

The Pursuit of Wisdom and the Future of Education

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The Virtue and Value of Wisdom

Humanity faces a number of significant challenges, including the need for sustainable development, the unequal distribution of wealth and resources, ethnic conflict, and the lack of ethically informed global long-term planning.¹ Modern popular Western culture also suffers from a variety of negative trends which are frequently reflected and reinforced in the world of education. These trends include the increasing speed and frenzy of life; a diminished sense of the past and future in favor of presentism; a perceived decline in the value of intelligence, complex thought, and wisdom in favor of superficiality and sensationalism; excessive consumerism and commercialization; and relativism and the loss of intellectual and moral standards. Specifically regarding education, there is an increasing emphasis on high-tech gadgetry, convenience, and speed over depth, hard work, and sustained thinking; a push for vocational, profit-motivated, and self-serving learning over social responsibility and the love of knowledge; and the trend toward offering fragmented, just-in-time learning instead of an integrated curriculum and holistic education.²

Various writers have argued that a new way of thinking, which includes an enhanced capacity for future consciousness, is needed to successfully address the challenges and problems of contemporary society. A New Enlightenment is called for.³ Within academia there are related concerns and there are different proposals for how to transform education to meet the demands of the contemporary world. As the writers of *How People Learn* report, the goals of education have changed in the last century as we have moved from an industrial economy to a global, pluralistic, and knowledge based society. Where in the past the emphasis was on memorization, drill, and mechanical learning, education today should facilitate the development of interpretative skills and deep understanding, the capacities to think and read critically, to solve complex problems, to communicate clearly and persuasively, and to participate thoughtfully in the democratic process. But perhaps, most centrally, students need to develop “learning strategies” that support life-long learning; they must learn how to learn and be motivated to do so.⁴ Yet in a time when our culturally pluralistic, rapidly evolving, and information-intense world requires thoughtful deliberation, expanded perspective, conceptual integration, and the love of learning,⁵ our popular culture often appears shallow, fickle, fragmented, and anti-intellectual, and modern education, rather than realizing the standards identified in *How People Learn*, may be perpetuating these negative cultural trends.

Some contemporary writers have argued that the teaching and cultivation of wisdom would greatly benefit both modern society and educational practice.⁶ I would argue that if the virtue of wisdom more strongly influenced problem solving and decision making in our modern world, we would make great progress in solving the social problems of today and creating a better world for tomorrow. Additionally, if more importance were placed on wisdom, many of the negative

cultural trends identified above would be minimized or reversed. The pursuit and practice of wisdom should be the main focus of education. Wisdom should be the central character trait we practice and model as educators, and the central virtue we attempt to instill and develop in our students. This conclusion aligns with educators Howard Gardner and B. Van Weigel's arguments that the development of virtues and ethical values, rather than simply the accumulation of knowledge and skills, should be at the core of education and academic inquiry.⁷

Although the understanding and pursuit of wisdom has a long and great tradition,⁸ I would propose that we need to formulate a new theory of wisdom that, although building upon the insights of the past, incorporates contemporary thinking and addresses contemporary problems and challenges. This proposal is in line with what advocates of a New Enlightenment argue; these futurists especially emphasize recent scientific theories as providing fundamental new insights into reality and human knowledge. Another key feature of this new theory is an emphasis on the holistic quality of wisdom; wisdom synthesizes and perfects many capacities of the human mind and, I would contend, is the highest expression of future consciousness.

Wisdom can be defined as the capacity to grasp the big picture of life, of what is important and meaningful, and guided by ethics and values, the ability to apply this knowledge to enhance the well being of life, both for oneself and others. As can be seen from this definition, wisdom is not just a cognitive capacity or repository of knowledge in the human mind, but an ethical concept – in fact a virtue – and a practical or applied ability as well. Wisdom is the ethical application of knowledge. Further, as we will see below, wisdom includes multiple modes of thinking and understanding, encompassing analysis, reasoning, intuition, and synthesis. As a holistic psychological capacity, wisdom also involves motivational, emotional, social, and personality factors. In general, wisdom is connected with an expansiveness of consciousness, into the past and the future. Some researchers would argue that wisdom is the highest possible level of development in the human mind.⁹ All these qualities clearly would contribute to the betterment of humanity and culture.

In this paper I outline a contemporary theory of wisdom through examining: modern research on learning, knowledge and thinking; the study of multiple modes of human understanding; the search for enlightenment; the expansion of consciousness; contemporary science and epistemology; and psychological investigations into the holistic nature of wisdom. Often, themes encountered under each topic reinforce each other. I conclude with some thoughts on the teaching of wisdom and how the “life of wisdom” may represent a new level in the mental evolution of humanity, capturing and further refining the essence of the idea of the “New Enlightenment.”

Deep Learning and the Knowledge Base of Wisdom

Both traditional and contemporary thinking indicate that wisdom involves the accumulation of extensive knowledge, both general and specific, about human life, existence, and the nature of reality. Expressions such as “rich factual

and procedural knowledge,” “exceptional understanding,” and “deep knowledge” are used to describe wisdom.¹⁰ I would propose that the acquisition of this type of knowledge is built on a process identified in modern research as “deep learning.” Deep learning is a necessary stepping stone toward wisdom.

Deep learning is usually contrasted with surface learning. Deep learning involves getting the big picture - a synthesized and comprehensive understanding of a domain of study rather than simple surface learning of a set of disconnected facts. Whereas surface learning never penetrates to the core ideas of a learner, deep learning penetrates and affects the learner’s fundamental values and beliefs. Deep learning involves conceptual re-organization; in surface learning nothing of importance in the learner’s mind changes. Deep learning is carried into the future and affects decisions and problem solving; deep learning transfers from the original learning situation to new situations. Surface learning is the opposite – it doesn’t transfer. Deep learning is achieved through thinking about the subject matter; surface learning involves rote memorization. In fact, deep learning means that a person can think about the new ideas learned and can think with these ideas – the new knowledge becomes operational - it is active and useable knowledge. Surface learning is inert, floating on the surface of the mind, and a person’s thinking processes and problem solving do not incorporate the new knowledge. Hence, deep learning creates practical knowledge – knowledge that can be used – whereas surface learning is the accumulation of trivia. Deep learning also connects with self-awareness, reflection, and meta-cognition; when individuals engage in deep learning, they think about their own thinking processes and beliefs. Surface learning occurs without self-reflection. Finally, deep learning is usually associated with an intrinsic motivation to learn and the associated emotional affect is positive. Surface learning is extrinsically motivated (e.g., to pass a test) and the associated emotional affect is frequently negative, involving anxiety, fear, and stress. Deep learning is an active and exhilarating process; surface learning is more passive and often felt as mere drudgery.¹¹ All these qualities of deep learning apply to the type of knowledge possessed by wise individuals.

Another important quality of deep learning that connects with wisdom is what Patricia Arlin calls “the art of problem finding.”¹² The deep learner is an inquisitive soul; questions and perplexities frequently emerge in the deep learner’s mind, guiding the process of study. Although knowledge could be described as a collection of facts, answers, and conclusions, this would turn knowledge into a static and closed system. Of course, we do learn answers and facts in the educational process and throughout life, but we may also learn new questions, as well as new ways to ask questions and state problems; our capacity and drive for intelligent interrogation may increase. This point helps us to understand what motivates life long learning; human minds “come alive” in learning when questions are asked and problems are posed. This interrogative capacity and inclination is what drives a life of learning. Life long learning does not take place in a mind possessing only answers without any puzzles or perplexities. Active knowledge is not simply a set of answers; it is a dynamical system that self-stimulates its own continual growth. It does so through wonder

and asking questions. This quality of active inquisitiveness is also characteristic of wisdom. Copthorne Macdonald identifies a “knowledge seeking” attitude as one of the five defining features of wisdom¹³ and the psychologist Martin Seligman includes curiosity and love of learning as key qualities of wisdom.¹⁴

On a related point, the psychologist John Meacham has proposed that wisdom involves a balance of doubt and knowledge.¹⁵ Due to the uncertainties of life, human knowledge is inherently fallible and the wise person recognizes the limitations of what he or she knows. As Meacham argues, in a truly growing mind, the more we know, the more we realize we don’t know. As knowledge grows, it brings with it more answers, but also more questions and doubts. For Meacham, wisdom is a balancing between the two extremes of excessive confidence in having all the answers and excessive caution where everything is doubted. Wisdom is fundamentally an attitude toward knowledge – a reasonable sense of humility and openness to ideas and advice, as well as the capacity to admit mistakes. Contrary to the stereotype of the wise person having all the answers, the wise person acknowledges the uncertainty of things and is actually curious, non-authoritarian, aware of his or her limitations, filled with questions, and consequently active in the pursuit of new knowledge. Open-mindedness is a central trait of wisdom.¹⁶ In a world of rapid change and innovation, increasing complexity, and a multiplicity of viewpoints, conviction needs to be tempered with caution and open-mindedness.

Another key dimension to the knowledge base of wisdom is that it involves highly developed practical knowledge - “the ability to make sound choices, good decisions.”¹⁷ Recall that knowledge acquired in deep learning – the foundation of wisdom - is usable knowledge that transfers to new situations and to solving problems. Paul Baltes defines wisdom as an “expert knowledge system” on the “fundamental pragmatics of life” dealing with “important but uncertain matters in life.” (Note the inclusion of uncertainty again.) Baltes has researched three fundamental types of tasks pertaining to wisdom: Life planning, life management, and life review. All these practical tasks involve expansive temporal consciousness, in regard to making sense of the past and the future, and applying this knowledge.¹⁸

Aside from its practical dimension, another often cited quality of wisdom is that it is synthetic. Wisdom involves an integration of knowledge – a big picture of reality where the main features of reality are pulled together. The theoretical and abstract are integrated with the practical and concrete. The lessons of the past are applied to the present and the future. There is a synthesis of the whole and the parts – seeing the big picture but connecting it to the particularities of real life. Wisdom also entails seeing the relationship between oneself and others – wisdom is not self-centered, and this capacity supports the ethical dimension to wisdom. The “other” is not ignored in the thinking of the wise person; the wise person shows compassion and empathy toward other people. Seligman lists “social-personal intelligence” and Orwoll and Perlmutter identify “understanding people” as important qualities of wisdom.¹⁹ Also, wisdom is frequently seen as involving an understanding of the connection between the self and nature, if not the cosmos as a whole. Following Don Cochrane’s definitions of “civic” and

“cosmic wisdom”, the wise person attempts to live in harmony and resonance with other people, nature, and the cosmos.²⁰ Cultivating a synthetic and holistic understanding of reality is especially important in addressing the global and ecological concerns of today and is a strong counter-measure to the excessive self-centeredness within popular culture.²¹

Thinking and Virtue

Aside from deeply learned knowledge, a second key cognitive feature of wisdom is highly developed thinking skills. In this regard the study and practice of “critical thinking” is essential to understanding the nature of wisdom. The idea of critical thinking, as developed by the American Philosophical Association and the Critical Thinking Consortium, refers to those standards and practices that make for sound thinking. Richard Paul and Linda Elder list the following standards: Clarity, accuracy, precision, relevance, depth, breadth, fairness, significance, and logic.²² The standards of critical thinking provide criteria and guidance for creating and evaluating sound arguments and theories and statements of belief. The literature on critical thinking also provides a systematic description of the main processes involved in thinking, such as analysis, synthesis, evaluation, and logical inference, including both deduction and induction. The study of critical thinking deals with the nature of thinking and the standards for good thinking.

First off, we should note that there is an intimate connection between critical thinking and deep learning, and consequently wisdom. Not only is deep learning associated with the love of learning, it is also associated with a passion for thinking. Thinking, in so far as it is associated with knowledge acquisition, is experienced as an intrinsically rewarding activity. Good critical thinkers also love to think and think about the significance of what they are learning. As with deep learning, there is a positive motivational-emotional dimension associated with good critical thinking. Cognition and affect are inter-connected.²³

There is also an ethical dimension to critical thinking. The American Philosophical Association describes the ideal critical thinker as “...open-minded, flexible, fair-minded in evaluation, honest in facing personal biases, prudent in making judgments, willing to reconsider,...diligent in seeking relevant information,...and persistent in seeking results which are as precise as the subject and the circumstances of inquiry permit.”²⁴ Note that the list of qualities includes fair-mindedness, honesty, and prudence, which are ethical virtues. The internalization of the spirit or philosophy of critical thinking brings with it an ethical dimension – the belief and practice of a set of virtues.

Along similar lines, Paul and Elder interpret certain key motivational dispositions of the good critical thinker as “character traits,” and describe these character traits as virtues.²⁵ Paul and Elder list eight character traits or virtues associated with critical thinking along with their opposites: 1) Intellectual humility vs. intellectual arrogance; 2) Intellectual courage vs. intellectual cowardice; 3) Intellectual empathy vs. intellectual closed-mindedness; 4) Intellectual autonomy vs. intellectual conformity; 5) Intellectual integrity vs. intellectual hypocrisy; 6) Intellectual perseverance vs. intellectual laziness; 7) Confidence in reason vs.

distrust of reason and evidence; and 8) Fair-mindedness vs. intellectual unfairness.

Virtue and ethical values are central themes in understanding the nature of wisdom. As Macdonald suggests, and as was noted above, compassion and concern for others is one of the key qualities of wisdom. We also see that there is a set of supportive virtues connected with critical thinking and, consequently, wisdom. Not only is wisdom the application of knowledge toward ethical ends, but it is supported by a set of related ethical virtues such as humility, fair-mindedness, integrity, and courage.²⁶

Self-reflection is another feature of critical thinking that is relevant to understanding wisdom. Good critical thinking entails thinking about thinking; that is, self-reflecting and evaluating one's thinking processes, assumptions, and beliefs. The Foundation for Critical Thinking includes in its definition of critical thinking the following: "The art of thinking about your thinking while you are thinking in order to make your thinking better..."²⁷ This capacity corresponds with the process of meta-cognition in deep learning; deep learning not only involves thinking about the subject matter but thinking about how you think about the subject matter. Also, to recall, in deep learning one's core beliefs and values are confronted and sometimes self-consciously altered due to new information and ideas. Deep learning and good critical thinking stimulate self-awareness.

Paul and Elder argue that the essence of critical thinking is overcoming egocentric thought.²⁸ Egocentricity involves being exclusively concerned with satisfying one's own personal desires and goals and protecting and justifying one's beliefs. Egocentric thinking is biased, closed-minded, and prejudicial. Egocentricity involves having a narrow and singular perspective on life and doing whatever is necessary to serve and reinforce this limiting perspective. Paul and Elder state that in order to counter egocentricity, one must become aware of and scrutinize one's biases and limiting perspectives - which is what critical thinking is all about. So critical thinking expands and liberates the mind by raising critical self-consciousness and facilitating the transcendence of cognitive constraints in the human mind. Self-reflection and self-transcendence are also key features of wisdom facilitated by thinking about one's thinking and one's beliefs.²⁹

There are two related types of thinking that are also highly relevant to understanding wisdom. First, there is dialectical thinking, where opposing points of view are considered, evaluated, and synthesized. Dialectical thinking generates balance and openness in the knowledge base of wise people - it acknowledges multiple points of view yet strives toward reconciliation. Second, there is reflective thinking. Based on the research of Patricia King and Karen Kitchener, reflective thinking is the highest form of reasoning, decision making, and knowledge in the human mind. They propose that humans go through three stages in their cognitive development: Initially, knowledge is seen in an absolutist and closed framework based on authority; knowledge and beliefs are certain. Later, as the human mind develops, alternative ideas and values are acknowledged and knowledge become relativistic; in stage two, the human mind recognizes multiple views and becomes open. Finally, in the reflective stage, while acknowledging the element of uncertainty and a multiplicity of viewpoints,

the human mind, through comparative evaluation, is able to come to thoughtful conclusions regarding the best idea among many different possibilities. Knowledge becomes thoughtful, combining openness and commitment.³⁰ This is a key quality of wisdom.

Global Awareness and Multiple Modes of Understanding

A common view presented in science and philosophy is that there are different modes of thinking and understanding in human beings. One frequently stated theory is that the most fundamental division in human understanding can be described as a polarity between holistic/visual and analytic/linguistic modes of thought. This basic polarity has also been identified as the difference between right and left cerebral brain functioning, as well as the difference between “feminine” and “masculine” modes of thought.³¹

The psychologist Richard Nisbett in *The Geography of Thought* has proposed a basic contrast in modes of thinking between Eastern and Western cultures and supports his view with a huge amount of experimental data collected over the past couple of decades across several continents.³² The basic contrast in human thinking that Nisbett describes aligns closely with the other bi-polar models of human cognition mentioned above. According to his research, Easterners tend to see reality as a circle, prefer dialectical logic, look for balance, see the whole and the context of things, and arrive at both/and conclusions. Westerners see reality more as a line, prefer linear logic, take a side, isolate the object from its context, analyze the whole into parts, and arrive at either/or conclusions. The West emphasizes individuality and autonomy; the East emphasizes community and interdependency.

Nisbett argues that each mode of cognition has both strengths and weaknesses and that human thinking and understanding are best served if both modes are utilized in problem solving, decision making, and the quest for knowledge. Similar arguments have been presented regarding right versus left brain thinking, visual/holistic versus linguistic/analytical, mythic versus logical, and feminine versus masculine modes of cognition.³³ The human mind has broader and richer capabilities when it utilizes both modes of understanding and human society would function better if the two fundamental modes achieved a greater balance and integration in human affairs. This idea strikes a fundamental chord with theories of wisdom - wisdom involves both holistic intuition and analytical linear reasoning.³⁴

The incorporation and integration of both fundamental modes of cognition addresses a number of contemporary challenges and issues. First, it supports a balanced process of ongoing globalization, in that it reflects both Eastern and Western preferences in modes of thinking and social values.³⁵ Second, to whatever degree these two modes capture gender preferences in cognition, it supports a more balanced representation of the different modes of understanding between men and women.

It seems clear that wisdom should encompass cultural diversity and global awareness, cognitive balance, and flexibility in modes of understanding. If

wisdom entails getting the big picture of things, then understanding both Eastern and Western ways of thinking is essential. Expanding further on the theme of synthetic knowledge, clearly intuition and reason, holism and analysis, vision and language, individuality and community, and harmony and progress need to be brought together into a coherent whole within a contemporary theory of wisdom.

Enlightenment

Wisdom and enlightenment have been central and related concerns within the history of religion and spirituality. In his book *The Next Enlightenment*, Walter Anderson presents a theory of enlightenment that aligns with several key features of wisdom. Anderson describes enlightenment as an expansion of consciousness – a liberation from mental constraints. He also sees it as involving the experience of “oneness” and connectedness, where the conceptualized boundary between the self and the world is transcended. As Anderson notes, the boundary of self and other is frequently a protective and defensive posture, as a way to preserve stasis and prevent change within; enlightenment is the overcoming of this ego-defensive state. Enlightenment is a form of transcendence – of the capacity to stand back from everyday experience and gain a broader view of things. Enlightenment obviously impacts self-consciousness; in standing back, the self is put in perspective. For Anderson, enlightenment frees the person from the mental constraints of the self, and for him this is critically important, for he believes that the main cause of contemporary social problems is excessive self-centeredness.³⁶

Anderson sees a new and globally pervasive enlightenment as the next cognitive stage in evolutionary development of the human species. Enlightenment is not a state reserved for a privileged few, but actually may be a direction toward which the entire species is heading. In the past there have been “enlightened ones” who attempted to communicate their discoveries to others, and over the centuries, as Anderson recounts, there has been a series of enlightenment movements that offered liberation, transcendence, and more advanced modes of experience and cognition. But this may simply be a prelude to a more general evolutionary advance for all humanity.³⁷

The Expansion of Consciousness

A frequent criticism of modern society is that individuals are too egocentric and narrowly focused and too concerned with the immediate “here and now.”³⁸ This localized and restrictive consciousness runs counter to the increasing need to understand the big picture in our contemporary times. In order to understand both ecological and global issues, highly important and pressing concerns of our time, we need to expand and enrich our awareness of the world around us. Further, the rapid rate of change requires that we become more thoughtful and conscious of the future, as well as the past (in order to better understand trends and patterns of change). We also need to expand our temporal consciousness. Third, our pluralistic world requires that we become more cognizant of our

personal biases, cultural and cognitive, and more knowledgeable of the diverse views of others. Heightened self-awareness, in fact, is often facilitated by a heightened awareness of the “other” – we see our biases by encountering and understanding another person’s way of looking at things. Self-awareness and awareness of the other are a reciprocal reality. As Csikszentmihalyi and Rathunde argue some of the most distinctive features of wisdom are the capacities to look at long-term consequences, to see reality holistically and ecologically, and to realize both heightened self-consciousness and awareness of other points of view. In particular, foresight is commonly listed as a central feature of wisdom. Wisdom is “an antidote to knowledge that pursues selfish, short-term, and limited goals.”³⁹ Our contemporary challenges require a multi-dimensional expansion of consciousness that typifies wisdom.

Contemporary Science and Epistemology

In the West the rise and spread of modernity was associated with the emergence of modern science and the rational, empirical, and secular philosophy of the Age of Enlightenment⁴⁰ The core of modern science was Newtonian physics, which fitted well with the industrial mindset of modern Europe. As Sally Goerner describes it, Newtonian physics provided a “clockwork” model of the universe that was enthusiastically applied to many aspects of human society.⁴¹ Yet, beginning in the nineteenth century, various aspects of Newtonian physics came into question, and in the twentieth century, a new way of thinking about reality and knowledge replaced Newtonian science.⁴² Many of the new ideas of science are relevant to a contemporary theory of wisdom as well as the concept of the “New Enlightenment.” In describing the “new science” I highlight four themes each of which involves a rejection of a key idea in Newtonian science.

First, whereas Newton envisioned nature as a stable harmony, contemporary science views nature as evolutionary and dynamical. Where Newtonian science saw truth in absolutist, objective, and static terms, we now more fully realize that knowledge is evolutionary and transformative. In the new science, both reality and knowledge are dynamic and growing.

Second, Newtonian science described the physical objects of nature as discrete and possessing intrinsic qualities, emphasizing the analysis of nature into distinct parts. Also, objective detachment was the professed ideal in the study of nature. Twentieth century science though describes the objects of nature in relational terms; the entities of nature are open systems and interdependent. Nature is a vast multi-leveled ecological network of reciprocities. Nothing stands alone and everything is entangled and interpenetrating. If all of nature is interdependent, then the knower can not observe and describe reality from a detached position. The ideal of absolute objectivity is a chimera. Knower and known are reciprocal realities, intertwined in the act of knowing.

Third, coupled with its emphasis on analyzing nature into parts, Newtonian science saw both reality and knowledge as summative aggregations. Bigger wholes in nature are simply collections of parts. Knowledge grows by adding more facts and principles on top of what already is known. Yet, contemporary

science has come to realize that growth and evolution often involve re-organization and re-definition of the parts – the parts do not simply add together. Knowledge also often grows through conceptual re-organization – old “facts” and “theories” are frequently re-defined, if not discarded. Nature and knowledge evolve through extinction, emergence, and re-organization.

Fourth, whereas Newtonian science aspired to certainty, modern science realizes that even its laws of nature and presumed hard facts are contingent propositions. Contrary to the hope of Newtonian science, we can not know reality or predict the future with absolute certainty.⁴³

How do these new scientific ideas illuminate the nature of wisdom? First, as many investigators have argued, wisdom is neither static nor detached. Wisdom is inherently dynamical and evolutionary. As the educator Parker Palmer argues, knowledge is a process – truth is a dynamical reality.⁴⁴

Second, wisdom entails seeing the interconnection of all things, including the self and the other. Wisdom is an “open system” - an active engagement with reality. The wise person remains open to new realities, new perspectives, and new information. If detachment promised pure objectivity, we now see that absolute objectivity is an impossible goal. The personification of wisdom as a guru sitting on top of a mountain needs to be jettisoned and replaced.

Third, because the knower brings to the act of knowing a set of assumptions, concepts, and beliefs that impact the experience of “what is known,” the wise person pursues heightened self-consciousness and self-reflection. To recall, self-assessment and thinking about one’s thinking are essential activities within sound thinking, and heightened self-awareness is a distinctive feature of wisdom.

Finally, the idea that growth often occurs through re-organization supports the research finding that deep learning involves penetration into core beliefs and often significant change and re-organization of such core beliefs. The growth of deep learning, and hence wisdom, is not simply a layering of more information on top of what already was there – this is surface learning. In enlightenment, the whole world is seen differently. Wise people change their minds.

The Holistic Nature of Wisdom

Wisdom is not something a person is born with; wisdom is a product of experience and learning. Wisdom only comes through failure and learning from mistakes in life, and listening to others. As Seligman notes, virtues in general are a result of effort, experience, and accomplishment. The pursuit and growth of wisdom involves an active and continual effort of will.⁴⁵

At least as far back as Aristotle, the pursuit of wisdom has been strongly connected to human happiness and psychological well-being – the life of wisdom is intrinsically rewarding. More recent writers, such as Csikszentmihalyi and Monika Ardelt, have reinforced and supported this idea with empirical research on the connection between wisdom and overall life satisfaction.⁴⁶

Further, we have seen that cognition and emotion are intertwined in both deep learning and critical thinking, and researchers in wisdom have presented

similar arguments that wisdom involves the interdependent growth of cognitive and emotional processes.⁴⁷ Wisdom is a holistic integration of the thinking and feeling dimensions of the human mind – a synthesis of heart and intellect.

As noted above, wisdom involves the balance and integration of different modes of thinking and understanding, of synthesizing different points of view, of pulling together knowledge with action, and striking a balance between knowledge and doubt. As contemporary investigators James Birren and Laurel Fisher suggest, wisdom can be described as a fundamental set of psychological balances: The cognitive balance of knowledge and uncertainty, the volitional (motivational) balance of impulsive action and contemplative inaction, and the affective balance of detachment versus emotionality.⁴⁸ Sternberg also proposes a balance theory of wisdom. Wisdom involves a balancing of intra-personal, inter-personal, and extra-personal concerns; of long and short term consequences and goals; and of adaptation, changing, and switching environments. All of these balances involve open and reflective thinking, looking at the big picture, and integrating multiple considerations into a whole.⁴⁹

At a holistic level, wisdom is associated with a set of character and personality traits; in fact, according to some, wisdom is the highest level of self-development, involving exceptional self-awareness and psychological integration, as well as self-transcendence.⁵⁰ Macdonald argues that a certain type of personality is associated with wisdom, and that wisdom is connected with a distinctive set of other values and virtues. He suggests that wise people possess self-actualizing personalities, experience awe and wonder, respect the individuality of others, and do not conform to the general social expectations of their culture. They live by a set of values including wholeness, truth, honesty, justice, goodness, beauty, and even playfulness.⁵¹

Wisdom and Education

Surface learning divorced from thinking and application will not serve the future well - neither will the acquisition of knowledge divorced from value and virtue. Sternberg lists a variety of ways to support and teach wisdom and there are also techniques and principles for facilitating deep learning and thinking skills in educational settings.⁵² These principles and methods form the basis of an educational pedagogy for our contemporary world. Some of the key ideas are: Explain the concepts of wisdom and deep learning and discuss their value – establish an educational culture and community that values thinking, deep learning, and wisdom; reinforce thinking as a way to address and solve problems in life; focus on problem clarification and problem solving and the application of knowledge to life; discuss values and how values affect decision making; emphasize the interdependency of all aspects of reality, especially between oneself and others; practice dialectical thinking and the taking of alternative points of view; practice reflective thinking and the synthesizing of alternative interests and values into concepts for the common good; and make students' beliefs and values visible and engage them in debate and discussion on their beliefs – require self-reflection and self-assessment in students. Teachers should

pursue professional goals in line with the growth of wisdom, attempt to role model critical thinking and wisdom in teaching, and provide students with readings on wise people from the past and the present.

Wisdom and the New Enlightenment

The futurist Rick Smyre calls for a “Second Enlightenment” involving new concepts and principles of thinking in order to thrive in the future.⁵³ The new ideas in science, according to Smyre and others, provide the basis for this new way of thinking and dealing with our contemporary problems and challenges.⁵⁴ In some important ways Smyre’s theory of a “Second Enlightenment” corresponds with Anderson’s view of the “Next Enlightenment.” I would argue that wisdom encompasses many of the mental abilities and conceptual principles described by Smyre and Anderson and, hence, at the core of the New Enlightenment should be the pursuit of wisdom.

Smyre compares and contrasts principles of the first European Enlightenment with a proposed set of fourteen principles of thinking for the Second Enlightenment. At least seven of his new principles revolve around the theme of connectedness and interdependence (contrasted with the first Enlightenment emphasis on independence and autonomy). Also, the themes of mystery, uncertainty, and change and transformation each appear in a couple of his principles. In essence, Smyre’s set of principles align closely with the themes described in the previous section on modern science and epistemology.

There are various parallels between the ideas of Smyre and Anderson. Anderson highlights the theme of connectedness and critiques the psychological stance of maintaining a sense of ego-separateness with the world. Further, he supports an evolutionary perspective on reality and the development of the human mind. And he believes that the challenges and problems facing our world today call for a new way of perceiving and understanding the world.

What is important to highlight about Smyre’s ideas is that what constitutes an appropriate and empowering framework of knowledge is contingent upon the unique challenges and issues of the time. During the first European Enlightenment, the principles of rationality, autonomy, and mechanism provided a philosophical framework that advanced human society and our understanding of nature. Yet, as our scientific understanding has transformed and our social problems and issues have evolved, a different framework of thinking is needed.

Human knowledge is an evolutionary process. Belief systems that seemed valid in earlier times may be contradicted by new evidence and improved modes of thinking. The argument of Smyre and other contemporary writers is that the theory of knowledge and reality based on principles such as connectedness and interdependency, evolution and transformation, and mystery and uncertainty provides the best present understanding of reality, and appropriately and constructively addresses the challenges of today. Both Macdonald and Csikszentmihalyi specifically identify evolution and holistic interdependency as essential concepts within a contemporary vision of wisdom. Since an essential feature of wisdom, according to Macdonald and other writers on wisdom, is a

valid and comprehensive understanding of the big picture of reality, as best as can be determined at a given time, then the framework and content of knowledge underlying wisdom should reflect the newest advances in science and the study of human society and humankind. As I have explained in this article, our contemporary understanding of wisdom embodies such principles.

Summary and Conclusion

The main features of wisdom cover a set of general categories: the cognitive, motivational-emotional, ethical, and personal-social. These features are not absolutely distinct, but mutually supportive and interactive.

The cognitive features include deep learning and understanding; the synthetic and expansive capacity to see the big picture, including the cosmic and global, and an understanding of the connectivity of things; temporal expansiveness, involving the ability to see long-term consequences of actions; a highly developed practical ability to apply knowledge to concrete problems in life; excellent thinking skills, encompassing critical, dialectical, and reflective thinking; an integration of multiple modes of understanding, including the rational, intuitive, and mythic; the capacity to see multiple points of view; a self-stimulating, dynamic, evolving, open, and contingent system of knowledge balanced and driven by questions, doubt, and uncertainty; and knowledge of contemporary scientific theory and contemporary problems and challenges.

The motivational-emotional features include curiosity, inquisitiveness, wonder, engagement with reality, and a love of learning and thinking; compassion and empathy for others; and a positive emotional-motivational state – a sense of happiness - associated with the pursuit and use of wisdom.

The ethical dimension of wisdom involves the application of knowledge, guided by values and ethics, to the well-being of both oneself and others; and the connection and support of other virtues, such as courage, integrity, fair-mindedness, compassion for others, humility, and reverence.

The holistic personality dimension of wisdom includes a sense of connection between the self and other people, human society as a whole, nature, and the cosmos; exceptional self-awareness and the capacity for self-reflection; self-transcendence and a widening of the egocentric; self-accomplishment and an act of will that requires continual effort; and a self-actualizing type of personality.

This integrative array of qualities provides a set of ideals for the future of education, a set of capacities and principles for meeting our contemporary challenges and for guiding human society, and a vision for the future evolution of the human mind.

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