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REVIEW OF JOURNAL ARTICLES ABOUT ISSUES IN HIGHER EDUCATION

Bibliography:

Boss, Judith A. "The Autonomy of Moral Intelligence." *Educational Theory* 44 (Fall/1994): 399-416.

Howe, Michael J. A. "Separate Skills or General Intelligence: The Autonomy of Human Abilities." *British Journal of Educational Psychology* 59 (Nov/1989): 351-360.

Jarvis, Peter. "The Changing University: Meeting a Need and Needing to Change." *Higher Education Quarterly* 54 (Jan/2000):43-67.

Reese, William J. "The Origins of Progressive Education." *History of Education Quarterly* 41 (Spring/2001): 1-24.

Wagner, Richard K., and Robert J. Sternberg. "Alternative Conceptions of Intelligence and Their Implications for Education." *Review of Educational Research* 54 (Summer/1984): 179-223.

Boss, Judith A. "The Autonomy of Moral Intelligence." *Educational Theory* 44 (Fall/1994): 399-416.

Boss shows the connection of single intelligence (SI) theory to traditional philosophical dualism (i.e., mind and body function separately), as well as the connection of multiple intelligence (MI) theory to a holistic approach to human anthropology (i.e., both "mind" and "body" function as integral parts of human intelligence). Building on Gardner's working definition of intelligence as "an ability to solve a problem or to fashion a product which is valued in one or more cultural settings," she expands his list of seven intelligences—linguistic, logical-mathematical, musical, spatial, bodily-kinesthetic, intrapersonal (self-understanding), and interpersonal (social)—to include the possibility of aesthetic appreciation, motivation and attention, originality, humor, general synthesizing power or wisdom, and common sense (based on some of Gardner's research in the late 1980s). Her argument postulates that *moral intelligence* should be added to the list, which has, just like the other intelligences, its own identifiable vertical developmental history, biological basis, and symbol system.

Boss defines moral intelligence to include the traditional cognitive and behavioral components (which she says has been "epistemologically privileged" historically), but more importantly, the non-analytical or intuitive aspect of human nature. This moral intuition exhibits both a cognitive and an affective side, especially manifested through the conscience. All humans, she argues, regardless of culture or socialization (contra the views of most social learning theorists), have "an internal moral sense of feeling," nonlogical and instinctive "flashes of insight" that "inform our personal involvement by calling for an empathetic response." As proof of the intuition of moral intelligence, Boss summons the agreement of moral philosophers, such as Bentham, Locke, and W. D. Ross; she highlights the independence of moral development

from cognitive / analytical development; and she shows the frequent lack of correlation between moral reasoning and moral conduct.

Boss contrarily emphasizes the biological basis of moral intelligence with powerful examples of the “demoralizing” effect of frontal lobe damage in the brain (note especially the case of Phineas P. Gage, ca. 1848!). The antithesis of these “immoral” but analytically functioning individuals comes from people who are cognitively “handicapped” but have a high level of moral integrity and respect for others (i.e., persons with Down’s syndrome or trisomy 21). The strikingly different effects occasioned by accidental or biological mutation makes perfectly good sense according to MI theory where “each autonomous intelligence has its own identifiable developmental history which normal as well as gifted individuals pass through.” Boss however does counter Gardner and MI theorists in their assumption that moral intelligence is not autonomous but rather an integral part of social or interpersonal intelligence. As proof of this, she offers examples of social and moral intelligences operating independently (e.g., in con artists and some psychopaths).

What does this mean for education? First, an autonomous moral intelligence cannot be equated with logical / verbal or social intelligence. Therefore, traditional classes in ethics or moral education based upon analytical and cognitive methodologies (i.e., the values clarification approach) will fail to inform the independent, intuited symbol system of moral intelligence. Second, the most effective approach to moral development seems to be “community service projects coupled with active problem-solving of real-life moral dilemmas [with] discussions of the personal meaning of these experiences in students’ lives.” Boss highlights two direct benefits of such a hands-on approach: (1) moral sensitivity and empathy is triggered by seeing another

person in distress rather than abstract classroom discussion about others' hardships; and (2) students feel empowered by the experiences. Boss concludes that "the outmoded view of intelligence as a single entity has led to an education system in which all subjects are taught in basically the same manner—through the use of textbooks in a classroom setting. While this approach may work in the case of linguistic intelligence, it is relatively ineffective in enhancing moral development. What is needed is a progressive educational program that treats moral intelligence as an autonomous intelligence with its own symbol system and its own course of development."

Howe, Michael J. A. "Separate Skills or General Intelligence: The Autonomy of Human Abilities." *British Journal of Educational Psychology* 59 (Nov/1989): 351-360.

Howe debunks the traditional unitary and hierarchical view of intelligence for recent theories that counter some "notion of central control, [since] different abilities of a child or an adult appear to be interconnected only to a limited extent" (Rozin, 1976). Howe believes, along with those who favor a multiple and horizontal approach to intelligence, that the "mental abilities of a single individual may form a rather loose, imperfectly connected, confederation of processing systems" (Geschwind, 1983). Further, the author sees "intelligence" as "a purely descriptive concept, and not an explanatory one," since it is useful only as a label or measure of what a person can do *at a given time*, but it cannot *explain* what it describes (i.e., it does not tell why, or give underlying reasons, for a particular level of performance). That human abilities are relatively specific, independent, autonomous, and multiple follows from a variety of empirical evidences.

First, there are biographical anecdotes about people of genius who have difficulty with common and easy tasks, or brilliant chess players, mathematicians, and musicians who do poorly at skills outside their particular expertise. Second, there are mentally handicapped people (i.e., "idiot savants" or autistic children) who excel at complex mathematical and other high-order reasoning tasks. Third, there are the effects of brain damage, whereby certain abilities are completely destroyed while other skills remain unimpaired. Fourth, there are examples of the absence of inter-task interference—activities that hinder the performance of one mental task but hardly effect another task. Fifth, there are evidences of extraordinary ability toward mastery of a skill or intellectual level, but such exceptionality does not effect or transfer to other abilities in "the average person." Sixth, there are studies which indicate the independence of complex

cognitive functions from measured intelligence by which people exhibit complex mental functioning based more on personal interests and non-threatening contexts than on intelligence level.

Howe concludes that the weight of empirical evidence argues for separate, autonomous, and independent abilities or intelligences. Further, he counters the use of correlations between levels of ability as proof of a unitary intelligence with the existence of strong non-cognitive influences in all human processes—the influences of temperament, mood, or personality, which involve things like motivation, fatigue, degree of interest, attentiveness, competitiveness, “test-wiseness,” co-operativeness, perseverance, and self-confidence.

What are the implications of Howe’s affirmation of separate skills over against a general intelligence, especially for educational processes? First, according to Howe, “what has been said makes virtually no difference at all.” Intelligence tests and ability scales function as effective and economical devices for sampling intellectual skills that to some extent predict “a person’s success in real-life situations encountered within educational contexts.” In other words, cognitive-type tests function well at examining the student’s capability to operate satisfactorily in a traditional cognitive-type educational structure where a traditional unitary view of intelligence is the norm. But contrariwise, “such scores are not nearly so useful for predicting success at tasks that are not directly related to schooling or are encountered outside educational contexts.”

Second, such test scores cease to be productive when used in a false way that implies “intelligence” is an *explanatory* concept, rather than a purely *descriptive* one. The information provided is only descriptive (“it can only indicate what is likely in the future”) rather than explanatory (“it cannot set limits on what is possible”). He emphasizes, “Contrary to what is

often believed, scores at tests measuring mental abilities do not indicate limits imposed by some kind of fixed potential for future achievement.”

Third, most importantly, what becomes paramount for success in education is to affirm the individual’s current capabilities and the possibilities for growth, rather than “the presence or absence of some mythical quality or power of intelligence.” Increase in intellectual ability results from maximizing skills and the knowledge needed for those skills. In light of this, according to the author, “the concept of intelligence is redundant and unnecessary . . . but a figment of twentieth-century psychologists’ imagination . . . its existence . . . illusory . . . like that of a number of concepts that seemed real to previous generations of scientists . . . [something that should become] . . . as dead as the dodo . . .”

Jarvis, Peter. "The Changing University: Meeting a Need and Needing to Change." *Higher Education Quarterly* 54 (Jan/2000):43-67.

Jarvis resurrects the industrialization thesis of the 1960s in order to challenge the response of higher education to the new infrastructures of globalization. Widespread capitalism empowered by new information technologies has created new global infrastructures, and these driving forces have, in turn, caused significant changes in knowledge, higher education, and research. Since traditional universities functioned typically to prepare the elite to govern and to provide an institutional basis for research, they have failed to keep apace the worldwide demand for new knowledge and new skills in a highly competitive and evolving global market. Hence, the traditional universities may be by-passed, as national and transnational corporations begin to establish their own educational institutions to satisfy their pragmatic needs.

Jarvis traces this development over a period of roughly thirty years in the United Kingdom, as he focuses on the last days of pluralism, the changing world, the education of "knowledge workers" in the global competitive market, and the future. He does note, however, some variations for the United States, such as the co-existence of two systems of higher education which began as a result of the Morrill Act of 1862—the land-grant colleges (of agriculture and mechanical arts) and the elite universities (according to the German university tradition).

With the demise of the last days of pluralism (during which elite universities functioned independently of business, industry, and even the State to some extent), the process of globalization accelerated, corporations successfully transferred significant amounts of capital around the world, and the cost of manufacturing declined with the optimizing of additional world markets. As a result, traditional manufacturing industries declined and even failed, while new

occupational structures emerged. At the same time, the information technology revolution forced a massive socio-economic restructuring during the 1980s. With the concomitant rise in “knowledge workers,” along with the unpredictable demise of a viable alternative to capitalism (i.e., the fall of the old communistic Eastern Bloc) and the decline of State power and control, universities had to increase both their relevancy and production of wealth. In Britain, this forced the government to cut education grants to the universities, impose standards of efficiency gains in order to make universities more responsive to market demands, and abolish academic tenure as a way to effectively link production and retention in the world of academia.

With the increase in new knowledge-based occupations came the parallel emphasis on training and the continuing education of professional workers in the universities. Adult education and distance education grew, and a new phenomenon in education appeared—the corporate classroom (i.e., by the mid-1980s, almost eighty percent of all corporate training in the United States occurred in-house). Unfortunately, some universities operate “as if they were still functioning in pluralistic societies, almost free from commercial pressures. The fact that universities still regard themselves as the creators of knowledge and disseminators of that knowledge, rather than the respondents to the wider social pressures, provides an insight into their inability to change rapidly. . . . But as their monopoly in accreditation is being challenged, the universities will be forced to adapt.” Also unfortunate, Jarvis notes, is the use of new knowledge and its accompanying power to “hold the best paid jobs and get richer, while the producers of raw materials, the redundant producers, and the remainder of the population get proportionately poorer.”

Jarvis highlights important *aspects* of knowledge worker education in its global setting (e.g., responsiveness to rapid changes, practical and relevant curricula, and on the job applications). Because the universities and the State remain slow to adapt, corporations take up the slack with their “we’ll do-it-ourselves” approach, through training centers, company schools, research labs, distance education courses, partnerships with adaptive educational institutions, and even contracted agents to offer classes. Predictably, corporations will continue to develop their own educational resources for their knowledge workers, while the universities try to catch up. More and more, however, universities will adapt to the need to behave like corporations, or else they will suffer decline. Research in universities will increasingly occur as a result of private sector investment, and academic researchers will be forced to accommodate this climate. Perhaps through cooperation of higher education and industry, the socially excluded will be recognized as a valid group for concern, and appropriate and beneficent social action will follow.

Reese, William J. "The Origins of Progressive Education." *History of Education Quarterly* 41 (Spring/2001): 1-24.

Reese surveys eighteenth and nineteenth century origins of what has been called "progressive education." Reformers established "an impressive educational canon" in their fight for pedagogical change, for example, "children were active, not passive learners; children were innocent and good, not fallen; women, not men, best reared and educated the young; early education, without question, made all the difference; nature, and not books alone, was perhaps the best teacher; kindness and benevolence, not stern discipline or harsh rebukes, should reign in the home and the classroom; and curriculum needed serious reform, to remove the vestiges of medievalism."

In the United States, the spirit of reform paralleled religious revivalism and utopian experiments during the antebellum period. Sparked by the writings of John Dewey, William Blake (English), along with European writers such as Johann Heinrich Pestalozzi (Swiss), Jean-Jacques Rousseau (French), and Friedrich Froebel (German), passionate appeals for child-centered progressivism bombarded the American educational community. In its American phase, Reese argues, progressives basically reflected the ideology of a much larger humanitarian movement that resulted from "changes in family size, new gender roles within bourgeois culture, and softening of religious orthodoxy within Protestantism." That educational progressivism was only part of "wider reform movements in the Western world that sought the alleviation of pain and suffering and the promotion of moral and intellectual advancement" is evidenced by the effusive "trans-Atlantic crossing of ideas from the Swiss Alps, German forests, and English lake district."

Reese highlights key events in the Western world between 1750 and 1850 (i.e., growing industrialism and urbanization, the American and French Revolutions, and the ideologies of Enlightenment such as precepts of reason, rule of law, science and progress) as multiple causes of this growing humanitarianism. The fascination with child-centered education grew out this evolving milieu, with significant contributions from romantics, transcendentalists, businessmen, and evangelicals. Reese notes that while “motives of utilitarians, rationalists, shopkeepers, and revivalists obviously varied enormously,” by the end of the eighteenth century, a cult of childhood arose that forcefully heralded the child as “naturally good, not corrupted by Adam’s fall, but by human institutions.” Childhood, therefore, became “a holy, mystical place, superior to the corrupted lives of adults.” This basic and revolutionary ideological shift threatened to undermine the entire traditional pedagogical edifice, as reformers “attacked the old education and called for more humane treatment of the innocent child.”

Philosophically, the transcendentalists and romantics gave this new schooling its momentum with a vision of youthfulness. Pragmatically, two Europeans—the Swiss-born Pestalozzi and the German-born Froebel—strongly effected American child-centered educators with their emphasis on “the importance of motherhood, spirituality, and natural methods in educating little children.” Horace Mann, Henry Barnard, and others promoted “a gentler pedagogy . . . which assailed memorization, textbooks, physical discipline, and the usual features of the neighborhood school.” Robert Owen helped transform the public school teaching force from male to female with “his message on the power of women as educators,” as he personified “Nature as female, the giver of life, seemingly synonymous with all that was holy and good.” But, as Reese points out, American adaptations of Froebelian and Pestalozzian ideas and

practices remained mixed at best, and, more than likely, the U.S. Civil War had the greatest impact on American pedagogy for the remainder of the nineteenth century. Reese, though, does not develop this important connection in his article.

Voices of reform during the postbellum period—Francis W. Parker, Edward Sheldon, William Hailman, and Louisa Parsons Hopkins—banded the need for object teaching, nature study, and field trips. But less critical advocates of the “old school” kept right on with their “bookish” pedagogy—drills, exercises, recitations, and memorizations. Although the proponents of reform could boast a few triumphs, especially in urban areas, “the apostles of the new education were aware that the seeds of reform often died on the hard soil of tradition.” “Real schools and ordinary teachers valued the traditional curriculum, books, and old-fashioned pedagogy. That was how most teachers had been taught.” Yet, while the seeds of reform were slow in their germination, the “morale crusade [of many child-centered educators] nevertheless permanently changed the nature of educational thoughts in the modern world.”

As a result, Americans now live in a society permeated by progressive education—eclectic, relativistic, and secular—always seeking to reform itself, always seeking improved methodologies, and often lacking content with what has gone before.

Wagner, Richard K., and Robert J. Sternberg. "Alternative Conceptions of Intelligence and Their Implications for Education." *Review of Educational Research* 54 (Summer/1984): 179-223.

Wagner and Sternberg assemble an impressive array of educational research to compare and contrast three major schools of thought about intelligence—psychometric, Piagetian, and information-processing—and their practical applications for education. The authors realize that the concept of intelligence has not been particularly useful to educators except as “a rough guide to determining reasonable expectations regarding academic performance for students with different levels or patterns of intellectual skills.” But realistically, the standardized assessment of intelligence has borne considerable external consequences (e.g., for student career progression and for school district funding). The relationship between intelligence and educational practice, however, goes well beyond this external value to inform not only psychological inquiries and beliefs about *how* the brain works, but also the training, testing, and verifying that is conducted based upon these broad foundational theories.

The authors first survey the different meanings given to intelligence—something objectively quantifiable by standardized tests according to the psychometric view; something developmental in growth stages and malleable according to the Piagetian view; and something of a processing skill that can be determined according to experimental research according to the information-processing view. They conclude, however, that the three approaches are “largely complementary rather than mutually-exclusive.” For their contribution, they define intelligence as “involving purposive adaptation to, shaping of, and selection of real-world environments relevant to one’s life.” For this reason, intelligence should be viewed as *purposive*, in relation to real-world environments, defined strictly “in terms of its application to the environment as it is

relevant to one's life." They feel that theorists should "get out of laboratories and into the real world, whether it is the world of the school or the world of the adult worker." They do not consider current theory and practice, that "aptly decompose intelligence into its constituent parts," as without meaning for the *internal environment* of the individual. But the theories do seem to be inadequate to address the relation between intelligence and the *external environment* where intelligence functions, because "intelligence does not operate in a vacuum, but rather in a world that is constantly increasing in complexity."

This existential, rather than experimental, model for thinking about the concept of intelligence guides Wagner and Sternberg in their assessment of applications of the psychometric, Piagetian, and information-processing approaches to *deriving* and *reaching* educational objectives for both "intellectual skills" and "knowledge and knowledge-related skills." But the authors do not provide rationale for this separation of skills, and so assume reader understanding on this point. To make their case, Wagner and Sternberg cite a wealth of studies and allude to a host of projects that nicely illustrate each category of application under consideration. Their overall conclusion about the usefulness of the basic theories, however, are quite tenuous and somewhat vague (e.g., "because of inadequacies in the designs of existing studies, the fruitfulness of linking psychometric theory to educational practice is still in need of stronger demonstration . . . there has been a notable gap between theory and practice"; "educational implications of Piagetian theory have been difficult to come by, because Piaget's theory is a theory of intellectual development rather than of learning . . ."; "the main implication of recent information-processing research would seem to be the advisability of teaching metacognitive as well as cognitive skills in a skills-instructional curriculum . . . but there are

reasons for being wary of drastic revision of current educational practices . . .).” The authors also outline five negatives of metacognitive training, and after a brief look at attempts at combinations of perspectives (“transperspectives”) and a section that compares educational strategies, they come full circle to their original assumptions about the meaning of intelligence and how these assumptions advise successful programs. They conclude:

First, successful programs must be based on tasks characteristic of intelligent behavior in the everyday world, including, but not limited to, the world of the school. It is unlikely that training programs based solely on testlike and laboratory tasks will provide effects that generalize to everyday intellectual performance in and out of the school. Second, successful programs must be directed toward the metacognitive and cognitive levels, as well as toward their interaction. There is ample evidence that training programs that omit metacognitive skills training have effects highly specific to the training task and situation. Third, successful training programs will incorporate aspects of the psychometric perspective so as to be maximally responsive to individual differences, and will incorporate aspects of the Piagetian perspective so as to provide a framework for the development of skilled performance. In short, successful training programs will require selective application of aspects of the three major perspectives, as opposes to wholesale application of any one.

The scholarship of Wagner and Sternberg is certainly impressive, but perhaps in their eclecticism they fall as victims to nebulous indecision.