

## **Curricular Fragmentation: The Inadequate “Core” Curriculum**

**Rene Descartes:** “If, therefore, anyone wishes to search out the truth of things in serious earnest, he ought not to select one special science; for all the sciences are conjoined with each other and interdependent...” Rule 1, *Rules for the Direction of the Mind*, 1628.

**Thomas Jefferson:** “...every science is auxiliary to every other.” Extract from letter to Thomas Randolph, 27 August, 1786

**Alfred North Whitehead:** “The solution I am urging, is to eradicate the fatal disconnection of subjects which kills the vitality of the modern curriculum.” *The Aims of Education*, Mentor, 1960, p. 18

**Neil Postman:** “There is no longer any principle that unifies the school curriculum and furnishes it with meaning.” *Phi Delta Kappan*, January 1983, p. 316

**John Goodlad:** “The division into subjects and periods encourages a segmented rather than an integrated view of knowledge. Consequently, what students are asked to relate to in schooling becomes increasingly artificial, cut off from the human experiences subject matter is supposed to reflect.” *A Place Called School*, McGraw-Hill, 1984, p.266

**Thomas Merton:** “The world itself is no problem, but we are a problem to ourselves because we are alienated from ourselves, and this alienation is due precisely to an inveterate habit of division by which we break reality into pieces and then wonder why, after we have manipulated the pieces until they fall apart, we find ourselves out of touch with life, with reality, with the world, and most of all with ourselves.” *Contemplation In a World of Action*, Paulist Press, 1992, p.153

**David W. Orr:** [Formal schooling] “imprints a disciplinary template onto impressionable minds and with it the belief that the world really is as disconnected as the divisions, disciplines, and subdivisions of the typical curriculum. Students come to believe that there is such a thing as politics separate from ecology or that economics has nothing to do with physics.” *Earth in Mind*, Island Press, 1994, p.23

**Leon Botstein:** “We must fight the inappropriate fragmentation of the curriculum by disciplines . . .” *Chronicle of Higher Education*, December 1, 1982, P. 28

**Peter M. Senge:** “From a very early age, we are taught to break apart problems, to fragment the world. This apparently makes complex tasks and subjects more manageable, but we pay a hidden, enormous price. We can no longer see the consequences of our actions; we lose our intrinsic sense of connection to a larger whole.” *The Fifth Discipline*, Currency Doubleday 1990, p.3

**Harlan Cleveland:** “It is a well-known scandal that our whole educational system is geared more to categorizing and analyzing patches of knowledge than to threading them together.” *Change*, July/August 1985, p. 20

**Kurt Vonnegut:** “The things other people have put into my head, at any rate, do not fit together nicely, are often useless and ugly, are out of proportion with one another, and out of proportion with life as it really is outside my head.” Preface to *Breakfast of Champions*, Random House. 1973

**Buckminster Fuller:** “American education has evolved in such a way it will be the undoing of the society.” (Quoted in *Officer Review*, March 1989, p.5

**Felix Frankfurter:** “That our universities have grave shortcomings for the intellectual life of this nation is by now a commonplace. The chief source of their inadequacy is probably the curse of departmentalization.” Introduction to Alfred North Whitehead’s *The Aims of Education*, Mentor 1948

**Ernest Boyer:** “All of our experience should have made it clear by now that faculty and students will not derive from a list of disjointed courses a coherent curriculum revealing the necessary interdependence of knowledge.” Paraphrased by Daniel Tanner in his review of Boyer’s book *High School*. *Phi Delta Kappan*, March 1984, p. 10

**Robert Stevens:** “We have lost sight of our responsibility for synthesizing knowledge.” *Liberal Education*, Vol. 71, No. 2, 1985, p.163

**Edward T. Hall:** “Information overload increases the need for organizing frames of reference to integrate the mass of rapidly changing information.” Author’s Preface, *The Hidden Dimension*, Doubleday, 1966.

**Jonathan Smith:** “To dump on students the task of finding coherence in their education is indefensible.” Quoted in *Time*, April 20, 1981, p. 50

**John Kemeny:** “The problems now faced by our society transcend the bounds of the disciplines.” Quoted by William Newell in *Liberal Education*, Association of American Colleges, 1983, Vol. 69, No. 3

**Arnold Thackray:** “The world of our experience does not come to us in the pieces we have been carving out.” Quoted in *The Chronicle of Higher Education*, October 1987, p. A 14

**David Cohen:** “Testing companies, textbook publishers, teacher specialists, associations representing specific content areas, and other agencies all speak in different and often inconsistent voices...The U.S. does not have a coherent system for deciding on and articulating curriculum and instruction.” (*Phi Delta Kappan*, March 1990, p.522

**Frank Betts:** “Learning begins as an integrated experience as a newborn child experiences the world in its totality.” *ASCD 1993*, 13.7

**Philip Sabaratta:** “Students rarely have an opportunity to discover what one set of ideas has to do with another.” *Community College Review*, Winter 1982-83, Vol. 10, #3

**Greg Stefanich and Charles Dedrick:** “Learning is best when all of a student’s educational experiences merge to form an integrated whole, thereby transforming information into a larger network of personal knowledge.” *Science and Mathematics*, 1985, Vol.58, p.275

**James Coomer:** “Our educational systems . . . are now primarily designed to teach people specialized knowledge—to enable students to divide and dissect knowledge. At the heart of this pattern of teaching is . . . a view of the world that is quite simply false.” (*Texas Tech Journal of Education*, 1982, p.166

**Paul DeHart Hurd:** “There are neither philosophical nor psychological grounds for compartmentalizing knowledge into islands of information as school subjects are currently conceived.” *Middle School Journal*, Vol. 20, No.5, p.22

**James Moffett:** “[It is essential to integrate] learning across subjects, media, and kinds of discourse so that individuals may continuously synthesize their own thought structures.” *Phi Delta Kappan*, September 1985, p. 55.

**Tsunesaburo Makiguchi:** “Through their studies, children must be brought to that point of awareness wherein . . . [they] get some sort of total picture of it all . . . In advancing level by level through the curriculum, students should be internalizing an overall idea structure of means and ends.” *Education for Creative Living*, 1989, p. 196

**Lewis Thomas:** “...young children possess minds that are fabulously skilled at all sorts of feats beyond mere language. They have receptors wired in for receiving the whole world; they are biologically specialized for learning.” *The Fragile Species*, New York, New York, Collier Books, Macmillan Publishing Company, 1993, p. 64

**Stephanie Pace Marshall:** “The natural world is now understood as an interdependent, relational, and living web of connections.” *The Power to Transform*, Jossey-Bass, 2006, p. xii

**Roger Schank:** “Academics designed the school system. To them, it seemed natural that subjects that they were experts on should be taught in high school. Such a simple thought has created a major problem. Education ought not to be subject-based but, in a sense, we can’t help but think of it that way because we all went to schools that were subject-based.” *Teaching Minds, How cognitive science can save our schools*). Teachers College Press, Columbia University, 2011

**Richard A. Gibboney,** “The atomized chop-chop of the high school curriculum has filtered up to higher education.” *The Stone Trumpet*, State University of New York Press, 1994. p. 9

**Steven Johnson**, “...encouragement does not necessarily lead to creativity. Collisions do—the collisions that happen when different fields of expertise converge in some shared physical or intellectual space. That’s where the true sparks fly. The modernism of the the 1920s exhibited so much cultural innovation in such a short period of time because the writers, poet, artists, and architects were all rubbing shoulders in the same cafes.” *Where Good Ideas Come From*, Riverhead Books, New York, 2010

**David Bohm**: “I think the difficulty is this fragmentation. All thought is broken up into bits. Like this nation, this country, this industry, this profession and so on... And they can’t meet. That comes about because thought has developed traditionally in a way such that it claims not to be effecting anything but just telling you the way things are. Therefore, people cannot see that they are creating a problem and then apparently trying to solve it... Wholeness is a kind of attitude or approach to the whole of life. If we can have a coherent approach to reality then reality will respond coherently to us.” *Wholeness: A Coherent Approach to Reality*, Presentation in Amsterdam, in 1990, documentary [\*Art Meets Science & Spirituality in a Changing Economy\*](#).

**Arthur Koestler**: “all decisive events in the history of scientific thought can be described in terms of mental cross-fertilization between different disciplines.” Quoted by Stephen Johnson in *Where Good Ideas Come From*, Riverhead Books, New York, 2010

**Association of American Colleges**: “We do not believe that the road to a coherent education can be constructed from a set of required subjects or academic disciplines.” *Integrity in the College Curriculum, A Report to the Academic Community*,” Project On Redefining the Meaning and Purpose of Baccalaureate Degrees, 1985

**Carnegie Foundation for the Advancement of Teaching**: “The disciplines have fragmented themselves into smaller and smaller pieces, and undergraduates find it difficult to see patterns in their courses and relate what they learn to life.” Prologue to *College: The Undergraduate Experience in America*,” November 1986

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