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# Wisdom, Complexity, and Adult Education: Emerging Theory and Meanings for Practice

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## **Wisdom, Complexity, and Adult Education: Emerging Theory and Meanings for Practice**

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**Keywords:** wisdom, complexity science, and spirituality

**Abstract:** This paper discusses various conceptions of wisdom in order to foster theory development of what it means to access and act with wisdom, as well as to educate adults in a way that fosters wisdom in a complex world.

We live in an increasingly complex world in which the quest for how to access and act with wisdom seems to be correspondingly more elusive. The quest takes on new significance in this complex era of technology, scarce resources, and the constant pressure to do more with less. Discussions of wisdom were frequent in ancient and mediaeval periods and attaining wisdom has been an interest of many of the world's great religions and indigenous cultures (Smith, 1994). Surprisingly, although the very root of the word 'philosophy' means 'love of wisdom,' there is little attention to wisdom in philosophy today (Ryan, 2008).

Within North American adult education circles, discussion of wisdom and how we might strive for it in our own lives, or educate adults for wisdom, is relatively absent. It receives some limited attention from adult education in Europe as summarized by Jarvis (2011). The University of Chicago conducts an interdisciplinary project to define and study wisdom, and many US educators and psychologists following the work of cognitive psychologist Sternberg (Sternberg & Jordan, 2005) are discussing what it means to educate for wisdom. From a neuroscience perspective, Goldberg (2005) has discussed wisdom and learning. Although there has been a scarcity of discussion of wisdom within adult education circles, this is the focus of the new sourcebook, *Adult Education and the Pursuit of Wisdom*, (Tisdell & Swartz, 2011).

### **Related Literature in Theoretical Development**

There are two primary bases we draw on in considering a theory in progress on wisdom for adult education: the broader philosophical literature, and synthesis of results from research studies. We suggest points of intersection with complexity science. Complexity science draws from multiple disciplines and takes an ecological systems theory view of the world (Capra, 1994)). From this perspective, wisdom might be considered an emergent phenomenon, possible at multiple systems levels. Naturally self-organizing systems (learners, at the individual systems level) are capable of a wide range of self-organizing processes, both stable and flexible, that connect to the capacity for wisdom. Building new patterns of connection constitutes learning.

### **The Wisdom Literature**

There are different perspectives on wisdom in the literature, some of which connect directly with spirituality and religion, others that connect to adult development, still others that are more connected to professional practice. Most take either a philosophical or religious perspective on wisdom, though some also connect to neuroscience and complexity science. Even the studies grounded in science can be seen to harmonize with aspects of the other perspectives. In western tradition, writings about wisdom reach back to ancient Greece, and the

most consistently quoted sources are Plato's *The Apology* and Aristotle's *Nicomachean Ethics*.

In a current analysis of these sources, philosopher Ryan (2008) uses ideas from contemporary philosophy to challenge traditional interpretations concluding with a revised theory of wisdom: the wise person has extensive factual and theoretical knowledge (drawn from science and the arts); knows how to live well; is successful at living well (identifies and responds successfully to dangers and opportunities); and has very few unjustified beliefs. Ryan specifies that her theory ignores the controversial question of whether living well requires moral virtue. This is notable, since the empirical studies from social science and biology include attention to qualities of moral virtue. In Ryan's theory there is no mention of divine wisdom or connection beyond the interpersonal. The highest wisdom is theoretical, associated with science. In fascinating contrast are the writings of adult educators about educating for wisdom (Tisdell & Swartz, 2011) where wisdom is understood broadly in connection with wholeness, and interest in virtue and transcendent wisdom are apparent, more in line with ancient thinking.

Many authors recount Plato's story of Socrates, respected for his knowledge and wisdom, who denied being knowledgeable or wise. We understand this to mean that all knowledge is partial. This tension of wisdom as having knowledge but not having knowledge connects wisdom to the notion of paradox, a subject of interest for many of the world's religious wisdom traditions. Socrates explained that the Oracle at Delphi had called him wise in order to illustrate that the wisdom of men is worthless, and only the god is wise. For Socrates, wisdom (or in ancient Greek, *sophia*) has to do with something divine and unchanging, unlike constantly changing bodily sense perceptions. No god would seek wisdom, wrote Plato, because a god is already wise. Both Plato and Aristotle identified wisdom as a quality of mind and one of the basic virtues. Such wisdom unites knowledge and action, cannot be misused, and pursuit of it is an aspiration to know what is good. They thought we are born with the abilities to acquire wisdom (just as we are born with a capacity to self-organize). They agreed that wisdom is the most important virtue but disagreed over division of its speculative and practical aspects.

Plato, and later writers following his tradition, treated wisdom as one entity. The resulting conceptions of wisdom included calm repose, achieving freedom from desires, focus on daily life, knowledge infused with conscience, understanding the whole creation and one's place in it through purification and renewal of the inner self (Adler, 1952). As discussed by Swartz (2011) these are ideas often associated with Eastern religious traditions of Hinduism and Buddhism, where *prajna*, Sanskrit for wisdom, is associated with mindfulness, a natural state of awareness present in everyday embodied experience. Also called to mind is the Jamesian concept of transcendent wisdom and the search through meditative practice to experience the hidden wholeness of the universe, as well as the 'open heart' described in unitive contemporary sapiential studies. Siegel (2010) in his description of 'mindsight' makes these ideas practical in a way that can be useful for educators. Adult education could make worthwhile connections to these ideas through embodied learning, as well as to the role of intuition as per the following discussion.

Aristotle categorized wisdom as an intellectual virtue, and the others as moral virtues. Moral virtues exist at the mean, a balance between two vices, and their achievement is through constant movement away from one extreme toward the other, following perception and not reasoning. Dynamic movement to reach moments of homeostasis in virtue might be understood as a self-organizing process, making a connection with complexity science. Flows of states of

activation between extremes of sameness and variation, order and chaos, comprise a system's capacity to 'self organize,' or continually adapt in a way that not only fosters survival, but builds new and greater capacity for life (Capra, 1994). Aristotle also identified five intellectual virtues: three types of wisdom, ability to produce art, and intuition. *Sophia*, the highest form of wisdom, combined intuition and scientific wisdom in the contemplation of eternal things, creating a 'divine science' of the highest, most difficult knowledge. This knowledge has no practical utility and is knowledge for its own sake. *Phronesis*, practical wisdom to live a good life, is present only when the moral virtues of temperance, courage and justice are also present. It requires experiences to develop, and provides for *sophia* to come into being. Only a contemplative type of life is associated with intellectual virtues, with wisdom, and Aristotle named Wonder as the beginning of natural wisdom, the ultimate goal of human inquiry. Swartz (2011) notes that contemporary lived religion, in particular nature religion, is sourced in Wonder. Recent returns to shamanism might fit here as well. Far from purely rational, Greek philosophy can inform wisdom studies that give space to mystery and the non-rational, never linking to specific religion.

Adler (1952) explains that some later writers building on Aristotle emphasized scientific wisdom, using the Latin term for wisdom, *sapience*. All sciences taken together came to be identified as human wisdom. Aristotelian scholarship through Christianity reasoned that scientific wisdom and *sophia* were best represented by sacred doctrine based on revelation, emphasizing supernatural wisdom as a divine gift, as described in the *sapiential texts* (wisdom books of the Hebrews). There, Fear of the Lord is the beginning of wisdom, and fear is sometimes experienced as Awe. Note that Wonder, Fear and Awe are all emotions. Much of the literature exploring wisdom in the Abrahamic religious traditions refers to the Proverbs 24 reference, where Wisdom is building *her* house. It distinguishes *Sophia* (*Chokhmah* in Hebrew), the highest form of wisdom in the transcendental sense, from practical wisdom and names it sapiential knowledge, meaning either the wisdom of God or specific knowledge leading to wisdom. Given that numerous discourses on wisdom focus on religion and spirituality, these are places for connection to discussions of spirituality in the field of adult education (English & Tisdell, 2010; Tisdell, 2003).

A fascinating comparative analysis of Confucian and Israelite wisdom literature by Yao (2006) presents the wisdom journey as individual or collective enterprise, using a lens that resonates with systems understanding. Both traditions recognize the need for transmission of specific wisdom knowledge through teaching. Yao (2006) describes wisdom as process around a central constant dynamic tension between human and divine. Knowing is connecting, wise ones make skillful use of connections, wisdom's essence is concern with relationships in the context of inter-relatedness. The concluding common framework is reminiscent of transformative learning theory that is focused on how individuals grow and change (Cranton, 2006; Mezirow, 2000; Taylor & Cranton, 2012).

### **Studies of Wisdom**

While wisdom has long been related to the domains of philosophy and religion, there have also been attempts to study wisdom empirically in the biological and social sciences, especially in cognitive psychology, where the focus has been on practical wisdom or *phronesis* (Hall, 2010). Studies examine how people perceive wisdom in different cultures and acquire wisdom through culturally distinct processes of integration and embodied action (Yang, 2012), how people develop the wisdom of expertise in the pragmatics of life (Baltes & Staudinger,

2000), the ways wisdom connects to intelligence and the aging process and what it means to educate for wisdom from a cognitive science and practice based perspective, as well as how it connects with creativity (Sternberg & Jordan, 2005)

More recently, wisdom appears in neuroscience and these studies harmonize with complexity science through neural networks theory. Meeks and Jeste (2009) reviewed research on the six subcomponents of wisdom: behaviors of empathy, compassion, altruism; rational decision making based on pragmatic knowledge of life; emotional stability; insight / self-reflection; tolerance of divergent value systems; decisiveness when facing uncertainty. They concluded with a proposed model of contributing pathways in the brain. Their six components are similar to the social science model of practical wisdom (Hall, 2010).

Goldberg (2005) analyzed the development of wisdom, noting the paradoxical emergence of brain changes that support wisdom in old age during decline. He identified that wisdom exists in complex patterns of connection across multiple areas of the brain cortex, and that wisdom is a decision making process that relies on pattern recognition. Examining complex patterns at other systems levels, Swartz (2011) reports that interpersonal neurobiology is linking wisdom with the natural aging seen in elders' storytelling expertise and the role they play in cultural transmission and preservation, along with theorizing about wisdom's roots in pre-conscious thought, with connections to cultural evolution and ritual practices. There is also interest in the neurobiological correlates of transcendent wisdom, linked with spiritual seeking. In adult education, relatively recent discussion connecting complexity science and transformative learning (Swartz & Sprow, 2010; Tyler & Swartz, 2012) has implications for theory building about wisdom in connection with this body of work.

Our own adult education research also contributes some insights. One recently completed study (Swartz, 2010), grounded in complexity science and interpersonal neurobiology, examined nurses' embodied knowledge and embodied learning and uncovered findings that suggest emergence of clinical and personal wisdom. In this work, students engaged in embodied practices that encouraged mindfulness, body and self-awareness, and self-reflection. Through story-telling they made connections with each other within a shared professional culture. They experienced increased self and body awareness, better ability to calm themselves and manage negative emotions, greater embodied empathy and compassion for their patients leading to more assertive advocacy, and a more holistic perspective. These findings suggest that embodied practices combined with self-reflection can enhance the development of qualities associated with practical wisdom; that storytelling among peers about shared emotional and embodied experiences in the workplace can contribute to better emotional regulation in the work place; and the combination can enhance decisiveness in the face of uncertainty and increase acts of altruism. These outcomes are aspects of practical wisdom.

In the other research, Tisdell's ongoing international study of a multicultural group of adult educators, a follow up to an earlier study (Tisdell, 2003) both in the US and in Ireland, and the role of spirituality in their lives and work, finding a rhythmic balance between inner reflection and outer action emerges as a key component of aging well, in line with the research showing that wisdom requires action, not just positive feelings. For these participants, growth was intertwined with spirituality, and an aspect of growth was becoming more humble, a classic characteristic of wisdom. Central to their process of growing in wisdom were the emotion of love, the practice of listening to the 'inner voice,' and connectedness. All these factors are associated with wisdom, some practical and others more transcendent, which is not surprising

given that spirituality is the focus.

### **Toward A Theory of Wisdom and Adult Education**

Several key elements arise from the preceding discussion that need to be included in a theory of wisdom and adult education.

#### Accessing Wisdom

- Emotion and Intuition are integral elements of wisdom.
- Wisdom requires the ability to recognize patterns, even within complexity; see the whole.
- Enhanced inner connection, through self and body awareness, enhances outer connections.
- Culturally grounded meaning making and ritual are key.
- Intention is probably necessary.
- Seeking transcendent wisdom is a personal choice, the path uniquely patterned, embedded within a lifetime's web of interconnections.
- One must be able to tolerate ambiguity and the awareness of constant dynamic tensions.

#### Acting with Wisdom

- Virtue is present in terms of concern for the whole.
- Seeking wisdom is both individual and collective.
- Wise action is grounded in complex connections within and across all systems levels.
- External action begins with inner connection and is characterized by boundary crossings.
- Actions are expressions of seeking balance within dynamic tensions.
- Learn how to follow perception, not reasoning.

#### Educating to Foster Wisdom

- Teaching must include diverse experiences, beyond experience of task accomplishment.
- Emotion must be recognized as essential, elemental, always present, worthy of reflection.
- Incorporate embodied learning, storytelling, practices that enhance self/body awareness.
- Learning to recognize patterns and make decisions under uncertainty are worthwhile.
- Teaching must integrate subjective and objective, inner and outer knowing.
- There might be special knowledge required for wisdom; it might vary across cultures.
- Learning to recognize tensions, dialectics, and reflect on one's own patterns and processes of self-organization is useful.
- Education must aim to foster connections, within and across all systems levels.

We believe that an understanding of wisdom and what it could mean for adult education, requires an integrated theory that takes into account the relationship among the elements discussed above, and this is accomplished best through a complexity science theoretical grounding that is currently supporting transdisciplinary research and theorizing across many fields. This approach embraces the fact that each dynamic system and subsystem constantly re-organizes itself, in communication with its context or environment, in order to survive and thrive, whether that 'system' is a single living cell, a whole human being, or an entire society (Capra, 1994). In turn, the self-organizing system acts as context, or environment, for its points of connection. In other words, changing selves also change their environments. This

transdisciplinary, complex systems perspective requires drawing on components of the spiritual, the cognitive, the affective, and the embodied (all familiar concepts to the field of adult education) and the neuroscientific processes (less familiar in adult education) that are involved in the process whereby the organism (adult learner) continues to transform itself to become more whole and more wise in living in a complex world.

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