

*The Substance and Process of Interdisciplinary General Education Reform:
Old Dominion University 1983-1998*

Lucien X. Lombardo, Ph.D.
Department of Sociology and Criminal Justice
Old Dominion University
Norfolk, VA 23539

This paper provides an inside and long-term look at general education curricular reform that emphasizes structural and substantive approaches to interdisciplinarity in general education. While recognizing that the basic departmental structure of the academy tends to work against interdisciplinary approaches, the model of general education reform at Old Dominion implicitly utilizes the basic departmental structure as a mechanism to cross departmental boundaries. As in insider in the process over the past 16 years, the author identifies key principles and decisions which have maintained momentum for interdisciplinary approaches and a growing recognition of the presence and importance of interdisciplinary work on campus.

Lucien X. Lombardo is professor of Sociology and Criminal Justice, chief departmental advisor from 1988-2000, a member of the Faculty Senate's curriculum committee, 1983-1986 and 1995-1999, a member of General Education Review Committee's 1983-1986 and 1995-1998, and coordinator of the Cluster Task Force, a university-wide group made recommendations to the provost and the Faculty Senate regarding the administration of the Cluster program. Starting Fall 200, Dr. Lombardo is Coordinator for Individualized Integrative Studies and University Cluster Coordinator. Professor Lombardo has a BA in Spanish Linguistics, with minors in Political Science and History from the University of Rochester; an MA in Ibero-American Studies from the University of Wisconsin, Madison, with emphases in Spanish, Economics and History); an MA and Ph.D. in Criminal Justice, with emphases in Planned Change and Law and Social Control)

*The Substance and Process of Interdisciplinary General Education Reform:
Old Dominion University 1983-1998*

This paper examines the development of interdisciplinary components of the general education program at Old Dominion University. It describes the process and structure of general education reform with specific reference to lower-level general education (mid 1980's) and general education at the junior and senior level (mid 1990's). Particularly important are those aspects of reform dealing with fostering and supporting faculty involvement in the general education reform process, its interdisciplinary efforts and the ``real politick'' of interdisciplinary approaches to student learning. This presentation provides an insider's view of faculty and administrators struggling to do what had long been considered 'undoable' at the university, i.e., alter the university's seemingly ``writ in stone'' undergraduate distribution requirements that went into effect in 1976.

Lower Level General Education Reform mid-1980: From Distribution to Interdisciplinary Goal Directed ``Perspectives''

Dr. William E. Vandament's observations in a *Point of View* piece in the Chronicle of Higher Education (1988) provide an excellent starting point for a discussion of Old Dominion University's general education reform efforts which started in the early 1980's:

Calling for change and achieving it are two different matters. Most seasoned academics, faculty members and administrators alike, have heard criticisms [of higher education] before, and many of them question their validity or are skeptical about the ability of the reformers to bring about real change. They are inclined to oppose legislative action, often through passive means, as an intrusion on academic freedom, and frequently view proposals for reform as attempts by politicians and others to enhance their own reputations.

Even when the validity of criticisms is acknowledged, there seems to be little enthusiasm on most campuses for diverting scarce resources or attention to address problems. To establish institutional policies necessary to achieve reform requires a different approach, one that takes into account the realities of academic governance.

Learning from Failure: These observations certainly describe a portion of the atmosphere regarding curricular reform at Old Dominion University when our general education reform initiative began in 1983. This was the third attempt at general education reform in five years. The first took place in 1979 within the Faculty Senate curriculum committee. This was a group traditionally overburdened with catalog-to-catalog curricular matters and a group that changed composition from year to year. Given these characteristics its attempt at long-term major reform was doomed before it started. This committee never reported out a proposal.

A second reform effort in 1981 involved a larger Presidential Task Force that worked over a summer. The Task Force presented ideas for curricular reform to the university community when faculty returned in the fall. As I recall, reactions to the task force proposals were of two kinds. First, there was hostility to what was perceived as an administratively imposed program. The fact that the committee met when most faculty were not actively involved on campus or available supported this perception. Second, many faculty reacted with passively aggressive apathy. This was expressed by saying, “They (meaning the administration) can’t put any program into effect unless we (the faculty) do it. So let’s ignore it and it will go away”. They did ignore it and it did go away.

These failed efforts, however, informed the reform process initiated in 1983, and taught many valuable lessons that led to the structuring of a change process that paid due deference to the realities of the academic governance process (as Vandament suggests reformers should do). *A key decision was to work through the reform process in stages.* In the spring of 1983, the Provost appointed a new General Education Committee. This committee included 2-3 faculty from each of the university’s 6 colleges, the dean from the College of Arts and Letters and the Provost. The chair of the committee was a former provost who had returned to the English Department as a faculty member. In addition, many of the committee members were also members of the Faculty Senate (a key player in the university governance process especially with regard to curricular matters).

The initial charge to the General Education Committee in 1983 gave the committee two years to complete its task. As we began we were not sure if this was too much or too little time. However, it was clear at the outset that the process would be a time and energy-consuming task. Once the process started, it quickly became very evident that committee members had decided to invest time and energy to the process. At different points in the process the investment people made to get as far as we did made all committed to complete, and not sabotage, the process. That few committee members missed meetings (held every couple of weeks at the start, then nearly every week later) made this commitment clear. Attendance also reflected a desire to 'get ones two cents in' and to prevent others from easily doing what individual members might oppose.

Another important factor in the General Education Committee's early work was its *isolation*. We met every two weeks and distributed minutes to ourselves. (As I think about it now, the Internet and web pages would probably require us to post minutes of all deliberations on the web. This makes me shudder !)

Items from minutes of early meetings reflect the usual struggles of committees such as this trying to define their tasks and directions. Should the task take two years? Why not just do it? Everything is fine, why do we need to do change? Do we need to study philosophies of general education? Can we ever agree? Are we starting at the wrong end, should examine what we already have and try to strengthen it? How far do we open the door once we start? Do we need to examine standards for all general education courses? What's the distinction between education and training? How do we foster the 'something clicks' phenomenon? Must we agree on a content base? Is there an appropriate mix of content and skills? Do we need to develop guidance for faculty and students on the meaning of 'new general education' program and courses we might develop?

As we read and discussed general education literature and explored many models, it became clear that we had to pay particular attention to some specific issues if we were to succeed. *First*, we had to pay attention not only to what we were doing, but also what we were not doing. That is, *which areas of the undergraduate experience would become the province of*

this general education committee and ultimately the university community? Which areas would be the responsibility of the individual faculty, departments and academic colleges? This approach generated some protest from departments and individual faculty who argued that any outside involvement in their individual courses violated their academic freedom. Integrating general education goals and perspectives into existing courses was, as they saw it, inappropriate. However, initially *identifying and clearly articulating curricular components of undergraduate education and the locus of responsibility for each component* overcame this objection. General Education was the common broadening and connecting experience of undergraduate education and was the responsibility of the university community through its governance structure. The Major was the primary in-depth training involving method, substance and application and the responsibility of the academic departments and colleges. Electives were to complement General Education and the Major in ways appropriate to student and were the responsibility of the student with assistance from the academic advisor. The university community's responsibility for general education was reinforced by obtaining support for this analysis of the curriculum through the faculty governance process before either a general education course structure or individual courses were proposed.

Secondly, we knew we had to *write our reports in language that would be understood by all segments of the university community*. We noted that educational reform efforts are often filled with 'jargon' and 'administrative new-speak' of competencies and outcomes or whatever words were fashionable at the time of the report's writing. While we, as a committee, had many chances to come to common understanding of such terms, we could never agree on a common language and understanding in the broader university community using these terms. We certainly could not expect the diverse faculty to come to an understanding. Though these technical concepts have meaning to those who use them everyday, experience of many committee members with the faculty senate led us to believe that the use of such language would doom our efforts before they began. We had to write in a language meaningful to our university context and to faculty with diverse backgrounds.

As the process continued, committee members talked informally with colleagues, but the committee issued no formal reports to anyone until the end of the spring 1984 semester, eight

months after we began. At that point the committee had produced nine goals for the general education program we were designing (See Chart 1). These goals were submitted to the Faculty Senate and, after much debate and some modification, the goals for the new general education program were approved.

The Benefits of Early Isolation: This behind-closed-doors process built both anxiety and curiosity in the faculty. These faculty reactions were seen as positives in the process. When faculty saw (1) that the committee would not be hurried by some hidden agenda or favorite model of a university president, provost or dean, and (2) that the committee did not intend to create chaos, much of the tension held over from earlier reform attempts eased. Faculty Senate approval of these goals achieved a major shift in the University's understanding of the responsibility for courses. We now had approval for the idea that the university community as a whole had responsibility and authority to dictate some of the goals (that is, the general education related goals) for specific courses (taught in departments) which would be part of the program and available for all students.

Thus, after a full academic year's work, we completed a recommendation to the Faculty Senate describing the goals we identified for the general education program we had yet to structure. These goals were not in any sense revolutionary, nor did they have any specific interdisciplinary content. But they certainly provided a statement of purpose beyond distributing student FTE's to different departments.

The Discovery of 'the Matrix': Structure Before Content: At an early 1984 meeting all members of the General Education Committee were encouraged to draft an outline of the skills and content reflected in the approved general education goals and how we might proceed in translating these goals into an actual program of courses. One of these outlines using a matrix model served as a basic document that was refined and ultimately sent to the university faculty for response and comment in March of 1985. This *matrix* (a term we never used in discussions with the larger faculty community) provided a way of structuring some integration of academic subject matter. It saw *the student at the locus of interdisciplinarity* (See Chart 2). That is, though we as individual faculty may not be interdisciplinary, suffering as we do from the specialization

of our training, we felt we could provide our students with an opportunity to study some specific subject matters or analytical tools from different perspectives. We did not understand this until we started to form the matrix and were then able to visualize what we were doing.

The original document was based on a *matrix of general education goals* (the goals were already approved) and *academic perspectives* reflected broad ways of understanding the world around us, and producing knowledge about that world. (See Chart 1) From this Matrix emerged a number of principles that were explicitly discussed in the committee and in Faculty Senate debates. First there was *the inclusiveness principle*. This meant that no one discipline or perspective has a monopoly on the truth, but that all participate in the discovery process. This approach also provided support for all academic disciplines and departments present in our university, the older more traditional ones (e.g., History, Philosophy, Chemistry) and newer ones (e.g., Communications, Criminal Justice and Oceanography) while giving power or special privilege to none. Here we placed the student and the learning process as the center of the program and saw the student as the integrator of knowledge, *the locus of interdisciplinarity*, something we as specialized faculty were infrequently trained to do. *Thus, this program provided an interdisciplinary framework in its structure based on traditional academic disciplines, without having to discuss and get approval for an interdisciplinary program.* A discussion of Lewis Mumford's approach to interdisciplinary work describes well the approach that we implicitly took.

This is a centrist rather than a radical interdisciplinary project, in that Mumford does not explicitly seek to abolish the disciplines in favor of some kind of unitary science or method. He does not deny the value of the 'widely separated fields' – indeed, he seems to insist that they are the locus of detailed knowledge and of the unearthing of new evidence. But the distinctions between specializations do not preclude their subjects being part of a larger pattern that remains invisible to the individual disciplinary worker. The generalist must find a vantage-point from which the larger pattern becomes visible, a pattern the individual fields help to form. Yet, once the larger pattern appears, it does not leave the disciplines just as we found them, for new elements – “unseen details” – can now be located within particular fields; and the nature of the boundaries between fields also becomes clear: they do not correspond, naturally and essentially, with the actual articulations of intellectual problems and their solutions; they are primarily, prudential ‘gentlemen’s agreements,’ enforced by “No Trespassing” signs which can accidentally or arbitrarily divide elements that belong together. (Beckwith: 1996, p.16).

During this second stage of the reform process (developing structure and content) a great deal of effort was expended informally interacting and communicating with individual faculty, departments and colleges. This feedback was integrated into revisions and helped build interest and a knowledge base that would be needed for the political debates that would surely take place when a final proposal was submitted to the Faculty Senate for debate. Once we had a solid draft proposal, this was published in the campus newspaper and widely distributed to faculty and departments. Though this draft was a “consensus document” it was clear that not all committee members supported in detail all provisions. Meetings were held with colleges and student senate groups to get further feedback. These meetings allowed for opposing viewpoints from General Education Committee members to be aired and argued. Rather than having all General Education Committee members ‘support the entire program’ in an effort to sell it, we decided that the spirit of debate should continue throughout the entire process. In this way, minority positions within the General Education Committee sometimes became positions that were ultimately adopted.

The second principle was our decision to make *general education applicable to all students*, those in traditional liberal arts programs and those in professional programs. This was especially problematic in a large university with four professional colleges whose curricula, in part, were regulated by professional accrediting bodies. *Bridging gaps with professional programs* helped us deal with this problem. Ensuring their involvement on committees and subcommittees proposing general education reform provided participation. Working through faculty governance ensured that the proposals would originate from and have approval of professional programs as well as the traditional liberal arts where most general education classes would be offered. In addition, consultation with professional programs helped us find ways to accommodate ‘credit hour’ problems stemming from accreditation bodies and state higher education agencies without sacrificing the basic integrity of the overall program.

Finally, we also squarely faced a third principle, *the principle of constraints*. Many members of the general education committee could construct their ‘ideal’ program. However, we forced ourselves to consider limitations imposed by the numbers of faculty, our limitations as

faculty, work-loads concerns and FTE formulae, room size availability, scheduling problems, and issues of transferability of courses both into and out of Old Dominion University. We knew that such constraints would lead departments to focus primarily on introductory disciplinary courses as the vehicle for exposing students to the goals and perspectives structured into our general education program. Departments were free to propose new courses and to show how new course offerings met the requirements delineated in the outline for proposals related to the perspectives. However, we felt most departments would choose to integrate general education goals into the introductory courses designed for their majors, but which would now need to address general education goals that the university community was imposing.

Here again, the matrix had major influence on the committee's understanding of our general education program and on the politics of reform. Though not all approved skills or perspective area courses were designed to meet all goals, most goals were to be met by more than one skill and /or perspective course. For example, Historical, Social Science and Philosophical perspective courses would be designed, among other things, to develop student's 'understanding of Western and Non-Western cultures, values and institutions' and 'the contributions, perspectives and concern of women and minorities'. Each approved General Education course approved for these "Perspectives" would need to show that it dealt with these themes from the perspective of its specific intellectual traditions (e.g. History or Sociology). In addition, all perspective area courses were to expose students to how technology is dealt with in all of the intellectual traditions represented by the 'Perspective' areas: Fine and Performing Arts, Literary, Historical, Philosophical, Social Science and Natural Science. This technology requirement was added in the 1996-1998 general education reform effort.

This matrix of goals and perspectives mixed with disciplinary content made the lower-level general education experience more than just a collection of independent of courses whose defining characteristics are those provided by their disciplines. *The structure of the program helps us provide students with a more coherent experience. This experience is linked by the cross-disciplinary exploration of areas defined by goals that transcend individual disciplinary perspectives.* Thus, the locus of interdisciplinarity as we envisioned it, was found in the

structure and in the student who is exposed to similar issues from different disciplinary (perspective) discourses (see Chart 2).

Building on Momentum: While earlier (pre-1983) large-scale curricular reform efforts failed at our university, narrower, other more focused *explicitly interdisciplinary reform efforts* were attracting faculty interest and developing a university wide cadre of faculty who were learning about the languages and strategies of curricular reform and implementation. These efforts were important because they provided a base of faculty and expertise upon which the 1983-1985 general education reform effort could build. During the three years prior to the beginning of the General Education Committee's work in 1983 three faculty development efforts were particularly important. The university's *International Studies* program received U.S. Department of Education grant funding for a Third-World Studies faculty development program. This program aimed at enhancing the ability and knowledge base for faculty to integrate third world experiences into the undergraduate program. Central to this project was a year - long interdisciplinary faculty development seminar, with 16 faculty participants from all colleges in the university receiving a one - course teaching load reduction for participation. In addition, the university's *Women's Studies* program provided interdisciplinary workshops for faculty to increase their knowledge and familiarity with feminist scholarship and perspectives. Finally, for the *Writing across the Disciplines* program provided two-week seminar opportunities for faculty from different disciplines to interact, to share experiences and to learn from disciplines other than their own about the writing process. Over 120 faculty members participated in this program over the seven years it was offered.

Each of these faculty development efforts asked faculty participants to take their experiences back to their departments and colleges as they served as resource persons and workshop leaders for faculty in their colleges and departments. Prior to 1983, these faculty development efforts started to create *a culture where interdisciplinary curriculum reform was seen as a 'continuing process'* and not a series of single isolated episodes. Central to this process was a clear articulation by the General Education Committee of underlying assumptions about the undergraduate educational experience and our organizational limitations. Organizing

these efforts was the matrix.

Integrating the Administrative Details: Once the structure, content and courses for this program were approved great care and attention was taken to link knowledge and perspectives provided by the new program with various university support offices: the registrar had to be clear on how this would effect graduation requirements for students using different catalogs, admissions councilors and advisors had to understand the intricacies and philosophy of the program, so they could explain it to prospective and new students. The transfer credit evaluation office had to be clear on how this reform was to be handled for the large number of students transferring into and out of our university. The scheduling needs of departments and various colleges were a concern. To address all of these issues a three-day ‘working workshop’ was held off-campus. Here the members of the general education committee and employees from the various offices affected by these changes and who would have to implement them in some way worked on developing procedures and language which would need to be placed in various parts of the university catalogue as the new program went into effect. This program surfaced many problems and conflicts all of which had to be hammered out before the program could actually go into effect. Again the inclusion of various university departments in the process with the General Education Committee helped prevent many problems from emerging as the program went into operation in 1986.

Upper-Level General Education Reform (1996): From Anything to Interdisciplinary Clusters: The Matrix Revisited

Upper level general education at Old Dominion University has always emphasized requiring students to take courses outside of their majors. In the early 1970's the requirement was simply *any four courses (12 credit hours)* at the junior / senior level chosen from all courses offered at the university. There was no particular content or focus required. In the early 1980's the minor (a minimum of 12 hours of junior / senior level courses) in disciplines already offering majors was developed. With the 1986 general education reform, *minors* were kept as a way of

focusing and integrating the upper level outside the major experience at the upper level. In addition, a collection of AU@ courses (“U” standing for approved ‘upper level’ courses) were approved with students having to take one course from a list emphasizing History, Philosophy or Impacts of Science and Technology, one course from a list emphasizing Non-western, Minority or Women’s studies (a diversity emphasis) and 2 more courses from the ‘Subject Areas’ similar to the ‘Perspectives’ at the lower level. All approved courses were to emphasize integration and synthesis of knowledge, and writing. This gave some substantive structure to the previously open-ended course options.

Starting with the 1998-2000 Catalog the *Cluster or Focus Area* (See Chart 3) appeared as a new option for undergraduate students seeking to meet their upper-level general education requirement. While the traditional discipline based ‘minors’ remained an option, the interdisciplinary Cluster or Focus area, and an International Certificate (which builds on international or globally oriented Clusters) replaced the upper level AU@ course option.

The Focus area or Cluster option (Cluster for short) is one of the results of the most recent review and revision of General Education experience for undergraduate students at Old Dominion University. In redefining the goals of General Education the Faculty Senate set the following goal: “To integrate knowledge at the upper level”. In doing so, the Faculty Senate provided the university faculty in general and Committee A of the Faculty Senate (the Undergraduate Education Committee) with a formidable task. Integrating knowledge from various disciplines is not something that comes easy for faculty, yet we were charged with helping students to accomplish this goal.

The idea of Clusters built on the approach lower level general education described above. At the lower level the program is structured around a matrix of goals and perspectives. At the upper level, clusters were developed around a matrix of themes and classes (See Chart 4 for an example of a Cluster Matrix).

At the Upper-level, the concept of Clusters works in much the same way. That is, each Cluster is to be more than just a collection of individual upper level courses taught by individual faculty in their individual departments. Clusters are to represent the collective effort of faculty from different disciplines bringing their interest and knowledge to bear on a specific theme or focus area. During the 1997 academic year the Undergraduate Education Committee of the Faculty Senate (Committee A) and the Provost reviewed over twenty Cluster proposals and approved ten Clusters as models to begin the university's exploration of interdisciplinary, theme focused, upper-level undergraduate education. The approved Clusters were: *Administrative Leadership and Ethics for Professional Roles, Aesthetics in Art and Science, The Designed World, Environmental Management, Explorations in Conflict and Its Resolution, Health and Wellness, Impacts of Technology, Understanding the World of Children, The Urban Community: Problems and Prospects, and World Cultures: Values and Visions*. In putting these Clusters together new courses as well as existing courses became part of the mix. *In order to ensure diversity of perspective the Faculty Senate mandated that all clusters contain courses that provide a scientific perspective (natural or social science) and courses that provide a humanities perspective (history, philosophy, the arts and literature).*

During the summer of 1998 faculty whose courses are part of an approved Cluster participated in a workshop designed to give them the opportunity to putting the Cluster concept into operation. This workshop reinforced in some cases and initiated in others a creative process which demands that faculty teaching courses which are part of Clusters begin to conceive of their courses differently. No longer are their courses simply components of their disciplines and departmental majors. As "cluster courses" they are also part of a learning experience that uses the problem, theme or issue that focuses the cluster as a central organizing point. As part of the workshop, faculty members were charged with developing a general statement of the theme (these appear in the 1998-2000 Catalog). *In addition, cluster faculty examined their courses to determine how various sub-themes were dealt with in each of the courses included in the cluster. This development of a matrix of courses and themes engaged faculty in a process that began to give the cluster faculty a reference point external to their disciplines.* At the end of her book exploring interdisciplinarity Julie Thompson Klein (p. 196) writes:

ACutting across all these theories [of interdisciplinarity] is one recurring idea. Interdisciplinarity

is a means of solving problems and answering questions that cannot be satisfactorily addressed using single methods or approaches”.

The development of clusters builds upon this basic definition of interdisciplinarity. Again the matrix was an analytical and organizing mechanism that allowed for the respect for disciplinary contributions and view of the complementarity of disciplines in the context of the problem or focus of the cluster.

These Cluster Development tasks engaged faculty in the creative process of learning from other disciplines, learning what other cluster courses bring to the discussion of the focus area or theme, and reexamining what they themselves bring to the cluster. Such interaction across disciplinary boundaries enriches both the disciplines of participating faculty as well as the clusters. It also brings more cohesion to the student experience of the upper level general education than any simple collection of courses could achieve.

In developing Clusters the faculty has begun a process that has the possibility of leading both faculty and students in some incredibly creative directions. Seminars and conferences related to Cluster themes are developing and could become commonplace. During the past two years, the Understanding the World of Children cluster provided a theme for the university's Film and Video Festival. The World Cultures: Values and Visions cluster brought a nationally prominent anthropologist to discuss film and culture during the 1999 Film and video festival. While we have learning communities for first year students, Clusters as they develop, could provide a structure for the development of learning communities of both students and faculty. Curriculum development focused on Cluster themes should enrich all majors as new Clusters and courses focusing on contemporary and future problems are developed. Upper level classes will also become enriched by an increasing diversity of students participating in such classes.

Conclusion: The curricular reform processes described here demonstrates that successful and long lasting general education reform is possible. After nearly 20 year, the basic structure of general education at Old Dominion University has stayed fairly stable and is supported by

students, faculty, and administrators (as our assessment data show). I believe the stability of this program owes much to the thoughtful attention and commitment of the members of the 1983-1986 General Education Committee to inclusion and participation, to faculty governance, and to respect for constraints placed on any program by limited resources. By structuring and defining a program around institutional culture, by learning from failed efforts and building on other curricular reform efforts a culture supporting this approach to general education has developed. The development and clear articulation of philosophy, goals, structure and content, and responsibilities for curricular decisions, and the use of the matrix as an organizing principle has provided the basis for a common vision where General Education is concerned.

As the General Education Program at Old Dominion University developed over the past 17 years it has structured an interdisciplinary experience into both its lower level and upper level curriculum. By applying the analytical tool of the matrix, we have been able to discover and build linkages between disciplines and courses. The matrix has also allowed us to clearly articulate both the responsibilities for the undergraduate experience, to discover complementarity in often competing departmental and college structures. The matrix approach has also helped us to make choices that are workable within the limitations of faculty, departmental and university resources. We have also been able to build a solid foundation that has promoted that has promoted the development and approval of other interdisciplinary curricular experiences including more interdisciplinary majors and minors. The challenge that lies ahead is finding and developing 'curricular leaders' who will build on this strong foundation.

REFERENCES:

Beckwith, Guy V. (1996) "The Generalist and the Disciplines: The Case of Lewis Mumford," ISSUES IN INTEGRATIVE STUDIES. No.14, pp. 7-28.

Jones, Morgan D.(1998) THE THINKER'S TOOLKIT: 14 POWERFUL TECHNIQUES FOR PROBLEM SOLVING. NY: Times Business, 1998.

Thompson, Julie Klein (1990) INTERDISCIPLINARITY: HISTORY, THEORY AND PRACTICE. Detroit, MI: Wayne State University Press, 1990.

Vandament, William E. (1988) "Those Who Would Reform Undergraduate Education Must Recognize the Realities of Academic Governance," THE CHRONICLE OF HIGHER EDUCATION, XXXV / 14, November 30, p A52.

CHART 1**Lower Level General Education Matrix: Old Dominion University 1986-1998**

	PERSPECTIVES					
GOALS	Fine and Performing Arts	Historical	Literary	Natural Science	Philosophical	Social Science
critical and analytical thinking	XXX	XXX	XXX	XXX	XXX	XXX
approaches to knowledge and contributions to problem solving	XXX	XXX	XXX	XXX	XXX	XXX
ideals of creativity, service and scholarship	XXX Eliminated for All Persp	XXX ectives	XXX 1998	XXX	XXX	XXX
effective use of English language	XXX	XXX	XXX	XXX	XXX	XXX
appreciation for aesthetic experience	XXX		XXX			
ability to make reasoned, ethical or aesthetic or scientific judgments	XXX Aesthetic	XXX reasoned	XXX aesthetic	XXX ethical and scientific	XXX ethical	XXX ethical and scientific
understanding of American Culture and institutions	XXX	XXX				XXX
understanding of Non-Western culture and values		XXX			XXX	XXX
understand contributions, perspectives and concerns of women and minorities		XXX	XXX			XXX

Technology added 1998	XXX	XXX	XXX	XXX	XXX	XXX
--------------------------	-----	-----	-----	-----	-----	-----

CHART 2
Locus of Interdisciplinarity Matrix at Old Dominion University

Possibilities	Lower Level General Ed	Upper Level General Education
Discipline	N/A	N/A
Program Structure	Goals / Perspectives Nexus	Clusters: Theme / Course Nexus
Individual Courses	N/A	N/A
Faculty (individual ID Faculty)	N/A	N/A
Faculty (team taught)	N/A	N/A
Faculty (collective control)	XXX (Governance Process)	XXX (Cluster faculty)
Student	XXX	XXX

Chart 3

Clusters: An Interdisciplinary Upper Level General Education Option

<p>Upper Level General Education Clusters</p>	<p>Requirements: 9 hours; one (AW@riting Intensive course; one cluster course may also be used in your major.</p>																								
<p>Admin Leadership and Ethics for Professional Roles THEMES: Ethics; Communication; Decision Making ;Professionalism COURSES:</p> <table border="0"> <tr> <td>Comm 351</td> <td>Org Comm</td> </tr> <tr> <td>Hlth 425</td> <td>Lead and MGT in Health Prof</td> </tr> <tr> <td>Mgmt 325</td> <td>Principles of MGT</td> </tr> <tr> <td>Phil 303W</td> <td>Business Ethics</td> </tr> <tr> <td>Phil 345W</td> <td>Bioethics</td> </tr> <tr> <td>Psyc 303</td> <td>Industrial / Org Psychology</td> </tr> </table>	Comm 351	Org Comm	Hlth 425	Lead and MGT in Health Prof	Mgmt 325	Principles of MGT	Phil 303W	Business Ethics	Phil 345W	Bioethics	Psyc 303	Industrial / Org Psychology	<p>Health and Wellness THEMES :Learn knowledge of: indicators of personal and public health; strategies for health promotion; Policies and practices that influence the health and status of a population; ethical theories and principles pertinent to health and wellness.;Improve skills: Improving and maintaining health; Identifying public, corporate, and social policies that impact health status; decision making, grounded in ethical theories and principles;Cultural Context of health and wellness. COURSES:</p> <table border="0"> <tr> <td>CHP 400</td> <td>Philosophy of Health</td> </tr> <tr> <td>HLTH 300</td> <td>Health: Lifestyles and Awareness</td> </tr> <tr> <td>PE 403</td> <td>Lifetime Fitness and Wellness</td> </tr> <tr> <td>Phil 345W</td> <td>Bioethics</td> </tr> <tr> <td>Psyc 306</td> <td>Health Psychology</td> </tr> <tr> <td>Soc 440W</td> <td>Sociology of Health and Illness</td> </tr> </table>	CHP 400	Philosophy of Health	HLTH 300	Health: Lifestyles and Awareness	PE 403	Lifetime Fitness and Wellness	Phil 345W	Bioethics	Psyc 306	Health Psychology	Soc 440W	Sociology of Health and Illness
Comm 351	Org Comm																								
Hlth 425	Lead and MGT in Health Prof																								
Mgmt 325	Principles of MGT																								
Phil 303W	Business Ethics																								
Phil 345W	Bioethics																								
Psyc 303	Industrial / Org Psychology																								
CHP 400	Philosophy of Health																								
HLTH 300	Health: Lifestyles and Awareness																								
PE 403	Lifetime Fitness and Wellness																								
Phil 345W	Bioethics																								
Psyc 306	Health Psychology																								
Soc 440W	Sociology of Health and Illness																								
<p>Aesthetics in Art and Science THEMES: Aesthetics; Trends in the Arts; Trends in the Sciences ;Perception Art and Science in the Next Century COURSES:</p> <table border="0"> <tr> <td>Art 304</td> <td>Color</td> </tr> <tr> <td>Musc 410</td> <td>Psychology of Music</td> </tr> <tr> <td>Phil 324</td> <td>Philosophy of Art</td> </tr> <tr> <td>Phys 332W</td> <td>Physics of Music and Musical Reproduction</td> </tr> <tr> <td>Phys 311</td> <td>Color in Nature and Art</td> </tr> <tr> <td>Psyc 313</td> <td>Perception</td> </tr> </table>	Art 304	Color	Musc 410	Psychology of Music	Phil 324	Philosophy of Art	Phys 332W	Physics of Music and Musical Reproduction	Phys 311	Color in Nature and Art	Psyc 313	Perception	<p>Impacts of Technology THEMES: Analyze past effects of technological change; characterize the present impact of technology on societies around the world; explain the diffusion and adoption of technology; analyze the positive and negative effects of technology; assess the implications of technological interactions with the values and structures of societies; develop skills to appraise the impacts of technologies on the future COURSES:</p> <table border="0"> <tr> <td>Hist 389T</td> <td>Technology and Civilization</td> </tr> <tr> <td>Geog 305</td> <td>World Resources</td> </tr> <tr> <td>Geog 306</td> <td>Hazards: Natural and Technological</td> </tr> <tr> <td>OTS 370T/W</td> <td>Technology and Society</td> </tr> <tr> <td>OTS 382</td> <td>Industrial Design</td> </tr> <tr> <td>Phil 383T</td> <td>Technology: Its Nature and Significance</td> </tr> </table>	Hist 389T	Technology and Civilization	Geog 305	World Resources	Geog 306	Hazards: Natural and Technological	OTS 370T/W	Technology and Society	OTS 382	Industrial Design	Phil 383T	Technology: Its Nature and Significance
Art 304	Color																								
Musc 410	Psychology of Music																								
Phil 324	Philosophy of Art																								
Phys 332W	Physics of Music and Musical Reproduction																								
Phys 311	Color in Nature and Art																								
Psyc 313	Perception																								
Hist 389T	Technology and Civilization																								
Geog 305	World Resources																								
Geog 306	Hazards: Natural and Technological																								
OTS 370T/W	Technology and Society																								
OTS 382	Industrial Design																								
Phil 383T	Technology: Its Nature and Significance																								
<p>The Designed World THEMES: Historical evolution of design;Contemporary trends and issues in design; Technology and its impact on design; Design in its global context: cross cultural aspects of design; Perceptual and organizational principles in design through time and space; media and techniques of design; design for special populations COURSES:</p> <table border="0"> <tr> <td>Art 435W</td> <td>Modern Architecture</td> </tr> <tr> <td>Art 439</td> <td>Art Between the Wars: 1919-1939</td> </tr> <tr> <td>OTS 386</td> <td>Architecture</td> </tr> <tr> <td>OTS 422</td> <td>Fashion Design and Coordination</td> </tr> <tr> <td>PSYC 313</td> <td>Perception</td> </tr> <tr> <td>PSYC 344</td> <td>Human Factors</td> </tr> </table>	Art 435W	Modern Architecture	Art 439	Art Between the Wars: 1919-1939	OTS 386	Architecture	OTS 422	Fashion Design and Coordination	PSYC 313	Perception	PSYC 344	Human Factors	<p>Understanding the World of Children THEMES: Appreciate and value the world from a child ' ' s perspective; Learn how our treatment of children is a reflection of Adult-centered@ perspectives, interactions and inequalities; learn components and techniques for understanding children and raising children with dignity; Learn to critique and evaluate disciplinary data and methods related to studying children; learn to critique and evaluate strategies and recommendations for improving the status of children. COURSES:</p> <table border="0"> <tr> <td>Comm 427</td> <td>Children and Communication</td> </tr> <tr> <td>Crjs 403W</td> <td>Violence in the World of Children</td> </tr> <tr> <td>Engl 405W</td> <td>Children and Literature</td> </tr> <tr> <td>ESSE 476</td> <td>Practical Applications in the World of Children</td> </tr> <tr> <td>Psyc 351</td> <td>Child Psychology</td> </tr> <tr> <td>Soc 402</td> <td>Child Welfare</td> </tr> </table>	Comm 427	Children and Communication	Crjs 403W	Violence in the World of Children	Engl 405W	Children and Literature	ESSE 476	Practical Applications in the World of Children	Psyc 351	Child Psychology	Soc 402	Child Welfare
Art 435W	Modern Architecture																								
Art 439	Art Between the Wars: 1919-1939																								
OTS 386	Architecture																								
OTS 422	Fashion Design and Coordination																								
PSYC 313	Perception																								
PSYC 344	Human Factors																								
Comm 427	Children and Communication																								
Crjs 403W	Violence in the World of Children																								
Engl 405W	Children and Literature																								
ESSE 476	Practical Applications in the World of Children																								
Psyc 351	Child Psychology																								
Soc 402	Child Welfare																								

<p>Environmental Management</p> <p>THEMES: Environmental problems and issues including their historical dimension; multifaceted interactions of humans and their environment focusing on principles and methods of environmental science; scientific and technological methodologies and concepts; complexity of environmental problems and their alleviation; sustainable development and what the principles of zero emissions, pollution prevention and designing for the environment; legal dimensions involved in addressing environmental issues; economic aspects of environmental issues; environmental management and public policy; and, alternative policies to manage environmental problems.</p> <p>COURSES:</p> <p>Biol 317 Environmental Issues CE 458 Sustainable Development Econ 447 Natural resources and Environmental Economics Envh 402W Environmental Health Administration and Law Geog 306 Hazards: Natural and Technological Phil 344T Environmental Ethics</p>	<p>The Urban Community</p> <p>THEMES: Appreciation of the complexities of the interlocking and contingent nature of urban problems; provide an understanding of the problems associated with common space, diversity, urban services, disorder and work in an urban environment.</p> <p>COURSES:</p> <p>Chp 415W Critical Issues in Community Health CRJS 355 Crime asnd the Community Econ 445 Urban Economics Geog 310U Geography of the City Hist 303U The City in Western Civilization Psyc 431 Community Psychology</p>
<p>Exploration in Conflict and Resolution</p> <p>THEMES: Study conflict in a variety of contexts from interpersonal to institutional; the importance of both perceptions and objective conditions in generating and resolving conflict; Improve skills in analyzing conflict and applying resolution strategies from communication to social and cultural change; Confront the individual and social impacts of conflict and failure of resolution</p> <p>COURSES:</p> <p>Comm 421 Communication and Conflict Resolution Crjs 401W Understanding Violence Econ 454 Economic Development Engl 472 Vietnam: The Government and the Media Hist 410 War as Human Experience Pols 462 Ethnic Conflict in the New World Order</p>	<p>World Cultures Values and Visions</p> <p>THEMES: Contrast the values of the United States with those of Other Cultures; Learn how other cultures structure time, space, goals, work, education, groups and their conceptions of personhood in these contexts; understand and describe issues from different cultural contexts; analyze social, political, cultural and economic factors that may help or hinder communication across cultures; identify strategies for presenting information in ways that make sense to people from other cultures and eliminate barriers to inter-cultural communication.</p> <p>COURSES:</p> <p>Engl 371W Communications across Cultures Mgmt 361 International Business Operations Mktg 411 Multi-National Marketing Phil 354 Comparative Philosophy: East and West Psyc 420 Cross Cultural Psychology Wmst 401W Women: A Global Perspective</p>
<p>Global EngineeringTHEMES: global technology, effects of cultureand communication differences on business practices and project teams; sustainable development, environmental impacts of industrialization and appropriate technology.</p> <p>COURSES:</p> <p>Enma 422W* Global Engineering and Project Management Ce 458 Sustainable Development Mgmt 361 International Business Operations Geog 305 World Resources Engl 371W Communications Across Cultures</p>	

CHART 3: THE MATRIX: An Example of Making Explicit Linkages Between Cluster Courses:

UNDERSTANDING THE WORLD OF CHILDREN CLUSTER

CLUSTER GOALS FOR STUDENTS COURSES	<i>To Appreciate and value child''s perspective</i>	<i>To learn how treatment of children relates to Adult perspective</i>	<i>To learn components and techniques for raising children with dignity</i>	<i>To critique and evaluation of data and methods of studying children</i>	<i>To critique and evaluate strategies and recommendations for improving the status of children</i>
<i>Soc 402 Child Welfare</i>	place children''s voices and interests at the center of research and theory	analyze children from a sociological perspective of power and unequal resources; as an oppressed group; & physical, emotional and sexual abuse of children	integrate insights for children;''s dignity from macro analyses of inequalities and micro-parenting (Aself-esteem@) research	examine research and critical analyses of the field of child welfare and the adult agenda its policies reflect	Individual, family, community and national strategies
<i>Psyc 351 Child Psychology</i>	defining and discuss a developmental perspective on childhood	Compare historical adult centered view of development with current child centered view	interaction of family, community, and cultural factors with cognitive, social, and emotional development	examine research and analysis of child development in social and cultural contexts	discuss implications of current data for changes
<i>Comm 427 Children and Communication</i>	Examine the unique qualities of children as message producers and consumes	Understand communication is a developmental process beginning in early childhood ; a life-span approach to human communication	Develop approaches to communicating with children that teach children how to communicate effectively, that is, to manage information effectively, to relate to peers and adults, and critically consume media	examine research and analyses of child, adult and mass media communication with children	Develop approaches to better managing communication with and among children at all levels; increase media literacy, develop child-friendly national policies relating to children''s media
<i>Crjs/Soc 403W Violence in the World of Children</i>	expanding upon legal and social science definitions of violence to include violations of human dignity	discipline, in families and schools criminal and juvenile justice responses; Asocial construction@ of childhood	approaches to conflict in individuals, families and community; child development and discipline	examine research and analyses of violence in children''s lives; multi-factor explanations and processes	Individual, family, community and national strategies
<i>English 405W Children and Literature</i>				explore portrayals of children in literary works and creative writing	
<i>CSSE 476 Practical Applications in the World of Children (Prerequisite ''2 other cluster courses or 1 and other as co-requisite)</i>	developing the art of listening to children	observing different behaviors of children and reflecting on varying methods of child raising. Participating in parent classes	learning to use positive techniques when relating to children	make and analyze direct observations of children''s behavior applying knowledge gained in other cluster courses	encouraging students to become active in professional organizations and becoming militant on behalf of children

Guidelines for Developing Upper Level General Education Clusters

The Process of Developing Clusters: faculty member interested in developing a cluster focusing on some specific issue or problem should consider the following:

HINTS:

- \$ **Think of problems or issues that will have continuing significance and / or relevance after the student graduates;**
- \$ **Explore the University''s Mission and / or Strategic Plan and see if you can envision clusters which will link to these statements;**
- \$ **Look through the catalog and schedule book to see if there are courses in other disciplines that deal with the topic or problem of interest to you;**
- \$ **Identify faculty who teach those courses; get in touch with them and discuss the possibilities;**
- \$ **If courses aren't presently available, get in touch with deans, associate deans or chairs of departments whose disciplines you think are relevant to the study of the problem or issue for recommendations of faculty who might be interested;**
- \$ **Start discussions with these faculty and be sure to get copies of the New Cluster Proposal format;**
- \$ **Contact Lou Lombardo (Sociology and Criminal Justice) to get copies of cluster reports for those clusters which have already been approved; (<Llombard@odu.edu>; 683-3800);**
- \$ **Work on finding and building connections between and among courses so that the various themes of the cluster can be met (though in different ways depending on the combinations of disciplines a student takes) regardless of the courses a student takes; share syllabi and reading lists;**
- \$ **Think of how students will see the connections between courses in the cluster. Maybe a required course, or an option where two courses are overview type and four are specific applications;**
- \$ **Have someone serve as ACluster Coordinator@.**

PITFALLS:

- \$ **Don''t think that all courses need to be in the catalog at present; new courses can be thought about and developed as a result of thinking about how instruction in a discipline relates to a specific problem or issue;**
- \$ **Don''t have too many prerequisites for courses which are part of a cluster (where possible have completion of Lower level General Education related prerequisites);**
- \$ **Try to have at least two Writing Intensive courses in your cluster so students have some flexibility in completing the cluster;**
- \$ **Be sure to have at least one course from the Natural or Social Sciences and one course from the Humanities as part of your cluster;**
- \$ **Try to ensure that students will have to have courses from at least 2 different disciplines outside of their major;**
- \$ **Be sure there is a commitment (signed off on by department chairs) to offer the courses in a cluster on a regular basis (so a student can complete a cluster in two years).**

In developing proposals for new clusters, faculty involved should focus on completing the following tasks. The completed tasks will form the basis of the ACluster Proposal@.:

1. Defining the central focus of the cluster: What is this cluster all about? How does the statement reflect the cross-disciplinary focus? *Developing a concise statement of the cluster''s theme or focus (no more than 5 sentences).*
2. Defining the clusters goals: What do we intend for students to come away with once they have completed the cluster? Knowledge, skills, perspectives.

3. Exploring and making explicit the links between courses: What explicit links exist among the courses in the cluster? Perspectives? Topics? Readings? Assignments? (See Matrix of Courses and Themes).
4. Ensuring 3 course combinations reflect cluster'' s goals: What needs to be added, changed, developed for individual courses to make this happen?
5. Identifying Cluster Supporting Activities: What extra-curricular (outside of the class-room) activities are suggested for students and/or faculty to support the focus of the cluster?
6. Identifying Ways of Assessing Clusters: What strategies, information would be useful to collect as measures for continuing cluster development and for judging a cluster'' s success?

Matrix for Generic Cluster with Five Cluster Themes Identified:

CLUSTER THEMES

<u>COURSE</u>	Theme 1	Theme 2	Theme 3	Theme 4	Theme 5
Course #1					
Course #2					
Course #3					
Course #4					
Course #5					
Course #6					

Key Principles in Old Dominion University's General Education Reform

Effort:

1. Develop and receive appropriate approvals in stages (e.g., goals before structure, structure before content).
2. Clarifying and specifying distribution of and responsibility for curriculum comprising the undergraduate degree (major, minor, General Education, electives).
3. General Education applicable to all students (professional and traditional liberal arts programs).
4. Recognizing structural and resource constraints and integrating them into program decisions.
5. Recognizing and dealing with problems of articulation and transfer into and out of the university.
6. Utilizing general English and avoiding 'specialty language or jargon' in developing and presenting proposals.
7. Building on momentum of other curricular reforms.
8. Involving admissions, general academic advisors, department chairs, deans, faculty, catalog writers in integrating the final language of general education into formal university documents (catalog and other publications).