The Wider Benefits of Learning

Part 3: Learning, Life Satisfaction and Happiness
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Foreword

For centuries, scholars searched for a miraculous substance that would make people happy, healthy, wealthy and able to enjoy life. A panacea that would help them deal successfully with life’s difficulties, better understand themselves and the world, and ultimately gain wisdom they could transmit to future generations.

Today, science has found this magic formula. The trouble is that virtually no one knows that it exists, where and how to find it and what miraculous effects it has when properly used. At the same time, renowned researchers are proving its effectiveness in increasing numbers of international studies. It works on everyone, everywhere, from infancy to old age, in all of life’s circumstances and spheres. It has an unending number of side effects – all of them positive and good for people. As for how much of it to apply, the only mistake we can make is not to use enough. That’s because the more of this magic formula people use and the more often they use it, the better they feel, scientists have unanimously determined. And when people feel better, statisticians have recently proven in comparisons of countries throughout Europe, so do the regions and countries where they live with others.

In fact, everyone knows this miracle substance and many are already using it. However, in most cases it cannot sufficiently produce its effects. Most people totally misunderstand it because too often, it has been prescribed incorrectly and in the wrong dose. The miracle substance that science has discovered is nothing other than learning. But not just learning in schools and educational institutions, much too often discussed only as it relates to finding employment or enhancing corporate and national competitiveness. The real magic formula is learning in all of life’s phases and aspects – lifelong and “life-wide.”

It may seem inappropriate to speak of a miracle and science in the same breath. But the human brain and its ability to learn are among the greatest miracles in our known universe. And the miracle of learning and cognition within our brain a) is only barely understood by even the best and most advanced scientists, and b) these scientists themselves admit that the more they investigate, the more they discover ever greater miracles about the brain’s complexity, capacity and plasticity. (More insight into these interconnections can be found in the Bertelsmann Stiftung publication entitled “Warum Lernen Glücklich Macht” [Why Learning Makes You Happy]. In short, science still considers the fact that human beings learn and how they learn to be a kind of miracle.

Researchers throughout the world have begun to investigate the positive effects of lifelong learning on individuals and society. And the more interconnections and relationships between learning and life processes they study, the more multifaceted, surprising and unambiguous their results have been. They already agree on one conclusion: If we want to unleash the
miraculous effects of learning, we first have to understand learning in its diverse forms, possibilities and effects in a completely different way.

Educational research, generating much public interest, has shown how successful schooling, vocational training and university attendance affect income and job opportunities, and how closely education and skills development are related to a society’s economic prosperity. On the other hand, the public has heard virtually nothing about the happiness that is derived from learning or the pleasure of curiosity and discovery, or from personal development and the ability to continually change oneself. Too little attention is paid to the connections between learning and gains in resilience, physical and mental health, participation in social life and social solidarity, all of which have also been scientifically investigated.

To survey the current status of research on the diverse effects of lifelong learning, the Centre for the Wider Benefits of Learning at the Institute of Education of the University of London, at the request of Bertelsmann Stiftung, has prepared a comprehensive review of the literature on the social and personal benefits of learning. The scope of the published findings has persuaded the editor to present this survey thematically, in sections.

This third of five sections focuses on the close reciprocal effects between learning, life satisfaction and happiness.
The study on wider benefits of learning

Learning and well-being – a look at complex relationships

Although the term “learning” has already become central to the discussion of economic and social policy in Europe, most of these countries lack both clarity and understanding of the specific learning relationships involved. Learning is considered the key to success for individuals, organizations, regions and nations, leading to greater economic affluence for knowledge societies. But the complex phenomenon of learning is often reduced to formal education and its consequences for employability.

Similarly, scientific research into the interconnections in education has been essentially devoted to studying formal learning in school and other educational institutions. For years, data has been systematically collected on the performance of secondary and post-secondary students. The number of scientific studies and research papers in this area has risen dramatically. There have also been studies on the value of vocational training, continuing vocational training and – to a lesser extent – adult learning for the job market. But with the dominant focus on the economic consequences of formal learning processes, the holistic and social effects of learning have received comparatively little attention.

In fact, growing numbers of international scientists have begun to investigate the positive main and side effects of lifelong and life-wide learning beyond the economic impact on individuals and society: What are the effects of learning, for example, on the development of identity, self-consciousness, motivation and resilience? On our ability to continually adjust to changing living conditions? How does learning affect our health, life expectancy and birth rate? Or, to take just one example, our ability to come to grips with an increasingly complicated healthcare system? What forms of learning result in greater well-being, greater life satisfaction and happiness? And what are the effects of learning processes on social cohesion and vitality – in neighborhoods and associations, municipalities, regions and whole societies? To what extent does learning influence personal willingness to integrate, be tolerant, show solidarity and become politically and socially engaged? And what factors can best improve the framework conditions and circumstances for every form of learning at every age?

Without exception, results of the studies by international scientists indicate that the key to future well-being, happiness, social cohesion and – as just one important positive consequence out of many – personal and national economic development in Europe lies exactly in the widely ignored effects of lifelong and life-wide learning processes. Until now, the conclusions of these studies and research have never been assembled, correlated and made available to a broader public. The following survey of the status of international research is intended to close that gap.
Overview of the five parts of the study

Part 1: Learning and identity

The first study covers the scientific discussion of the reciprocal relationship between lifelong learning processes and the development of human identity. Numerous studies show that the forms and quality of formal, non-formal and informal learning in various phases of our lives impact our self-confidence, self-esteem, resilience and the development of social skills, and look at how they do it. And in addition, they examine how - through the concepts of self that are affected by learning processes - these forms of learning then impact future learning behavior and internal attitudes toward learning later in life.

Part 2: Learning and health

The second study collects the relevant studies on the effects of learning on physical and mental health. Numerous studies have made clear the direct relationship between the duration and frequency of learning processes in various phases of life and mental and physical well-being, health behavior, life expectancy and numerous other physical and mental health aspects. Likewise, studies show how learning behavior affects our ability to find our way through an increasingly complex medical system.
The third study summarizes findings about the consequences of learning for the well-being, quality of life, happiness and optimism of people. It examines research on the effects of both learning in school as well as adult learning on a positive attitude toward life. Besides showing a positive correlation between learning and happiness, this part of the study makes it clear that the scope of research efforts lags far behind the importance of this crucial field of knowledge.

The fourth study looks at a broad spectrum of research results on the effects of formal, non-formal and informal learning processes on social cohesiveness and community vitality. Given the diverse and complex interconnections it examines, this individual study is divided into four sub-chapters. The first looks at the effects of lifelong learning on social inequality, income differences, social mobility – and the influence of learning sequences on social cooperation in a society. The second discusses the effects of learning on active citizenship, the possibilities of social participation and the integration of immigrants. Also considered is how participation in learning processes can be combined with aspects of interpersonal behavior such as trust, tolerance and inter-cultural sensitivity. The third sub-chapter deals with the concept of “social capital” and describes how learning contributes to developing individual and community social capital. The final section deals conceptually and statistically with the connections between learning and criminality and thus how specific learning processes and educational interventions affect criminal behavior.

The fifth and last study describes the numerous positive “side effects” of learning, which cannot be directly ascribed to the categories already listed but are of substantial importance for human well-being and the positive development of societies. Unlike the previous four categories of the accompanying study, which look at the more or less direct effects of learning processes on individual and social development aspects, this section looks at some more complex reciprocal effects of learning and living processes. Thus it illustrates how positive learning experiences impact people’s future learning behavior, followed by the complex relationships between learning and occupational prospects. In addition, it explores the multifaceted impacts of learning on family situations. These include, for example, the influence of the educational and learning level of parents on the development of their children or the effects of learning processes in which parents and children participate together. The influence of the learning behavior of adults on their children’s academic success and birth weight, family structure and size, marriage and divorce and parental behavior in early and later development phases of their children is also described. Finally, the study discusses the influence of the learning behavior of adults on their immediate neighborhood and accordingly how learning affects processes of sustainable development and the search for social justice.

This thematic structure of the survey of research results offers a better overview of the diverse aspects of the positive impacts of learning on people and societies. However, interdependencies between the various areas should not be ignored because in the final analysis, the individual and social effects of learning are never one-dimensional or limited to specific spheres of life.
Instead, every learning experience influences the whole person – and accordingly the society in which that person lives.

This survey of research results on the positive impacts of learning on people and society is another important component of the ELLI project as a whole, to continue to complete the picture of lifelong learning and its positive effects on people and societies. As a mirror of the status quo of research, it is intended to provoke new and different ways of thinking about the meaning and design of formal, non-formal and informal learning processes for both individuals and society.
Focus: Learning, life satisfaction and happiness

Introduction and overview

In the public debate about education, people rarely even consider its relationship to happiness and wellbeing. And schools and other educational institutions are seldom thought of primarily as sources of joy and delight. As a result, many people associate learning with effort, struggle and frustration – and not infrequently with futility and impracticality. When people consciously try to learn, it is mostly to pass examinations, obtain certification, improve their job prospects and raise their income, not least in order to increase their material affluence.

At the same time, bookstores are flooded with bestsellers offering advice about how to find happiness. More and more people, it seems, are looking for some other form of happiness because they recognize that its traditional sources – more money, higher status, more consumption – fail to make them happy in the long run.

In the meantime, even national governments are coming to realize that positive social development is not equivalent to economic growth and a higher gross domestic product (GDP). By the 1970s, doubts were already being expressed about the significance of GDP with respect to the future development of societies when Nobel prizewinners James Tobin and William Nordhaus began to cast doubt on the value of using GDP as the standard for national success. The highly regarded “Limits to Growth” report issued by the Club of Rome in 1972 provoked discussion as well, about which indicators of social development were really meaningful. However, the first measurement systems that also considered aspects of human wellbeing from comparative, supranational perspectives - for example, the UN Human Development Index or the Happy Planet Index of the New Economics Foundation – did not become sufficiently accepted to be treated as leading indicators to be used in political decision-making by individual countries, even though they regularly showed that the economically strong, rich countries were by far not the happiest ones.

Only recently have individual industrialized countries decided to seriously investigate the growing signs that an exclusively economically-oriented vision of development potential falls seriously short. Thus French president Nicolas Sarkozy commissioned two Nobel-prize winning economists, Joseph Stiglitz of Columbia University and Amartya Sen of Harvard, to find social development indicators that go beyond GDP ratios. The Stiglitz-Sen Report was presented to the public at the end of 2009 - and since then has served as a basis for measuring economic performance and development models that include personal wellbeing in their analysis. The German federal government has recently created a commission consisting of Bundestag members and scientists tasked with investigating “Growth, Affluence and Quality of Life,” in order to develop holistic indicators of prosperity and progress that reflect subjective experiences, such as quality of life and satisfaction.

But where is the key that will advance both economic prosperity and individual wellbeing in a society?
It is just where too few people think to look for it. The results of the ELLI-EU Index clearly indicate that the learning climate in a country is directly related to the happiness and satisfaction felt by its inhabitants. In a pan-European comparison, it turns out that people are by far the happiest in countries where they can learn the longest, the most enthusiastically and the most subjects in as many different opportunities as possible.

The results of the ELLI-EU Index on the relationship of learning to life happiness are confirmed by the results of modern brain research and cognitive science: Just by observing the neuronal processes in the human brain, experts have seen that the feeling of happiness and learning processes are mutually and inseparably interconnected (Roth 2003). Contrary to what is generally assumed, the desire for learning and the happiness gained from it are really what make people and society happy in the long term.

Unfortunately, this decisively important connection between individual and social development is still a mystery to most political decision-makers, at least in its full scope. Add the fact that educational researchers have not yet discovered the interplay of happiness and learning as a promising field for their future efforts. So far there have been just a small number of scientific studies that look more deeply at the positive influence of lifelong learning processes on human happiness and wellbeing. Only a recent study by the Bertelsmann Stiftung, in the form of a representative survey of adults in Germany, found that 85% of those asked about a positive connection between learning, happiness and wellbeing agreed. In addition, 40% of respondents indicated that “being able and having the opportunity to learn something new” was a very important factor in their own happiness and wellbeing (Bertelsmann Stiftung 2008).

This third part of the overview of international research on the wider benefits of learning is the least extensive. Nevertheless, all the studies on this topic, brought together here for the first time, confirm the direct and indirect effects of lifelong learning processes on wellbeing, happiness, quality of life and joie de vivre for people in all phases of life.

### Learning in school and happiness

Compared to the extraordinary attention devoted to detailed research on the formal educational achievements of school children – since the first PISA study at the latest – it is very apparent that there have been hardly any studies that look at the issue of whether learning in school makes young people happy. The few international studies available unanimously suggest that participation in school, length of schooling and the level of qualification achieved correlate positively with happiness. In one study is shown, for example, that achieving a higher degree instead of just a lower-level diploma leads to more than doubled life satisfaction. And in another study, it turns out that a higher education has a decisively positive influence on people’s happiness throughout their lives - independent of their income. However, we found no study of the positive or negative effects of performance orientation or educational quality.  

### Adult education and happiness

Up to now, the focus of research on learning and happiness has been on the effects of learning processes on adults. This involves on the one hand the effects of school education on wellbeing later in life, and on the other hand the connections between

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1 However, an OECD (2001) report points out that while it is possible that the extent of an individual’s education has a positive effect on the happiness of others, alternatively, education may affect happiness because it influences perceptions of status relative to others—in which case the results of Blanchflower and Oswald could overstate the effect on wellbeing of any expansion of educational provision. Nevertheless, using state-level data from the US, Putnam (2000) found that both one’s own and the average county level of education had positive effects on happiness.
Focus: Learning, life satisfaction and happiness

participation in various forms of adult education and satisfaction with life, quality of life, happiness, etc.

Thus, various qualitative studies support the assumption that participation in non-formal and informal learning processes has a positive influence on the wellbeing of adults that can result in a healthier lifestyle as well as better mental balance and health. With respect to measurable effects, a survey of a representative group of adults indicates that participation in adult education courses leads to higher satisfaction with life — and in addition, to the likelihood of greater wellbeing and optimism, more self-confidence and a significantly better self-assessment of their health.

But no other thematic focus in this survey of research on the personal and social effects of learning has revealed such a great need for further research as for the central issue of how people can make themselves happier in their lives through learning. It should perhaps also be considered one goal of this survey to inspire researchers in all related fields to look at this extremely fruitful and still mainly untouched sphere of research. The same applies to persuading those who make education policy to provide the necessary resources for studying this extremely promising area. If social development potential is to be measured by more than just economic markers, it seems vital to recognize the positive role of learning in the development, wellbeing and prosperity of individuals and societies. Because ultimately, a country’s transformation into the knowledge society of the future can succeed only if as many people as possible become happy through and while learning.

Research results in detail

1. Learning and life satisfaction as subject of research

“Money can’t buy you love, but learning probably can make you happy”

It might be intuitive to assume that taking part in learning leads to an increase in life satisfaction. Certainly, a representative survey on the influence of learning on happiness, joy and wellbeing in Germany by the Bertelsmann Foundation (2008) found that 85 percent of respondents agreed that there is a positive connection between learning and happiness and wellbeing. Moreover, 40 percent stated that “the ability or opportunity to learn new things” is a very important factor for happiness and wellbeing.

Research in this area generally concentrates on adults, whether looking at the effects of schooling later on in life or at the associations between life satisfaction, happiness and so on and participation in adult learning. However, there is some evidence that attainment in school is significant while students are still young. In general, findings from research are not always clear in this area—perhaps because concepts such as ‘happiness’ and ‘wellbeing’ are notoriously difficult to define and measure. Nevertheless, some effects of learning on happiness and life satisfaction have been pinpointed: even though the changes brought about by learning seem to be small, these may often still be important.

We consider the effects on life satisfaction and happiness of both schooling (in terms of its effects later in life) and of participation in adult learning, finding both qualitative and quantitative evidence for small but potentially significant influences.
2. Schooling

Gutman et al. (2010) used data from the Avon Longitudinal Study of Parents and Children in the UK to examine changes in wellbeing across mid-childhood and early adolescence. They found that attainment in school was a significant positive factor, particularly for girls in mid-childhood: higher scores for girls in standard assessments at age seven predicted better than average changes in their emotional, behavioral and social wellbeing in mid-childhood compared with children with lower scores. The finding was significant even when taking into account measures of special educational needs.

Other research has identified links between the level of education achieved and optimism, life satisfaction and happiness in adulthood. Using data from Switzerland in 1992–1994, Frey and Stutzer (2002) estimated that achieving middle and high levels of formal education increased life satisfaction by 2.19 and 2.09 percentage points. On happiness, Hartog and Oosterbeek (1998) used data from a cohort of adults born in 1940 in Noord-Brabant, Holland to investigate the relationship between education and happiness. Their results indicated that this relationship reached a maximum for intermediate levels of qualifications. The parabolic relationship between education and happiness remained, but was significant only for intermediate qualifications and for higher vocational qualifications, when prior health and wealth were included as controls.

Further evidence suggests both immediate and long-term positive effects of education on self-reported happiness. Blanchflower and Oswald (2004) found that educational attainment was associated with greater happiness, even when controlling for family income. However, an OECD (2001) report points out that while it is possible that the extent of an individual’s education has a positive effect on the happiness of others, alternatively, education may affect happiness because it influences perceptions of status relative to others—in which case the results of Blanchflower and Oswald could overstate the effect on wellbeing of any expansion of educational provision. Nevertheless, using state-level data from the US, Putnam (2000) found that both one’s own and the average county level of education had positive effects on happiness.

3. Participation in adult learning

A further body of evidence exists around the effects of learning undertaken in adulthood. Some of this is qualitative, and supports the assumption that participation in learning can have a positive impact on adults’ wellbeing, which may translate into healthier lifestyles and better mental health (Hammond 2002).

In terms of more measurable effects, a cohort of adults was found to exhibit improvements in life satisfaction, and in the odds of having improved wellbeing, optimism, self-efficacy and self-rated health, if they took part in adult learning courses (Feinstein and Hammond 2004; Hammond and Feinstein 2006).

Analysis was in terms of changes in life outcomes for adults between the ages of 33 and 42, controlling for their development and contexts up to age 33. Taking between three and 10 courses offset the predicted decline in life satisfaction for those who took no courses by 35 percent. Health patterns between the ages of 33 and 42 were also affected: the probability of having a positive transformation on health conditions or behaviors between the
Another large-scale study (Matrix Knowledge Group 2009), meanwhile, found that adults undertaking part-time education, either formal or informal, currently or at some point in the previous year, did have greater levels of wellbeing than those not participating in education. There was an exception in that those participating in part-time formal education had lower scores for life satisfaction.

For this study, data from the British Household Panel Survey, a longitudinal survey of over 10,000 adults, was used to construct three measures of lifelong learning: undertaking formal (leading to a qualification), part-time education or training currently or in the last year; undertaking informal (not leading to a qualification), part-time education or training currently or in the last year; and having received an educational qualification later than at the conventional age. The relationship of these with four measures of subjective wellbeing (including life satisfaction and unhappiness or depression) was investigated.

There is some debate as to the benefits of obtaining qualifications in adulthood. The Matrix study identified a negative relationship between wellbeing (all measures except life satisfaction) and having obtained a formal qualification at later than the conventional age. Taking into account years spent in education, the authors concluded that obtaining a qualification at a conventional age increased wellbeing compared with obtaining one at a non-conventional age.

Hammond and Feinstein (2006) also found that participation in adult learning was associated with empowerment and small improvements in lifestyle, although not with positive changes in mental or physical health for those who did not flourish at secondary school (measured in terms of attainment and attitudes). Since those who did flourish at secondary school generally experienced better outcomes in adulthood than those who did not, participation in adult learning did not close the gap in adult wellbeing by compensating for not flourishing at secondary school.

However, Jenkins (forthcoming 2010) found some evidence that obtaining qualifications in later life increased a sense of wellbeing for the over-50s. He used the English Longitudinal Study of Ageing, involving more than 11,000 people aged 50 and above, to test the impact of taking part in adult learning over
the previous year. Work status, partnership status and aspects of physical health and disability, as well as highest qualification attained, were taken into account in the analyses. Adult learning was divided into four different types: obtaining qualifications; formal training; music, arts and evening classes and gym/exercise classes.

Nonetheless, prior qualifications also appeared to have a positive impact on quality of life for adults in Jenkins’ study: those with degrees had markedly higher levels of quality of life than those with no qualifications. As controls for work status, income and health were added to statistical models, prior education became less important, but remained significant, indicating that education influences quality of life mainly through its effects on work, income and health. The most striking finding was that music, arts and evening classes were significantly associated with positive changes in quality of life and life satisfaction and, though to a lesser extent, with wellbeing. Meanwhile, life satisfaction tended to be higher among those who had recently attended formal education and training courses.

4. Conclusion

Learning is linked with life satisfaction and happiness throughout life, for both children and adult learners. Higher attainment in school, for girls at age seven, predicts better than average changes in their emotional, behavioral and social wellbeing in mid-childhood compared with children with lower scores. Research has also identified links between the level of education achieved and optimism, life satisfaction and happiness in adulthood. Older adults with university degrees had markedly higher levels of quality of life than those with no qualifications; there is also some evidence that obtaining qualifications in later life increased a sense of wellbeing for the over-50s. Adults who took part in adult learning courses of various kinds were found to exhibit improvements in life satisfaction, and in the odds of having improved wellbeing, optimism, self-efficacy and self-rated health.
Information about the project “European Lifelong Learning Indicators” (ELLI)

It is important to remember that this study is just one part of the larger European Lifelong Learning Indicators (ELLI) project. The ELLI project was launched by the Bertelsmann Stiftung in January 2008 in an effort to make the concept of lifelong learning more understandable and transparent. It is meant as a resource for political decision makers – from the European to the community level – as well as educational institutions, private industry, academics and journalists. In addition, it assists individuals in Europe who want to know more about learning in their own community, country and the rest of Europe, i.e., what learning entails and the impact it has. The ELLI project is breaking new ground by expanding its focus to include not only the formal educational system, but also learning that takes place outside of traditional educational institutions. This holistic approach is an essential component of the project, and is reflected in all of its instruments and activities.

For an overview of all activities please visit our webpage

www.elli.org
References


Part 3: Learning, Life Satisfaction and Happiness
The study on “The Wider Benefits of Learning” comprises the following 5 parts.

Part 1: Learning and Identity

Part 2: Learning and Health

Part 3: Learning, Life Satisfaction and Happiness

Part 4: Learning and Community Vitality

Part 5: Learning Spill-overs and Interplays

The parts of the study can be downloaded from www.elli.org