

# **Gerontologically-oriented educational concept for lifelong learning - a plea for learning in old age**

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**Preface:** About 50 years ago, then US President John F. Kennedy made the statement: "There is only one thing more expensive in the long run than education, no education." [1] Today, this assessment is more correct than ever. Due to globalisation, it is important to keep a country's level of knowledge high and to stay on the ball in all areas. In addition to a well-founded school education and vocational training for all young people, adult education with its diverse offers proves to be an indispensable part of the education system. Apart from vocational training, which is usually prescribed by the employer, learning in adulthood is voluntary. Especially since learning for older people keeps the mind and body fit is really no longer a secret and is becoming more and more important! [2]

**Thesis:** Our society does not recognise and use the potential strengths of old age. Thus, those years that are also gained through medical-technical progress are not sufficiently used culturally. One can even say that no cultural blueprint for life in old age has yet been developed in our society. An age-friendly culture in which older people can contribute their abilities and articulate their interests in the same way as younger people is not yet discernible in our society. Thus, we are culturally lagging behind the successes of medical progress and technology. I amplify this: We lag far behind the successes of medicine not only culturally, but also ethically.

### **Gerontological insights**

It is one of the undoubted merits of gerontological research that ageing is no longer seen as a mere biological process of decline, but as a developmental process that is influenced by both internal and external factors and can proceed in many different directions. Here, differential gerontology in particular has contributed a great deal to clarification. In a survey conducted as early as 1992, 87% of older people gave top priority to the desire to remain physically and mentally fit - even ahead of the desire for a secure livelihood (79%). People are quite ready for geroprophylaxis, i.e. prevention in physical, mental and spiritual respects, as long as corresponding attractive offers are made. However, a culture of ageing is lacking in our society; this still needs to be built up! The possibility of discussing age-specific life events such as retirement, the empty nest situation (empty house), restrictions due to health complaints, widowhood and other topics in guided discussion groups can also positively influence the quality of life in old age. [3] Basically, one can learn anything until old age. The ability to learn is there, sometimes the willingness to learn, the motivation is lacking.

When it comes to learning, older people often say: I'm too old for that. Especially when it concerns knowledge of a technical, scientific or media nature, this sentence is cited as a kind of excuse or protective claim. Yet today it is considered certain that successful learning is possible up to a ripe old age and that older people do not necessarily learn worse than younger ones. [4]

## **Geragogical aspects**

Geragogy can be considered a specialisation of gerontology. It deals with learning and learning processes in old age. Geragogy sees the human being as a context of the past, the present and the future. In practice, gerontology is not reduced to specific topics on ageing. However, it is important to first know about the ageing process in order to be able to deal with the physical and mental changes or to shape them accordingly. It is common to speak of age education only when the subject of learning is related to the life course of the individual and "a special form of (self-)reflection" [5] can take place.

But we also need mental activities. Those who are more mentally active, have a broader radius of interests and a far-reaching reference to the future, reach a higher age of psycho-physical well-being than someone who has fewer interests, i.e. is less mentally active. A greater open-mindedness provides stimulation and excitement. Mental abilities are thus trained and increased. Conversely, in mentally more passive people, the lower search for stimulation and new interests leads to the remaining mental powers dwindling more and more over time.

A trained memory still functions in old age. It is wrong to view ageing only in terms of loss - especially since in many respects gains dominate. It is not ageing itself that is a problem, but the expectations and attitudes of the environment, which often still assume a constricted and limited lifestyle of old people.

## **On the concept of lifelong learning**

The concept of lifelong learning is not new, but it is becoming increasingly important. Due to technical, industrial and social progress, changes in the most diverse areas of life are taking place at such an accelerated pace that constant adjustment is becoming a necessity for existence at every age. New challenges are constantly arising as a result of the upheaval. Often people remain in their old patterns of behaviour, which can leave them perplexed and facing seemingly insurmountable difficulties. Only by grasping the necessity of biography-accompanying learning can these moments be overcome, as rigid patterns of behaviour can thus be broken and social development can be understood as an opportunity. [6]

## **Definition and development background**

The concept of lifelong learning (lifelong education) was first introduced in many European countries as early as the 1960s - in connection with the education policy debate on fundamental structural reforms in the education system. Despite these references to lifelong learning, it is not possible to give a generally valid definition of what exactly is meant by it - for example, the demand for greater permeability of the education system or the possibility of certifying informally acquired knowledge. According to the EU definition,

lifelong or lifewide learning includes "all learning throughout life that serves to improve knowledge, qualifications and competences and takes place within a personal, civic, social or employment-related perspective." [6]

Lifelong learning can thus be defined as a principle that regards the educational process as never-ending and emphasises the continuity of continuing education throughout the life course. At the same time, it emphasises the lifelong capacity and need for education. Some scholars even speak of "lifelong learning advancing to a social guiding idea, to a basic cultural orientation, which has a more or less obligatory character for individuals [...]". [6] In this context, continuing vocational education and training is playing an increasingly important role, as rapid change is particularly prevalent in this field and rapid adaptation or individual further development is therefore necessary. [6] The nature of knowledge, the processing of experience changes with age. With increasing age, the concept of experience and knowledge becomes more and more clear, is cleansed of false ideas of knowledge. This is why older people often have a clearer view of things.

### **Elements of a modern age culture**

In addition to the current youth culture, there is a need for a separate age culture that takes demographic change into account. Old age cannot be seen solely from a medical or social point of view, because the evaluation and appreciation of old age depend considerably on cultural attributions and judgements. In our view, the core of a modern age culture means: to promote the development of a person's personality throughout life.

It is not the case that parallel to the ageing process, the life line only goes downwards. Until a few decades ago, old age was only seen as a decline in health, a dwindling of abilities, the loss of social skills and relationships. However, it is rather the case that there can still be increases in the later years, provided that one does something mentally and physically to achieve this: one can thus continue to develop mentally and psychologically into old age and maintain one's physical dexterity. Within the framework of a specific culture of old age, these developments can be described in more detail. Through this, older persons should develop their potentials, consolidate their self-determination or strengthen their self-responsibility and thereby realise their self-actualisation.

This view of old age can be summarised - as is usual in ageing research - in various models (here with keywords for their specific characterisation), some of which overlap:

- The activity model: staying active, active for as long as possible, no retirement, with free choice of the tasks one sets oneself.
- The opportunity model: explore the possibilities of old age, decide accordingly.

- The competence model: acquire additional competences adapted to age.
- The resource model: maintaining and promoting physical and mental resources.

These models are oriented towards the developmental possibilities of the old person. Other models (deficit model, disengagement model), on the other hand, are based on experiences of loss and withdrawal in old age, especially after retirement. In today's research, the concept of culture is often equated with the performance of integration. Concrete models of action must then be measured against the degree of integration performance. [4]

### **Personal development through education and learning**

If one summarises the results of gerontology and its conclusions in one sentence, it could read: It is important to promote independence through learning or education. Learning is about promoting the ability to think, mental independence and further development of the personality. We may assume that learning is also a suitable means of dementia prevention. This alone would be motivation enough to learn throughout life. Education cannot be equated with knowledge. Education is much more about being in an appropriate relationship with one's fellow human beings and one's environment. [4]

### **Forms of knowledge**

In knowledge, we distinguish at least these three forms:

- Dispositional knowledge (technical and instrumental knowledge, e.g. How do I operate the computer or smartphone?)
- Experience knowledge (horizon knowledge, what experiences have I had in my life, in my profession, how have I decided and acted in each case?)
- Orientation knowledge (value knowledge, what do I orientate myself by, ethically, religiously?) Orientation knowledge becomes increasingly important in old age. [4]

### **Education and curiosity**

Education is also not the accumulation of one of these forms of knowledge. Education has its very origin in the idea of humanity. This idea assumes that we humans must recognise ourselves as limited, finite, erring and lapsing beings. But within these limits, all the potential, resources and possibilities that lie within a human being are to be brought to fruition. Education has a high value within the framework of an age or generation culture. And this is therefore the actual learning and educational goal: the comprehensive development of the personality. The appeal for lifelong learning is to be understood in this context. Curiosity is always part of

learning and education. Plato had all knowledge and education begin with the experience of wonder. Being amazed and curious, being open to new things, to others - that brings about inner growth. Education is something that people do with themselves and for themselves. Others can educate us, but we can only educate ourselves. [4]

### **Learning strategies**

The learning process can - simplified - be represented as a double process: In the first phase, the (learning) material is absorbed, and in the second phase, the newly learned material is processed and brought into a connection or context with previous knowledge. The younger generation is faster and more receptive when it comes to absorbing the material; the older generation, however, is better at processing it and placing it in the context of previous knowledge, probably due to their longer learning biography. This results in an almost equal learning success of both generations, provided that it is not only about the quick storage of knowledge facts.

In order to be successful in learning, it must be taken into account that the susceptibility to external disturbances (e.g. noise) increases with age, that the learning units, the lessons, are appropriate in scope and in relation to the learning time. Repeating the material several times plays an important role, as do learning breaks. Today there are well-prepared learning packages with easy-to-use multimedia elements. E-learning (learning on the internet) or blended learning (combination of traditional and digital forms of learning) are also increasingly gaining acceptance among older people. [4]

### **New competences**

In addition to the process of becoming oneself through education, the acquisition of various competences in the later phase of life is inevitable. Firstly, ageing itself should be learned through appropriate preparations (see Geragogical Aspects). Then, the maintenance of learning, social and cultural competences is almost indispensable for the self-determined shaping of life. Learning biographies of older people are often characterised by the high degree of continuity (continuity thesis): Those who have learned regularly in their previous life will find this natural also in their later years. And: one is never too old to learn. The process of self-education is lifelong. [4]

"Gerasko d'aiei polla didaskomenos". With these words, the ancient Greek philosopher Solon (ca. 640-560 BC) characterised his age shortly before he turned 80: "I grow old and still learn many things." These words express a principle of life that is also characteristic of many: in all phases of life, man is - at least according to possibility - a learner, but also a digger. [7]

## **Recent findings in brain research**

Gerontology contradicts the preconception that ageing is predominantly a process of physical and mental decline. "Some of the most valuable things that life has to offer can only develop at all in mature age, not only wisdom, but also skills in hundreds of different areas of life that require decades of learning. Growing old can be associated with a wealth of positive experiences. 'Successful' ageing means harnessing and bringing to fruition the tremendous potential of inner growth, love and contentment that resides in every human being." [8] Cohen describes a special form of intelligence that he calls developmental intelligence. He sees this as a particular strength of older people and defines it thus: Developmental intelligence is the ever-improving interplay of thinking, judgement, emotional intelligence, interpersonal skills and abilities, life experience and awareness, and the synergies between these factors.

Cohen's theses are supported by the results of recent brain research:

- Through learning and experience, the human brain is constantly reshaping itself.
- New brain cells are formed throughout life.
- The emotional wiring patterns in the brain become more complex with age.
- In older adults, the interaction of the two hemispheres of the brain is more balanced than in younger people. This allows for more holistic, balanced reactions, wiser behaviour than in younger years.
- An older brain has learned more than a younger one. It can therefore better grasp multi-layered aspects of life.
- The complex neuronal structure of the older brain, consisting of decades of experience and coping with everyday life, is a fundamental strength of older adults - called old-age wisdom.
- Demanding mental activity stimulates the growth of neurons, as does physical exercise. And better networking and interconnection can, in a sense, make up for the gradual slowing of signal transmission and loss of neurons. [8/9]

## **Neurobiological findings and ageing culture**

Let's learn to accept that with increasing age, usually from the age of 50 onwards, brain processes are slower. We learn more slowly and the precision of our memory decreases. Part of this change is due to the fact that one percent of all nerve cells in older brains die every five years. However, part of this loss can be compensated for in the hippocampus. We can encourage this process with our lifestyle. It seems that the brain, at least in the hippocampus, grows in its tasks. This is one of the most important arguments for lifelong learning, because the newly formed neurons are particularly well protected even when pathological degradation processes

damage the ageing brain. Another factor that is often forgotten in old age: Precisely finding memories is often more difficult in huge amounts of data - and with age, the amount of stored information simply increases. One must distinguish well between what actually deteriorates with age and at what point we simply learn and remember differently.

Older brains do have their own strengths, at least in areas where they are trained throughout life, such as the precision of linguistic descriptions. Growing old is not the only thing that makes you smart - but those who learn for a long time and perceive the world with open eyes accumulate enormous treasures. The insight is: old age is a developmental stage with special challenges for our brains. As societies, we must therefore ask ourselves what we expect from older people in the workplace, in the family, in clubs and in public life - it is therefore urgent to develop a culture of ageing.

And physical health is also important for the brain. Anyone who wants to still have an optimally efficient thinking organ at the age of 60 or 75 should start paying attention to a few things before the age of 50. He should watch his weight, eat a healthy diet and avoid blood pressure and diabetes or have them treated in time. You should exercise regularly - because exercise also helps the brain. In addition, one should have one's hearing checked, because hearing problems lead to social isolation, which also damages brains. You should not skimp on sleep, because it helps the brain. [10]

Let's move and our brain says thank you. 11] Start: Don't think for long, but take concrete steps and act. It helps physical and mental fitness and creates stability and courage to face life.

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