of limitation. Taking these decisions is a cultural achievement. The point is not to limit the increase in options. The markets will take care of that when there is less or no demand as a result of citizens’ responsible limitations. Here, too, the point is the selection criteria. What matters is developing and passing on character traits that are acquired as part of one’s education. Through education, people become social beings who act for their own good and for the good of others. Education teaches social skills, reliability, tolerance, respect for the dignity of others. It is widely considered to be the responsibility of schools and thus of teachers. But we are usually not willing to give it the necessary competencies. In many cases, the responsibility for education is not or only insufficiently honored. Here, too, the consequences will become apparent later on.

Finally, let me say a word on lifelong learning. We are quick to emphasize the need for lifelong learning. The BMW Foundation today has honored people who think and act along these lines, for example by bringing together young and old. In the past, the interactions between young and old primarily took place in a normal three-generation family, for example between a grandfather and his grandchild. Today there are far fewer opportunities for interaction between old and young, which is not just due to demographic developments, but also to far-reaching changes in the institution of the family and in its cultural perception. This makes it necessary to create alternatives.

The baby-boom generation is currently raising 30 percent fewer children than made up their own generation. If these children imitate their parents’ reproductive behavior, 45 percent of the baby-boomers will not have grandchildren. These changes in the age and population structure will also have consequences for training, education, and
learning. Therefore it will be necessary to see the changed life courses also in connection with lifelong learning. We might think of developments where the learning of older people is linked with the learning of younger people – for example, in ways we heard about today.

This could lead to interesting forms of knowledge and experience transfer. The young teach the old about modern communication technologies. I, for example, ask my fourteen-year-old granddaughter to explain my iPad to me. In the course of my socialization, I have not acquired the skills to intuitively understand the new system. I still have to think. And the attempt to replace intuition with reasoning and thought puts ever-new hurdles on the path to achieving the goal, because I have to overcome my old thought structures when thinking digitally. This turns out to be quite difficult.

For my granddaughter, it’s a piece of cake. But if she helps me with her knowledge, I have not lost authority. On the contrary. By being willing to learn from a younger person, I have gained authority. And it is fun, too. To embark on this path of mutual assistance, young people also have to realize, however, that older people know things that they, the young ones, are too young to know, because they have not yet been able to make these experiences. It could thus be the task of the elderly to pass on their experiences to the younger generation, together with a basic store of enduring personal knowledge. This way, the aging of society and the decline in the numbers of young people could actually be harnessed for the fruitful learning of all three generations. On this note, let me add that the integration of people who come to Germany and other European countries from other cultures also presupposes this kind of learning. Last but not least, it also makes an essential contribution to developing and maintaining civil society.

All things considered, education is not just an economic matter. To show you what education and learning can do, I would like to finish by telling you about my experiences in Saxony. When Germany was reunited, the people in Saxony and throughout Eastern Germany realized that their economy was in shambles and incapable of providing them with a proper standard of living. A company that had previously employed 5,000 people was able to offer jobs to only 500 people once it had adopted western technology. Productivity had increased ten-fold. This transformation happened virtually overnight.
Where did the people take the strength to deal with such incredible changes in such short time?

In Saxony, the answer that suggested itself had to do with the approximately 1,000-year-old history of the state. The Saxons were not oppressed by their history. Their history gave them strength. They felt encouraged by the fact that their ancestors’ hard work had made Saxony the cradle of industrialization, that Saxony was where the textile, the tool and the automotive industries had been created, where the first long-distance railroad had been built. Their centuries-old craft traditions, boosted by the discovery of silver in the Ore Mountains, had taught them as early as the 14th century what they were capable of accomplishing. They were proud of these accomplishments, they were proud of their history, and this history gave them the confidence that they would also be able to master the new challenges.

Young people who lack a sense of history would not have been able to accomplish that much. They would have no historical assurance. They could not be able to accomplish what the older generation, their parents and grandparents, expect them to accomplish for economic and social reasons. So it turns out that a country’s culture, traditions, and history as well as life in a historically, politically and culturally defined space are inextricably intertwined.

Allow me to end, Mr. Kreuzer, with a remark on Saxony and Bavaria. If you take a look at the composition of the Länderkammer in the Weimar Republic, you will discover that only two territorial states that make up today’s Germany were members of the chamber already back then: the Free States of Saxony and Bavaria. Besides the Hanseatic cities, and given the dissolution of Prussia, they are thus the oldest Bundesländer. From a historical perspective, all hyphenated Länder are of more recent creation; they did not exist in the past. Maybe this is one of the reasons why Bavaria and Saxony are engaged in a quite fruitful competition.