Minds toward the Future: Evolving the Wise Cyborg

Everyone is a futurist. We all think about the future, imagining and evaluating possibilities, making plans, and implementing strategies for realizing our goals. Educators deliberate the future of education, both where it is heading and where we think it should be heading.

I will outline here my vision for a preferable future for education, realistically anchored to certain fundamental features of contemporary affairs and human psychology.

I’ll begin with the human condition. We live in a world of pervasive and accelerative change: all the major dimensions of human reality are transforming, and based on various long-term scientific studies, evolution and the rate of change appear to be accelerating.¹

Though many people feel overpowered and confused by the pace of change and fight against it, our scientific understanding indicates that evolution and change are fundamental to the universe and that human reality is a natural expression of this overall dynamic trajectory; we are the cutting-edge architects of the multifaceted wave of change.²

We may view accelerative change as an external phenomenon that is happening around us and that we need to contend with, yet the life stream of individual human consciousness is itself purposefully transformative. Each of us moves through developmental stages, grows through learning, and undergoes periodic shifts in self-identity as we progress through life. Throughout human history, the depth, span, and complexity of change within the individual conscious mind have evolved and continue to evolve. We are the architects of change because we are conscious agents of evolution; it is built into our psychology.

Change provokes us into considering the future. If we are realistic about the future, it is better to thoughtfully guide change than to resist or deny it. It is better to be informed and proactive agents of change than to be passive adapters reacting to change.

Flourishing and Future Consciousness

A dynamic picture of human reality implies that we need a dynamic vision of well-being and the good life, since any static vision turns out to be unrealistic. Neither the individual nor human society can realize the good life by standing still.

As studied in positive psychology, flourishing provides a dynamic, growth-oriented, future-focused concept of psychological well-being. Individuals experience high life-satisfaction, happiness, and an overall sense of well-being when they are flourishing. Mental health is strongly correlated with having purpose, self-initiated direction, and an ongoing sense of growth in life—all critical features of flourishing.³ Happiness is the experience of flourishing. If education should facilitate the development of those capacities needed to realize the good life, both for oneself and for others, then the key for education lies in enhancing the power to flourish in a dynamic reality.

Humans possess a set of psychological capacities for dealing with the future. We anticipate; we set goals; we make plans; and we create. I describe this normal set of abilities as “future consciousness.” But these capacities can be strengthened and heightened in everyone.

Heightened future consciousness is critical to realizing a good future; if you can’t plan effectively, set inspiring and realistic goals, engage in long-term purposeful behavior, and take responsibility for your future, your life is going to be chaotic and depressing. In a world of accelerative, pervasive change, we need to be very good at anticipating, directing, and creating the future. Heightened future consciousness is the key to flourishing in the future.

The future of education should likewise be education on the future, including the knowledge and skills to thoughtfully anticipate and ethically guide the direction of our lives and external events.

The central function of the human mind is future consciousness. We perceive, remember, cultivate hopes and desires, and communicate in order to efficaciously navigate and direct the future. Our higher psychological processes—including thinking, problem-solving, ethical consciousness, integrative memory, creative insight, and a pronounced sense of self-responsibility—have evolved to facilitate the informed and proactive control of the future. We are evolved agents of evolution and change because we have a highly evolved sense of the future. And ideally, through education, we should strengthen all of these normal human capacities.

Wisdom and the Future of Education

As a college educator, I have explored the concept of wisdom, at one point having the epiphany that wisdom should be the central goal of higher education; wisdom should be the capacity that we, as educators, strive to develop within our students and should be the fundamental virtue that we role model in our own behavior.⁴

Over the years, I have spearheaded efforts to create courses and degree programs that pivoted on the teaching and assess-
mum of general core competencies, such as communication and independent learning skills. Within my department curriculum, I have addressed critical thinking, deep-learning educational goals, and academic ethics. All these broad, interdisciplinary, and integrative educational goals can be synthesized under the general capacity of wisdom.

Wisdom can be seen as a highflying and elevated goal, irrelevant to the techno-infused, fast-paced reality of contemporary life. Yet if we define wisdom as “the desire and creative capacity to thoughtfully apply broad and integrative knowledge to enhance the well-being of life both for oneself and for others,” then wisdom is the most practical of all human capacities for realizing the good life. Wisdom, by its very nature, has a future focus—it is the capacity to improve on the world and hence to create a good future.

Wisdom also has an ethical dimension, since its function is to enhance well-being, both for oneself and for others, and since it entails the integration of other ethical character virtues including honesty, open-mindedness, integrity, and courage. Besides the inculcation of knowledge and skills, education should address values and ethics. Wisdom is ethically informed heightened future consciousness.

Wisdom involves a set of capacities and character virtues, including the following: self-responsibility and self-discipline; hope and optimism; love and gratitude; a temporally expansive consciousness; and an intrinsically motivating desire to think, learn, and continue to grow. Wisdom is the highest expression of future consciousness—the holistic integration of those capacities necessary for flourishing in the future.

**Wisdom, Technology, and the Wise Cyborg**

If one thing symbolizes our visions of the future, it is the accelerating growth of technology and its progressive infusion into all spheres of human life. Many see technological growth as the cutting edge of accelerating evolution.

How is wisdom connected with technology? All of our contemporary challenges ultimately have to do with problems or deficiencies within ourselves—psychologically, socially, or ethically—and even though technology empowers, technological growth clearly needs a guidance system. That guidance system is wisdom.

Technology has a long and deep history. Before the emergence of our distinctive species, our hominid ancestors were creating and using tools. We have always been a functional synthesis of the biological and the technological; our identity and distinctive ways of life are an integrative blending of flesh and machines. We are “natural-born cyborgs.”

Based on this long-term process of bio-tech integration, we can reasonably expect further purposeful techno-enhancement into the future. Hence, it is critical that we strive toward becoming *wise cyborgs* and that, as educators, we facilitate the development of wise cyborgs in our students.

A wise cyborg is someone who utilizes technologies to facilitate the pursuit and exercise of wisdom. A wise cyborg specifically engages those technologies that exercise and amplify the higher capacities and character virtues that support wisdom or heightened future consciousness.

Why should we aspire toward becoming wise cyborgs, both for ourselves as educators and for our students as learners and contributors to society? As noted above, technological development requires a conscious guidance system, for technology can have both positive and negative effects on human psychology, society, and the environment. Wisdom provides the guidance system for our evolutionary bio-tech reality, not only in the field of education but in every arena of human endeavor.

We humans are self-conscious, purposeful beings that have, through evolution, developed a set of psychological capacities that empower us to direct the future. These capacities of future consciousness put us at the vanguard of change. The highest expression of these capacities is wisdom. When wisdom is pursued and exercised, we flourish, achieving happiness and well-being in the context of our dynamic reality. Our technologies need to be intelligently and ethically guided toward these ends. As educators, we should strive, as our central ideal for the future of education, to facilitate in our students the development of technologically empowered wisdom—that is, a heightened future consciousness consisting of the set of capacities that will enable them to realize a good future and flourish within and guide the evolutionary, accelerative flow of human reality. As role models, we should aspire toward these ideals within ourselves as well.

**Notes**


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