DOCUMENT RESUME

ED 089 618 HE 005 362

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TITLE Needed Correlative University Reforms: In Roles as Change Agent; Governance Climate and Structure.
PUB DATE 74
NOTE 9p.; Paper presented at the annual meeting of the American Educational Research Association (Chicago, Illinois, April 19, 1974)

EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE
DESCRIPTORS Case Studies; *Change Agents; College Environment; *College Role; *Educational Change; *Governance; *Higher Education; Speeches; University Administration

ABSTRACT

The disparity between the roles of the university as active irresponsible agent of exponential technology changes and nonresponsible agents of linear ideological change has become the basic issue in campus confrontations over relevance and the consequent need for university governance reforms. From case studies of governance reform ventures at Toronto, Cornell, and Syracuse, one conclusion and three hypotheses can be drawn that merit further testing as universities accept the challenge of attempting to discover ways of becoming responsible change agents and agents of governance reform. (Author)

28.14

ID # A-31-AERA
2:15, April 19, 1974

NEEDED CORRELATIVE UNIVERSITY REFORMS: IN ROLES AS CHANGE AGENT; GOVERNANCE CLIMATE AND STRUCTURE

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Research from divergent sources challenges universities to discover ways of: a) becoming responsible agents of both technological and ideological change, b) maximizing educational processes over political power plays in formulating goals and policies and c) structuring governance so off- and on-campus constituencies may be appropriately represented in determining the universities' role as a change agent.

Toffler,[1] the Meadows,[2] et al., Boorstin[3] and others document exponential rates of technological change. In 1920, many natural resources believed necessary for industrial society were estimated to be adequate for 300 years. It is now predicted that at the present rate of increase in per capita use many resources will be depleted within a quarter of a century (see Table 1 from Meadows). Indeed many crucial resources would be depleted immediately if China, India, Africa and South America began to use resources at per capita rates in the U.S.A., Russia, Japan or West Germany.

Limits to Growth[2] predicted in 1972 that known petroleum resources would be depleted by exponential increase in use by 1994. Quite aside from the Arab Israeli question and oil as a pay off in the power play, pacing the pumping and export of oil by the Mid-East countries may be more enlightened self and world interest than meeting the accelerated energy needs of the Big 4 Nations.

Pure and applied science and preparation of scientific personnel has made the university an active, dynamic fountainhead of technological industrial societies now changing at exponential rates. But the University has tended to be an irresponsible technological change agent because it is a non-responsible agent of ideological change. Succinctly stated, scientism has made the university an inescapable agent of technological change while causing it to escape being an agent of ideological change. Science creates "whats" and "hows." Ideological value orientations ask "for what." Science creates the tools and the time schedules. Values determine the directions and destinations. Science has emphasized the former, tended to ignore or deprecate the latter. Consequently the University is like a ship at sea filled with increasing knowledge and know how but leaving the ports of call to chance and so it is with the society it creates or "serves."

Throughout 699 of the 700 lifetimes of 70 years each of the 49,000 year history of man technological change has been uneven but basically linear. Change has been slow enough to provide time to build in

THE LIMITS TO EXPONENTIAL GROWTH

Table 1 NONRENEWABLE NATURAL RESOURCES

1	2	3	4			5	6	7	8	9	10
Resource	*Known Global Reserves*[a]	*Static Index (years)*[b]	*Projected Rate of Growth (% per Year)*[c] *High*	*Av.*	*Low*	*Exponential Index (years)*[d]	*Exponential Index Calculated Using 3 Times Known Reserves (years)*	*Countries or Areas with Highest Reserves (% of world total)*[e]	*Prime Producers (% of world total)*[f]	*Prime Consumers (% of world total)*[g]	*US Consumption as % of World Total*
Aluminum	1.17×10^{8} tons[i]	100	7.7	6.4	5.1	31	55	Australia (33) Guinea (20) Jamaica (10)	Jamaica (19) Surinam (12)	US (42) USSR (12)	42
Chromium	7.75×10^{8} tons	420	3.3	2.6	2.0	95	154	Rep. of S. Africa (75)	USSR (30) Turkey (10)		19
Coal	5×10^{12} tons	2300	5.3	4.1	3.0[k]	111	150	US (32) USSR-China (53)	USSR (20) US (13)		1[l]
Cobalt	4.8×10^{8} lbs	110	2.0	1.5	1.0	60	148	Rep. of Congo (31) Zambia (16)	Rep. of Congo (51)		3[l]
Copper	308×10^{8} tons	36	5.8	4.6	3.4	21	48	US (28) Chile (19)	US (20) USSR (15) Zambia (13)	US (33) USSR (13) Japan (11)	3[l]
Gold	353×10^{6} troy oz	11	4.8	4.1	3.4[j]	9	29	Rep. of S. Africa (40)	Rep. of S. Africa (77) Canada (6)		
Iron	1×10^{11} tons	240	2.3	1.8	1.3	93	173	USSR (33) S. Am. (18) Canada (14)	USSR (25) US (14)	US (28) USSR (24) W. Germany (7)	28
Lead	91×10^{8} tons	26	2.4	2.0	1.7	21	64	US (39)	USSR (13) Australia (13) Canada (11)	US (25) USSR (13) W. Germany (11)	25
Manganese	8×10^{8} tons	97	3.5	2.9	2.4	46	94	Rep. of S. Africa (38) USSR (25)	USSR (34) Brazil (13) Rep. of S. Africa (13)		14
Mercury	3.34×10^{6} flasks	13	3.1	2.6	2.2	13	41	Spain (30) Italy (21)	Spain (22) Italy (21) USSR (18)		24
Molybdenum	10.8×10^{8} lbs	79	5.0	4.5	4.0	34	65	US (58) USSR (20)	US (64) Canada (14)		40
Natural Gas	1.14×10^{15} cu ft	38	5.5	4.7	3.9	22	49	US (25) USSR (13)	US (58) USSR (18)		63
Nickel	147×10^{8} lbs	150	4.0	3.4	2.8	53	96	Cuba (25) New Caledonia (22) USSR (14) Canada (14)	Canada (42) New Caledonia (28) USSR (16)		38
Petroleum	455×10^{8} bbls	31	4.9	3.9	2.9	20	50	Saudi Arabia (17) Kuwait (15)	US (23) USSR (16)	US (33) USSR (12) Japan (6)	33
Platinum Group[m]	429×10^{6} troy oz	130	4.5	3.8	3.1	47	85	Rep. of S. Africa (47) USSR (47)	USSR (59)		31
Silver	5.5×10^{8} troy oz	16	4.0	2.7	1.5	13	42	Communist Countries (36) US (24)	Canada (20) Mexico (17) Peru (16)	US (26) W. Germany (11)	26
Tin	4.3×10^{6} lg tons	17	2.3	1.1	0	15	61	Thailand (33) Malaysia (14)	Malaysia (41) Bolivia (16) Thailand (13)	US (24) Japan (14)	24
Tungsten	2.9×10^{8} lbs	40	2.9	2.5	2.1	28	72	China (73)	China (25) USSR (19) US (14)		22
Zinc	123×10^{8} tons	23	3.3	2.9	2.5	18	50	US (27) Canada (20)	Canada (23) USSR (11) US (8)	US (26) Japan (13) USSR (11)	26

correctives. Even so families and nations (Rome and Alexandria) have not learned to live constructively with affluence and leisure for more than a few generations.

With current acceleration in exponential rates of technological change, mankind faces the inescapable question: Can need for correctives be anticipated and can correctives be discovered soon enough to avoid disaster?

U. Thant in his farewell address to the United Nations General Assembly expressed his concern.

> "I do not wish to seem overdramatic, but I can only conclude from the information that is available to me as Secretary-General, that the Members of the United Nations have perhaps ten years left in which to subordinate their ancient quarrels and launch a global partnership to curb the arms race, to improve the human environment, to defuse the population explosion, and to supply the required momentum to development efforts. If such a global partnership is not forged within the next decade, then I very much fear that the problems I have mentioned will have reached such staggering proportions that they will be beyond our capacity to control."

Research supporting the hypothesis that the University is a consciously non-responsible agent of ideological change is not as clear as that identifying its role in technological change. But it is substantial. Scientists have come through a half century of prolonged adolescent effort to disassociate themselves from their disciplinary ancestor--philosophy. And this stance has spread to the social sciences and humanities. Just as many scientists "ran out" on Dr. Robert Oppenheimer when he became concerned about the value consequences of nuclear fission and many historians became critical of Arnold Toynbee[4] when he decided that it wasn't enough to "back into the future" and ventured to become prophetic in light of his historical insights so the current philosopher is likely to be suspect unless he is a logical analyst.

We should not be surprised then that the review of values studies by Jacob[5] and more recent reports by Sanford,[6] Newcomb[7] and Rokeach[8] show professors and curricula to have little influence on students' value orientations; that most value changes while in college are the results of student interactions, societal pressures and a close relationship with a few professors who with their students, continuously seek answers to the question "for what?"

During most of man's history, he was under or in nature. Now that man is over nature in some identifiable ways, man created disturbances of his microcosm and possibly his macrocosm must also be man corrected. This suddenly becomes a terribly complex problem and responsibility. Much drive and genius went into the creation of the technology that now disturbs the balance. It will take more drive, genius and self-discipline to restore or keep a man-over-nature macrocosm in balance.

After a half century of conscious disregard for values and value consequences of scholarship, how long will it take for scholars to reconsider and accept responsibilities that have always been attendant on their freedoms? Will administrators encourage them? Will students wait patiently for this kind of relevance? Will community constituencies tolerate it, if ways are discovered whereby the university becomes a responsible agent of ideological and technological change challenging traditions of the economy, government and cultures?

Resistence, however, will come first from within and it will not be limited to scientists. While recruiting faculty for a new International Christian University in Japan, I asked some thirty philosophers: "What should be the purposes of an introductory course in philosophy that all students are urged to take?" The response was forthright, uniform and valid. "To acquaint students with concepts of reality and value constructs of the worlds great philosophers." When I asked: "How about helping each student begin the life long process of clarifying, defining and revising his own concepts of reality and the values that would tend to shape the ends and means of his own life?" Responses were hesitant, vague, diffuse, and uniformly evasive. "That is an interesting idea." "It would be difficult." "I have never tried it." "I'm not prepared for it." "I really feel I shouldn't do that to students." "It is beyond the responsibility of the philosophy teacher and of the university."

A challenging question is raised here. Are responsibilities of education fulfilled when students know some things and somebodies or should education also help them to become something and somebody? Not a prototype of the professor but, to use White's[9] words: ". . . uniquely competent individuals."

Increased discrepancy between exponential rates of technological change and the linear rates of ideological change is shown schematically in Diagram 1. The greater the gap between these rates of change the greater the following dilemmas:

a) Technology helps us to live longer but doesn't deal with why we should live longer,
b) Technology develops more labor saving machines and automated production of labor saving machines without dealing with consequent issues of unemployment, featherbedding, traditional work ethics,
c) Technology provides more energy and tools but doesn't deal with whether they will be used to "shape a beautiful cathedral or crush a skull,"
d) Technology increases the speed and reach of communication but it does not put news into perspective.
e) Technology increases pollution at exponential rates without asking about the capability of coping with it,
f) Science discovers genetic determinants but does not provide criteria for their use,
g) Science and technology produce varieties of change at exponential rates with indifference to man's capability of coping with them.

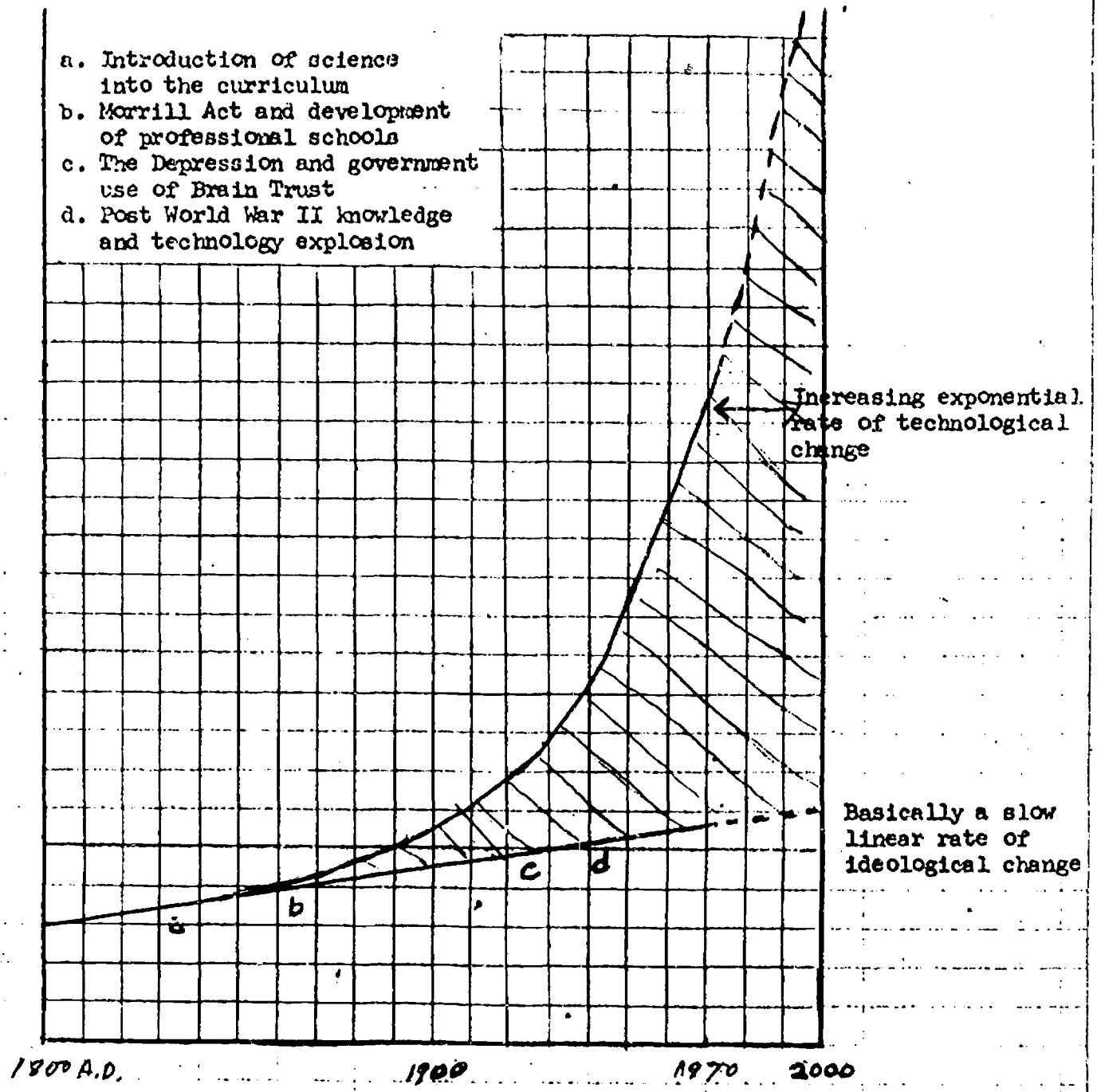

Diagram 1. Schematic Representation of the University as an Agent of Ideological Change and Technological Change

Universities have been more effective in creating than in solving these dilemmas.

It is the thesis of this paper that neither professors (scientists or non-scientists) as individuals nor the University as an institution can continue to ignore the value consequences of technological change or abdicate responsibility for the value consequence of education in general.[2] To do so is to seriously hazard institutional and societal suicide.

The alternative is not inviting. It is difficult -- filled with hazards. The University should not decide how a professor or department is to be a responsible agent of social change. But its professors individually and collectively can always be in the process of trying to discover ways in which they can be responsible change agents. The University cannot legislate this process but it should generate a climate that encourages faculty and students and indeed all of its constituencies to learn something useful about it.

Troyer[10] in case studies of ventures in governance reform at Toronto, Cornell and Syracuse universities and in the review of the literature on campus confrontations developed a pervasive conclusion and four hypotheses believed relevant to this discovery process and a correlative need for governance reform.

The Conclusion

The Role of the University as a change agent was central to all stated reasons for campus confrontations during the past decade.

Universal opportunity for higher education.
Minority representation in the student body, faculty, administration and trustees.
Academic programs for minorities.
Rapid institutional growth, automation and depersonalization..
Autonomous versus cooperative roles in policy making coeducational dormitories.
Campus security.
Hidden roles of the university in the Vietnam War.
Classified research contracts.
University investment policies.
On-campus placement interviews.

Hypotheses

1. Bias reduction should be an important and pervasive goal of education.

2. The climate for formulating University goals and policies should

foster bias reduction. Maximizing power plays -- the power of numbers, muscle, decibels and position -- tends to reduce the angle of vision, nurture bias, erode respect between and within constituencies and lower the level of achievable consensus. Maximizing research and educational processes in shaping goals and policies tends to increase the angle of vision, reduce bias, foster respect between and within constituencies and raise the level of consensus.

3. A clear and inescapable mandate for governance reform may make maximizing education processes visibly necessary.

4. A central ultimate goal and policy making agency regarding the university's role as a change agent, should consist of representatives of all on- and off-campus constituencies.

Taking these hypotheses in reverse order, their derivation is as follows. When off-campus constituencies (trustees) unilaterally seek to determine the role of the University as an agent of technological and social change they interfere with the freedom and creativity of faculty, students and administration. Unilateral decisions by on-campus constituencies is taxation without representation. Structure of governance[10, 11, 12] caste on-campus constituencies (faculty and students) and off-campus constituencies (Regents) in adversary roles. Acting in parallel but with over-lapping role perceptions, constituencies are predisposed to failure in effectively resolving issues relative to the University as a responsible change agent. A free University in a free society ought to be supportive to democratic goals and, therefore, ought to exemplify efforts to practice and perfect democratic processes and structure in its governance.

A small Commission on University Governance at Toronto had a mandate from all constituencies to produce the substance for a new act of parliament to replace the act of 1906 that defined responsibilities and composition of its governing board. It was the inescapability from this mandate that caused the Commission after 10 weeks of bitter "niggling" and "power plays" to start studying the issues, hold 50 hearings, entertain 108 briefs, formulate 107 recommendations that provided the substance for 15 resolutions that enabled a University-wide Committee (160 on- and off-campus representatives) to rise above political power plays and recommend the substance of a new act to the Toronto Parliament. It should be noted that while maximizing educational processes for another 22 weeks the small Commission became an ecclesia with great respect between individuals even to the point of agreeing on parity representation between off-campus, faculty and student constituencies on the Governance Council.

The mandate at Cornell was more intense (traumatic) but not so clearly

focused. A 300 member representative Constituent Assembly, highly adversary oriented, was still dissipating time and energy in procedural power plays five months after it was established. It was then that a small core representative group, maximizing educational processes; placed the issues in perspective, proposed a new University Senate on Campus Life and addition of representatives from campus constituencies on the Board of Trustees.

The Syracuse venture in governance reform came neither from a clear mandate of all constituencies or a traumatic campus incident. A newly reorganized Senate with half of its membership from the faculty and a fourth each from students and administration was finding its agenda jammed because of power play tactics. Policies eventually decided by small majorities placed responsibility on administration to resolve conflicts in policy with trustees acting in parallel with the Senate but with over-lapping role perception. Pressure from a student government with vigorous leadership and from a substantial faculty minority sponsored a referendum that approved a venture in governance reform. There was no consensus between or within constituencies as to the purpose of the venture.

A 300 member representative Governance Assembly was established. It too bogged down in procedural power plays. A due date target of six months was revised to 12, 18 and finally 24 months. Quorums were revised downward, eventually to 25%. The proposed governance structure eventually approved by the Assembly was rejected by all but the students in constituency referendums.

These case studies indicate the importance of the educational processes (the universities stock-in-trade) in policy making during a period when visibility of campus power plays was eroding the credibility of universities.

If data and conclusions of U. Thant (See Appendix C), Meadows, Boorstin, Toffler and others are substantially valid, society in general and Universities in particular have a clear mandate -- with time running out -- to discover ways of becoming responsible change agents -- technological and social. This means discovering a sense of direction. Clarifying, testing and tempering value orientations is inescapable. Our Universities have followed scientism in escaping this responsibility and have reflected society in maximizing and adopting its power policies. The solution to this problem would seem to be in re-establishing its own stock-in-trade -- educational processes -- in an attempt to meet the responsibility. Is it too much to expect that a constitution of the academic community would commit its members to discovering how it can serve the general welfare? To discovering what the general welfare is? These are value loaded questions. They cannot be answered adequately and with credibility by a University using power plays. But members of the academic community in cooperation with its off-campus constituencies with behavior mainly directed from the ears up (cognitive) and energized from the ears down (affective) should be able to make progress on crucial problems of man.

Footnotes

1. Toffler, Alvin. Future Shock, New York: Bonham Books, 1970. p. 561.

2. Meadows, et al. Limits to Growth. New York: Universe Books, 1972. p. 205.

3. Boorstin, Daniel. The American. New York: Random House, 1973. p. 717.

4. Toynbee, Arnold. Experiences. Oxford University Press, 1969.

5. Jacob, Philip. Changing Values in College. New York: Harper & Bros., 1957. p. 174.

6. Sanford, Nevitt. Ed. The American College: A Psychological and Social Interpretation. New York: John Wiley & Sons, Inc. 1962. p. 1084.

7. Newcomb, T. M. Persistance and regression of changed attitudes: Long-range studies. Journal of Social Issues, 1963, 19, 3-14.

8. Rokeach, Milton. Beliefs, Attitudes and Values. San Francisco: Jossey-Bass, Inc. 1970. p. 214.

9. White, Robert H. The Concept of the Healthy Personality: What Do We Really Mean? The Counseling Psychologist, Vol. 4, No. 2, 1973. (The whole of this issue is relevant. White's is the major article. Sixteen critiques follow with a final rejoinder by White).

10. Troyer, M. E. Ventures in Reconstructing University Government: Toronto, Cornell, Syracuse. Maxwell Review. Winter 1972-73. pp. 71-85.

11. Smith, R., Axen, R., and Pentony, D. By Any Means Necessary. San Francisco, Jossey-Bass, 1970, pp. 370.

12. Daniels, A. K., Kahn-Hut, R., et al., Academics on the Line, San Francisco, Jossey-Bass, 1970, pp. 269.