

A Theory of Intrinsic Learning: Fundamental Concepts

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Abstract

Learning methodologies that place the intrinsic knowledge and internal understanding of material at the center of instruction produce a more complete foundational and versatile understanding of subject matter than do traditional methods. Intrinsic learning is a universal approach to education that utilizes learning processes (the senses, perceptions, emotions, intellect, experiences, and aesthetics) all human beings have employed continually, at least to a degree, since birth. This methodology works to foster an understanding of our own intentional learning processes as well as to promote individual and collective harmony and well-being.

Keywords: authentic learning, aesthetic education, intentional self-development, learning process

1. Introduction

As the amount of information available to us expands rapidly, and each new decade requires we know more, and in a shorter period of time, the burden of instruction continues to be carried by educational institutions often having limited resources. New technologies have changed the face of education and shortened the learning curve for many topics, but our apparent faith in technology as an educational panacea may be misplaced; as well, traditional instructional methods may not be efficient enough to handle this increase in subject matter and complexity. While many academicians (and legislators) propose more technology as the answer to our educational dilemma and the budget problems accompanying them, we still find our students seemingly less prepared for living balanced and productive lives even as they appear to be more prepared for their careers (which are increasingly and heavily technology-related). Added to this dilemma, instruction in the arts and humanities, and the essential learning benefits they provide, are at an all-time low as parents (as well as teachers and legislators) seek additional instruction in math, science, and technology as a way of securing their own and their children's financial security (Hetland, 2013).

While this narrowly focused approach to education may be understandable, many have forgotten that the first goal of education is personal growth that leads to an understanding of the world. The traditional liberal arts and science education was intended to educate the individual for a good life, a productive career, and democratic citizenship; in short, to learn in a manner that supported general human prosperity (Dewey, 1991; Maslow, 1968; Rogers, 1969). The currently popular "job skills training" approach to university education (which is often a significantly less time-consuming process than what we have come to understand as a university-level education) may not be such a bad idea were we not facing a global dilemma in the quality of individual well-being as well as a crisis in human relationships of unparalleled proportions. Considering these facts, we may want to reconsider what we believe constitutes "valuable knowledge" in the twenty-first century.

What I offer in this paper is a shift both in educational philosophy and methodology that has some of its roots in a constructivist approach¹ to learning as well as in the principles of aesthetic education. Learning that places the intrinsic knowledge and internal understanding of material at the center of instruction produces a more complete foundational and versatile understanding of subject matter than do traditional methods. *Intrinsic Learning* is a universal approach to education since it utilizes learning processes all human beings have employed continually, at least to a degree, since birth. This approach works to foster an understanding of our own intentional learning processes as well as to promote an understanding of other individuals. These common natural learning processes produce a range of human conditions that tend to promote collective harmony and well-being.

The learning process is at the center of all human activity and is the first and most fundamental common behavior guiding intent and action. Educational methods based on a philosophy of learning more internal or intrinsic to one's individual nature promote human well-being which results in behavior that supports developmental growth. That is, we have a natural tendency to display actions that are evolutionary, or as Darwin (1981) states in *The Descent of Man*, that under "favorable conditions, [there is] some innate tendency towards continued development in mind and body" (p. 178). If the result of this human inclination is the guide to our future, what could be of greater influence on learning than an approach that puts central to the learning process that which we know the best—our own natural processes: the senses, perceptions, emotions, intellect, experiences, and aesthetics? It is our own natural tendencies and inclinations, *as a means of learning*, that are the most effective methodologies for insuring that learning supports growth and well-being, both individually and collectively.

2. Intrinsic Learning

What is the first "point of contact" for learning—the "first knowledge" most fundamental to an individual's understanding of a subject? Much of what we know best and are able to apply effectively is *that which we learn through a natural, persistent interaction with our environment*—this is considered "intrinsic knowledge" (Pappas, Carrier, & Kander, 2005, p.8). Intrinsic learning is natural, in that it uses one's senses, intellect, emotions, perception, experience, and aesthetics as primary tools for learning and persistent because our senses are being used at all times. On the other hand, what we learn through reading, listening, memorizing, or communicating with others is considered "extrinsic" (or external) knowledge. Most current methods of university instruction are extrinsic, and it is expected that students will apply their prior or existing understanding or knowledge of subject matter (intrinsic knowledge) to what has been taught extrinsically. Intrinsic approaches to learning naturally form the basis for extrinsic learning and, therefore, foster a better understanding of subject matter. Ultimately, intrinsic and extrinsic learning strategies work best when used in a complementary fashion, a topic I will address later in this article.

Academicians have long understood the value of learning methodologies that put the learner at the center of the process (Dewey, 1991; Maslow, 1968; Rogers, 1969). As well, institutions of higher learning have developed curricula that involve students *experientially* in course work (co-ops, internships, projects). Such intrinsic methodologies have been successful in most venues, but, unfortunately, little has been done to go beyond simple experiential learning to develop new learning philosophies that put the student in control of the intrinsic learning process. Why this is so is a mystery, since we all learned most of what we know using this method—that which we learned before our formal education began. As infants and small children, we learn using our own natural

¹ In general, a constructivist approach to learning focuses on utilizing information and current knowledge to inform the construction of new concepts, those that transform human intent and action.

everyday habits and tendencies, abilities, and experiences—the inevitable consequences of living—even as these were supplemented and directed extrinsically by those who raised us. It is remarkable what each human learns up to the age of five or so, but somehow this approach to learning is later replaced by formal extrinsic schooling.

Instruction in higher education is characterized by a philosophy that often marginalizes the individual in the learning process (with the notable exceptions of some instruction in English, theater arts, and art), in lieu of philosophies that instruct students to internalize material learned through extrinsic means (lecture, reading, discussion, memorization). These extrinsic methodologies are not, in themselves, bereft of great value, but as stand-alone methodologies, they often lack the personal and academic relevance necessary for students to understand and apply them in their lives and work. Most college students memorize material they soon forget, sitting through lectures they find of little personal or practical relevance, and taking test after test they often find unrelated to their personal development. Most faculty fear innovation (though few will admit this), have become narrowly focused on their disciplinary research or teaching, or are simply “too busy.” None of these excuses is acceptable. Faculty are largely at fault for the general decline in the quality and relevance of instruction in academia.

My approach to intrinsic learning is not the answer to the problems we find in higher education; it is, simply, an effective complementary approach to teaching and learning rooted in our natural tendencies and familiar learning processes. By understanding our own common human learning processes, we naturally tend to understand our own and others’ intents and actions.

3. Literature Review

That we learn intrinsically is not new to philosophers and psychologists (Dewey, 2004; Adams, 2001; James, 1950), especially those who have studied the processes children use to learn. Vygotsky (1962/1978) and Piaget and Inhelder (1972), for example, document the intrinsic character of the early stages of intellectual development throughout their works. What is unfortunate, however, is that few scholars have explored intrinsic cognitive development outside the childhood years or extended it to adult learning methodologies. Some writers have recognized the value these natural processes have in later learning (Rogers, 1969; Dewey, 1991; Csikszentmihalyi, 1993), but few have developed methods of using this approach intentionally in a formal university environment.

Abraham Maslow (1968) describes the learning process as beginning to understand “man’s natural tendencies...to tell him how to be good, how to be happy, how to be fruitful, how to accept himself, how to live, how to fill his highest potential” (p. 4). To Maslow, the learning process is internal—that one needs to understand one’s self and one’s own internal learning processes prior to attempting to understand those around us and the society in which we live. Throughout his works, Maslow (1968) describes the characteristics of healthy (or increasingly self-actualized) individuals; unfortunately, he provides few working methodologies for achieving this state of being other than to descriptively expound on the general role of the individual as intrinsically possessing an “increased acceptance of self, of others, and of nature,” and an “increased identification with the human species” (pp. 25-26). Near the turn of the century, Harvard’s A. Lawrence Lowell, adopting principles as old as St. Thomas Aquinas’ *De magistro*, suggested that true education was the “education of the self” (p. 268) and was dependent upon the student, not the professor, to achieve (Brubacher & Rudy, 1976). Alexander (2003) addresses learning style and educational objectives, stressing that education is an intrinsic process promoting community and human accord rather than ideological interests.

Carl Rogers (1969) was among the first academicians to effectively bring these intrinsic learning approaches to intentional behavior in or out of the classroom, noting that the individual is in control of the learning process and must take intentional developmental steps in order to experience growth. Rogers (1969) details an educational methodology for teachers, promoting an approach to learning defined by a “profound trust in the human organism and its potentialities” (p. 114), one that prizes students’ natural tendencies, where “learning becomes life” (p. 115). Rogers’ (1969) approach to teaching is intrinsic, where work is greatly characterized by “the facilitation of learning—how, why, and when the student learns, and how learning seems and feels from the inside...” (p. 125). He further expounds on a learning philosophy promoted earlier by Dewey and Maslow in which “a person learns significantly only those things which he perceives as being involved in the maintenance of or the enhancement of his own self” (p. 158).

Throughout John Dewey’s (1991) work are references to learning “based on natural tendencies” (p. 29) as those that promote individual and collective accord. In *Experience and Nature*, he discusses human experience as a fundamental source of “dealing with any and every genuine question, from elaborate problems of science to practical deliberations of daily life, trivial or momentous” (Dewey, 1959, p. viii). Dewey’s recommendations to educators have gone far to revolutionizing education, but his advice is focused primarily on internalizing only human experiences. Implicit in his work, however, is a broader intrinsic approach to learning, similar to that in the present discussion.

More recently, Schwarz and Skurnik (2003) note the importance of mood, affect, emotion, and other intrinsic constructivist processes in solving problems (what they refer to as “cognitive tuning”), stating that individual learners tend to “rely on preexisting knowledge structures and routines that have served them well in the past” (p. 269). Their approach to problem solving takes into account a wide variety of intrinsic factors. Edman (2002) notes the importance of “highlighted self-expression, emotional development, and self-actualization as the main aims of the educational process” (p. 58), all of which are central to and likely inseparable from general personality development.

Two authors in particular discuss the thinking and conditions that promote creativity and the internal conditions that result in alternative thinking. In these cases, the authors stress that creative thinking and action are dependent upon how one explores his or her inner nature to then apply to external conditions. Mihaly Csikszentmihalyi (1996) in his book, *Creativity*, writes about internalizing material: “A person who wants to make a creative contribution...must also reproduce the system [learning process] within his or her own mind” (p. 47). He later discusses how an intrinsic child-like attitude towards exploring stimuli yields more creative results. Jerome Bruner (1979) addresses learning in terms of intrinsic and extrinsic motives, noting the self-regulatory nature of an intrinsic approach to learning and the connection between a stimulus and the response it evokes. In this case, an intrinsic approach provides not only direction for more sophisticated learning but, as well, offers clues to the proper relationship between the learner and the subject matter.

It may be evident to the reader that several of the above authors (Piaget & Inhelder, 1972; Vygotsky, 1978; Dewey, 1991; Bruner, 1979) dedicated much of their research and writing to constructivist theories of learning and instruction; these theories form a foundation for the departure taken by the metacognitive approach described in this paper. My application of intrinsic learning is related less to genetics and abstract symbolic reasoning (Piaget & Inhelder, 1972) or social interaction (Vygotsky, 1978; Dewey, 1991; Bruner, 1979) than it is to *intentional metacognitive changes* on the part of the learner more closely related to theories advanced especially by Maslow and Rogers. This will become evident in the remainder of this article.

4. Intrinsic Learning and Extrinsic Learning as Complementary Forms of Instruction

What is sometimes unfortunate about how we learn is this: When we learn something extrinsically *first* (like through reading books, listening to a lecture, memorizing, or in discussion), the material is often less useful to us because we have limited intrinsic understanding of it or first-hand experience with it. Regrettably, this limited understanding often forms a weak foundation for more complex learning or complete understanding, what Lin, McKeachie and Kim (2001) call “consistent negative effects” (p. 2). Intrinsic understanding grows from knowing the world from the inside out, rather than from the outside in, by using and controlling our own “familiar internal tools and processes” as a primary medium for learning.

Consider how we first experience learning about the world and ourselves as children—seeing, touching, tasting, smelling, experimenting with how things are and work (Gottfried, 1990). As children, we understand our environments intrinsically first through our senses, budding awareness, unfamiliar emotions, and growing intellect—and we then use this information to inform the learning of other, more sophisticated forms of knowledge—and then apply this understanding to the external world (all that is “not us”). It is miraculous how quickly children learn the absolutely vast amount of information there is to know to begin to function independently. At no other time in our lives do we learn so swiftly, as we efficiently use our newly found intrinsic knowledge to inform our own growth, our understanding of others, and our perceptions of the world.

Ultimately, intrinsic and extrinsic learning work best in a complementary fashion, each method informing the other to access the appropriate method and sequence to best learn particular material. At times, we need some initial formal extrinsic information in the form of foundational disciplinary concepts (as I address in the next section). Unfortunately, traditional instructional methodologies focus predominantly on extrinsic learning with the hope that students can apply this extrinsic knowledge to what they already know about subject matter (which, in reality, may be very little or nothing at all). A more effective approach in higher education might include an early emphasis on weaving intrinsic and extrinsic learning methods that can later be applied developmentally to exclusively external subject matter. Extrinsic learning is an excellent complement to intrinsic learning but is often less important in the early stages of learning new material since an overload of complex extrinsic material may complicate the learning of fundamental concepts and, as well, overwhelm the learner.

Unfortunately, we often marginalize intrinsic forms of learning in lieu of needing (or wanting) to learn a tremendous amount of information quickly using extrinsic methods, which is why educators often wonder why students don’t always have an interest in or effectively apply what they have learned in class. The reason, quite often, is that *they did not learn it well*; they were told about it and know how to *describe* it, but they may have trouble successfully applying sophisticated concepts in which they have little intrinsic understanding. This might explain the sometimes low interest students have in the course material they engage. Students who initially grasp an intrinsic understanding of material very often contextualize and apply the material more creatively and fully, as well as understand the connections between these forms of learning and their appropriate developmental application (Vansteenkiste, Lens, & Deci, 2006). How well we know something, intellectually or otherwise, is based largely upon the degree of our intimate contact with it, that is, our experiences with the material or events.

One may ask: How can we teach all there is to teach (and students learn all there is to learn) if we are teaching using intrinsic learning methodologies? Intrinsic learning offers a more useful and universal understanding of that which is external to us, and this understanding grows exponentially as we practice, in our daily lives and activities, what we have learned in this manner. By extension,

many sophisticated concepts, like those offered in advanced university classes, are easier to grasp when initially taught using intrinsic learning strategies or in a complementary fashion employing instruction in limited extrinsic concepts. Not only can students learn material through directly relating it to their own intrinsic understanding of it, but learning intrinsically also serves as a means of filling in the gaps of their own incomplete (extrinsic) understanding of subject matter upon which advanced material may be weakly or erroneously based.

5. Examples of Intrinsic Learning Methodologies

Below are examples of discipline-specific intrinsic learning methodologies. In all cases, extrinsic learning approaches, such as readings, lectures, or discussions can be woven into the instruction. Often, an early emphasis on intrinsic learning methodologies with some very limited extrinsic support in the form of major disciplinary concepts allows students to best internalize material or experiences.

5.1. Sociology

If we seek to learn about the society and communities in which we live (as in a common university sociology course), then we might best begin by examining the characteristics of the communities we know best intrinsically—those in which we actively participate—our families, and social and work communities, for these are microcosms of larger communities and the society in which we live and function (Grauerholz & Copenhaver 1994). If we study and learn the complexities of how family, and social and work groups operate, we then begin to understand how larger social entities function. We have a stronger foundation for learning and applying these skills because we have an intrinsic understanding of the subject. One might begin such a study (or course) by studying and defining how individual relationships work in these smaller and personally relevant social units; determining how social, political, or economic “policies” form; and examining how the interactions of the groups and policies influence each other and develop—all in manageable intrinsic contexts. More specifically: Who has power and why? How is it used? Who controls the resources? Why do problems arise and how are they solved? How did the social structure develop? What are the important cultural and economic influences? These questions and countless others can be answered best in the contexts students know best, ones that are manageable for them, and ones in which they can test and revise their own theories, interpretations, and behaviors. We can hardly expect students to understand the complexities of the world, take away a useful understanding, and participate in a meaningful manner if they cannot understand the structure and function of their own families and the many small social units in which they participate.

5.2. Biological Systems

Similarly, if we understand well the biology of our own body, how the functional interdependence of systems works to maintain health, encourage growth, and promote healing, we gain intrinsic knowledge we can readily apply to other biological systems—like the environment and those related to the natural processes of other living things. We are unlikely to understand and respect other biological systems if we fail or refuse to truly understand the most intrinsic and intimate example of biological systems—our own bodies. (It is no small wonder we have environmental problems.) As well, an understanding of how biological systems function might inform the study of other systems-dependent disciplines such as economics and political science.

5.3. Culture and Myth

A more esoteric topic, learning about myths and their meaning in contemporary culture, might proceed by first defining myth in familiar extrinsic terms: “A popular belief or tradition that has

grown up around something or someone” or “a traditional story accepted as history which serves to explain the world view of a people.” In this case, students would seek out and identify myths they experience most directly in their own lives first: the ones they create about themselves and others, the ones they are subject to in their family and in society—those with which they struggle to understand, define, categorize, and negotiate according to their meanings and purposes (Wamboldt & Wolin, 1989). How about the myths surrounding marriage and romance (i.e. find your soul mate, fall in love, and live happily ever after); the myth of the America Dream (hard work and honesty always bring material success and happiness); myth as a part of religion (there is only one god, the one you believe in); and education (a “good” education guarantees financial success and happiness) to name a few? At this point, an examination of the fine line between myth and stereotypes might be appropriate, relevant, and within reach of students since popular myths often propagate stereotypes about sex, race, national origin, geographic origin, and lifestyle (e.g., men are stronger/smarter than women, African Americans are natural athletes, Asians are all very intelligent, rural people are hicks, college professors intellectualize emotions, overweight people are all overeaters, people from New York City are cold and indifferent). Our lives are filled with myths, some controversial, some positive and some negative, and students can discover how these are created, what purposes they serve, and how they function in their own lives. The intention here is primarily intrinsic, not an investigation of accepted or popular myths per se, but an examination of how popular beliefs originate (and function as or become myths) and influence students’ individual lives, families, and smaller social units. This is an effective precursor to the study of more traditionally defined myths that encompass greater scope and history.

5.4. Psychology

An intrinsic approach to learning the basic psychology of human behavior would first focus on understanding one’s own psychological make-up as well as the structured and intentional study of those individuals around us (Rogers, 1980). This study might be supported by limited extrinsic instruction in the basic concepts of personality and human behavior. Again, familiarity is central here since we have more intimate information and regular exposure to those in our family and close social circles than we do to society-at-large. The added information, access, history, and acceptance within these units, which are normally not present in other less intimate environments, allow us to observe and interpret others’ behavior more successfully, as well as to test and experiment with our own behavior with (hopefully) fewer serious consequences than might transpire in extended social or professional settings.

5.5. Art and Theater Arts

Intrinsic learning in the arts is a more familiar matter. In the visual or performing arts, much of what is done in institutions of higher learning is initially focused on isolating the senses so that students have a more intimate understanding of these factors apart from the complex contexts in which they exist. For example, in the visual arts, isolating visual skills to develop sensitivity and acuity has long been the standard for instruction since two- and three-dimensional art is entirely dependent upon the artist’s visual analysis and interpretation skills. This approach serves as a good example of one of the premises of intrinsic learning, that of developing skills and familiarity first in isolation as a means of applying this understanding to larger or more complex contexts and external situations. In theater arts, instructors have long required actors to explore their characters’ emotions and dispositions by assuming these characteristics in their own daily lives (Moore, 1965), which might explain the long-standing complaint regarding the difficulties of living with an actor. This intrinsic approach requires actors to *become* the content of their learning: the intimacy and internalization of content is nearly complete.

5.6. Design

Design and aesthetics are both essential features of an object. In the intrinsic design process, visual acuity and tactile awareness (especially when designing for physical and psychological interfaces) uncover intrinsic properties and the relationships among the elements or characteristics of an object in isolation (at least at first) from its proposed function and “identity” (Norman, 1988). This includes the interaction of line, shape, form, density, and geometric and aesthetic properties. Discovering how these properties intersect and interact then helps determine function, human interface, the psychology of use, and aesthetics in both the conceptual and construction phases of the design process. From this understanding of the basic elements of an object and its contribution to overall use and construction, students learn the design process through a thorough and intimate understanding of the elements, both artistically and functionally. This approach is not “reverse engineering” which demonstrates how an object is constructed by studying, in the process of disassembly, the relationship of the simple functions of these elements (how it works) but can accompany it. For example, while there are countless ways in which to meet the essential strength and longevity requirements in the design of a bridge, an awareness of the diverse elements in the design and construction offers students a comprehensive understanding of the many functions the bridge—from its weight-bearing capacity to its ease of use for drivers and maintenance workers to its environmental aesthetics; the choice of materials; manner of construction; and especially the cultural, social, economic, and environmental interfaces.

5.7. Literature and Creative Writing

Literature and creative writing instruction, in some cases, follows an intrinsic approach as well, in which students are encouraged to internalize fictitious characters and plots, that is, to “live” inside the work of fiction, and adopt a character’s personality as a form of understanding it (literature) or creating it (writing). MacKinnon (1962) notes “In this type of creativity, the creator externalizes something of himself into the public field” (p. 485). This approach enjoys obvious connections with acting instruction, and it may, similarly, well explain the unique and complicated nature of personal relationships and the social drama common to many university English departments that might approach what appears (or ought) to be fiction.

The intrinsic learning process can be contextualized to meet the requirements of learning most subject matter because it employs the entire spectrum of natural human tendencies and inclinations. Increasingly complex and sophisticated methods of integrating and combining intrinsic sources produces an evolving understanding of subject matter.

6. A Basic Approach to Intrinsic Learning

This basic process, which demonstrates some of the most fundamental principles of intrinsic learning, employs a developmental cognitive sequence of events. This approach is a form of intentional metacognitive meaning making—a contextualized and developmental approach—using the senses, intellect, emotions, experience, perception, and aesthetics, as they all operate well within this framework.

Using the example from Section 5.1 on Sociology (“learning about the society and communities in which we live”), the following stages comprise the intentional process:

- 1) Awareness of a problem, need, or desire (we recognize a need to learn more about or increase our awareness of a subject)—is an entry point for learning intrinsically. The process begins as we recognize the need to become more informed on the complexities of the individual’s social role in a community. Or we recognize a problem in our personal or professional lives related to the workings of a community in which we participate.

2) Intrinsic contextualization (identify one's existing intrinsic awareness of the subject)—provides the recognition that the structure and character of the problem might be relevant to us intrinsically. We may relate social systems to some intrinsic properties we can identify by asking: What intrinsic knowledge, understanding, or connection can I establish with this situation? In our example, we recognize that the role of the individual in our family or a social group in which we participate is similar to, in many ways, and has characteristics of, an individual's role in a larger community or social system.

3) Analysis of intrinsic connections (organize and study the contextual relevance)—expands the intrinsic recognition established in #2 through the particular lens of our own experience, understanding, needs, or interest. In the example, we understand that a democratic family structure or egalitarian social group tends to promote individual liberty, productivity, and well-being that lead to general social accord, much as it might in a larger social system.

4) Evaluation of intrinsic connections (determine its potential use to us)—helps determine the value of this information to us and its possible use in the current context. In the example, we determine that respect for an individual's autonomy, as stated in #3, will produce harmony in social systems and that this behavior, based on our observations and experience, should be cultivated and rewarded.

5) Application (act upon the intrinsic and contextualized knowledge)—helps determine the most appropriate manner in which to employ the information, utilizing the intrinsic links established. In the example, we begin to act in accord with the evaluation made in #4—practicing, testing, and evaluating this behavior in our daily life.

Learning intrinsically, then, requires us to alter our initial, and most likely extrinsic, understanding of subject matter based on one or more of the intrinsic sources (one's senses, intellect, emotions, perception, experience, and aesthetics), and to reflect this intrinsic understanding in our intentional personal behavior in specific ways. Naturally then, we begin to apply this growing intrinsic understanding to more sophisticated interactions in larger systems. As noted above, learning about social systems requires structured and gradual *intentional* metacognitive and behavioral changes through one's participation in familiar social systems. These behavioral changes often require intentional individual intellectual and dispositional changes in order to test and experiment with one's individual understanding and participation in the family or small social groups that can then be applied to larger social systems.

7. Conclusion

What are the ideal human conditions for intrinsic learning strategies to be effective? Well-developed dispositional skills, especially self-regulation, self-knowledge, and intentionality, optimize intrinsic learning processes. Healthy individuals, according to Maslow (1968), "have sufficiently gratified their basic needs for safety, belongingness, love, respect and self-esteem so that they are motivated primarily by trends to self-actualization, as a fuller knowledge of, and acceptance of, the person's own intrinsic nature, as an unceasing trend toward unity, integration, or synergy with the person" (p. 25).² Csikszentmihalyi (1996) suggests that the individual's "harmony between various goals, and between thought, feelings, and action" (p. 157) will result in intentional learning behavior that supports individual and collective human well-being.

² I would warn here against a dualistic interpretation of Maslow's theories on self-actualization. One does not need to have satisfied *completely* the need for safety, love, or belonging, for example, in order to be healthy enough to engage in intrinsic learning strategies. Sufficient progress in satisfying basic needs normally produces a reasonable level of functionality.

Intrinsic learning fosters an individual and collective understanding of content because it utilizes common natural human processes that lead to understanding the symbiotic relationship between human intent and action. These skills must be learned and practiced developmentally in and out of instructional settings, where process contextualizes and drives an understanding of content. Ideally, these processes become personalized “habits of mind,” that is, thinking processes that become increasingly adapted to fit an individual’s intellectual and personal style, creative skills, and daily routine.

The central objective of the traditional liberal education curriculum is, first and foremost, knowledge that addresses one’s self and one’s relationship to the world. As such, the aims of education are the same as the aims of life (or, restated more simply, “to get to know one’s self”). If the purpose of education is to uncover truths about the world in which we live, then we need to uncover the truths *in* and *of* our own lives first. Existing educational methods do not often effectively support these goals; therefore, we tend to engage in misdirected and self-centered acts that undermine individual and collective well-being. Indeed, if this is the case, it is no wonder our global misunderstanding of each other is so profound that we spend much of our time and resources protecting ourselves from each other, and have found it perpetually difficult, as a species, to negotiate our differences without violence.

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