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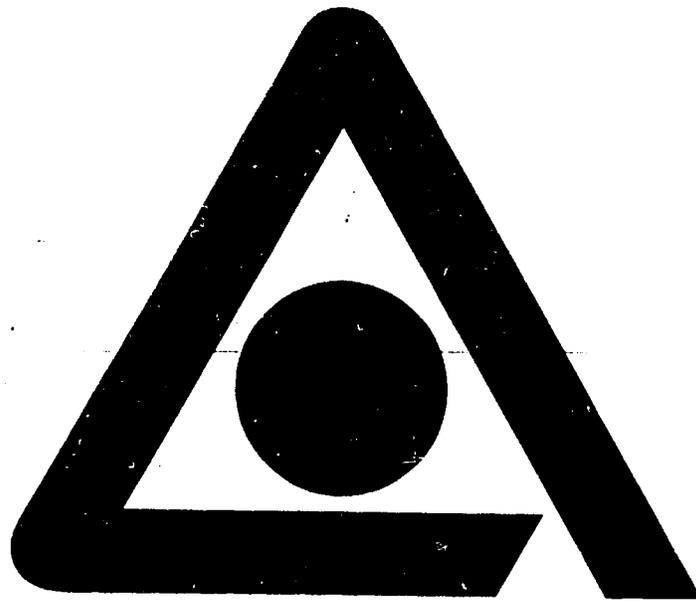
ABSTRACT

Alverno College began its outcome-oriented liberal arts curriculum in the fall of 1973. Clearly traceable to Alverno's early heritage as a teachers' college for educating the sisters of a teaching order is the current liberal arts college's interest in the incoming student's orientation to college learning. Each section of this report briefly outlines one of the eight areas of competence toward which the college orients its teaching and for which it holds its students accountable. The eight outcomes of education are: effective communications ability; analytical capability; problem-solving ability; facility in forming value judgments within the decisionmaking process; effective social interaction; understanding of individual/environment relationships; understanding of the contemporary world; and educated responsiveness to the arts and humanities. (LBH)

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Liberal  
Learning  
at Alverno  
College

# Liberal Learning at Alverno College



By the Alverno College Faculty

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The opinions are those of the faculty of Alverno College. No endorsement by either the Fund or the Kellogg Foundation should be inferred.

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# The Alverno Curriculum

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## Preface

It has been three full years since we at Alverno College began working with a curriculum centered on student competence as its outcome. Our program has taken enough shape, and we have gained enough experience with it that we can now make a more comprehensive attempt to inform our colleagues as to what we are doing and why.

The main body of this essay describes *what* we are doing. This preface concentrates on *why* we are doing what we are doing. The question can best be answered by telling how we came to do it, since the move to competences was neither imposed nor imported, nor even introduced as a concept from outside the college. Instead, it developed as a series of tentative responses and gradually adopted solutions to indigenous problems.

Early in the 1970-71 academic year, our president challenged the academic faculty with a crucial inquiry:

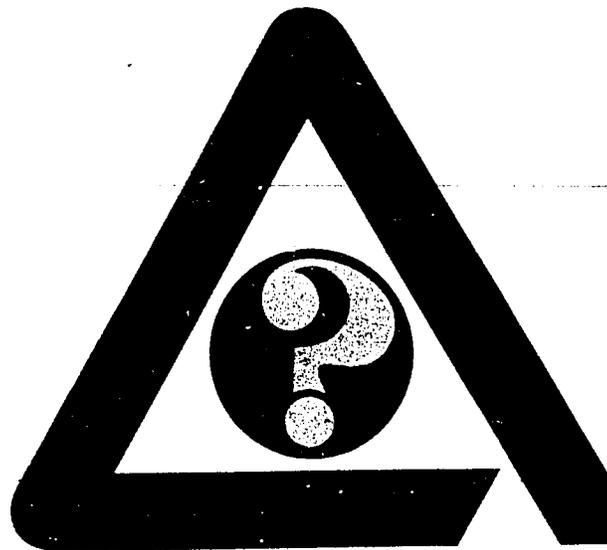
"What kinds of questions are being asked by professionals in your field that relate to the validity of your discipline in a total college program?"

"What is your department's position on these?"

"How are you dealing with these problems in your general education courses, and in the work for a major in your field?"

"What are you teaching that is so important that students cannot afford to pass up courses in your department?"

For the rest of that year, the faculty in the academic disciplines met regularly to hear each department's justification of its contribution to undergraduate education. As the resulting ferment grew, our colleagues from the professional programs joined in.



Out of these sessions came the question: "What are the outcomes for the student, rather than the input by the faculty?" which, in turn, became the focus for our year-end Faculty Institute. In a rigorous week of thought and discussion, this question was used to probe the meaning and purpose of liberal education at Niyerrio.

We managed to define four broad outcomes or "goals" of the education we offered. During the subsequent year the curriculum committee was charged with breaking out these four general outcomes into a more detailed system.

By the third year, an expanded list of "competences" had been developed and was given to an academic task force for shaping into an actual curriculum. At the same time, one section of a required freshman course in each discipline was set aside as a laboratory for developing means to teach and test selected competences. The task force's January, 1973, report detailed each of eight competence areas into six sequenced levels of development, and in the fall of 1973—nearly three years after the initial challenge—our use of an outcome-oriented liberal arts curriculum was underway.

The three year process is easy to summarize in retrospect, but it was long, difficult and often uncertain. Looking back, we can see that our formal and informal traditions gave us three important resources: a habit of dedicating time to faculty discussion and work sessions, an unusually strong emphasis on initiating the student into the higher education process and a mission to serve women.

For the first several decades of its existence, Niyerrio had been primarily a teachers' college for educating the sisters of a teaching order. For much of that time, into the post World War II period, the faculty had also been largely composed of sisters. While the nature of the college—faculty, students, program, and even facilities—was radically altered by the change to a liberal arts institution, some influence from that heritage seems to have remained.

As the faculty grew, we may have worked almost unconsciously to maintain the kind of communication we inherited from predecessors who, like Oxford dons, could talk over their classes, students and common problems after supper or on weekends. In any case, both faculty and administration were ready to set aside personal time and to ramp teaching schedules in order to work together during those three years.

## Preface

More crucial, traceable to Alverno's early heritage was our interest in the incoming student's orientation to college learning. Many of us were accustomed to think about the life of the educated person in such terms as "calling" and "mission." We tried, in orientation, to alert incoming students to this life, its values, its rewards, and its strict demands.

We were seldom satisfied with our orientation programs. But judging from our graduates' reputations as teachers, nurses, and community leaders, Alverno seems to have imparted a compelling awareness of the obligations higher education imposes.

To that extent we must have confronted our president's challenge with a fairly strong (though not yet clearly articulated) sense of what kind of student we meant to produce and what she should be able to do with her education.

Finally, being a college for women gave us a special focus. Educating women for professional careers, we had inevitably encountered their lack of preparation to assume or even aspire to socially responsible roles. We had already committed ourselves, in our 1972 decision to remain a women's college, to continue responding to this need as a central part of our educational mission.

Thus, for example, it was quite natural that one of the four "goals" we first identified was "involvement." As the curriculum committee worked with those goals, it became clear that "involvement" — unlike "communication," "valuing," and "problem solving" — was more a quality than a specific skill. Yet it undeniably expressed one of our most strongly held aims as a faculty.

Working this through was one of many experiences that contributed to our discovery of the notion of *competence* as a characteristic of the individual person, rather than an enumeration of tasks. A competent student demonstrates certain abilities; she is also committed to using them. Not only can she analyze or communicate effectively, she habitually does so.

Equally important in our understanding of competence's *context*. When we realized that we had been focusing too much on content and taking for granted those qualities we most wanted to foster, we became especially wary of trading that error for its opposite—trying to teach competence without content. We had begun this inquiry, after all, as professionals dedicated to the meaning and value of liberal education. The kinds of competence we are now seeking to foster do not develop in the abstract; they are developed only as an individual student works in the full context of academic and professional disciplines. This remains one of our guiding principles.

In the last three years we have discovered that our problems were not as unique to our situation as they at first appeared nor were our responses as non-transferable as they had seemed. We do not, however, offer our curriculum or any part of it as a model for imitation.

Even the process by which we came to it, we have learned, was valuable primarily because it embodied the honest and sometimes painful attempt of a particular community of educators, with particular resources and traditions, to come to grips with the challenge they faced. Nor do we see our mission as proselytizing for outcome-oriented education, valid though it has proved to be for us as a liberal arts college for women.

We do hope that by explaining what our system is and how we arrived at it, we may provide a resource for our colleagues and help to advance the continuing dialogue about the meaning and significance of liberal education.



## Introduction

Each section of the following essay briefly outlines one of the eight areas of competence toward which we orient our teaching and for demonstration of which we hold our students accountable. The eight outcomes of education at Alverno are:

1. Effective communications ability
2. Analytical capability
3. Problem solving ability
4. Facility in forming value judgments within the decision-making process
5. Effective social interaction
6. Understanding of individual-environment relationships
7. Understanding of the contemporary world
8. Educated responsiveness to the arts and humanities



The description of each competence begins with a sketch of how we understand that competence and its place in liberal education. We then review the developmental levels - the learning sequence of the competence - starting with the four "general" levels required of every student.

We also describe two further "specialized" levels in each competence area. The student pursues these as a necessary part of her chosen Area of Specialization (roughly similar to an academic or professional major) being required to develop to "specialized" levels those competences particularly appropriate to her Area.

At each level we have included some idea of the pedagogic rationale and suggested some specific aspects of the learning process. These are, of course, much more specific for the four "general" levels of each competence, since the student's learning situations and her means of demonstrating competence become more individualized at the advanced levels.

In the development of any competence, a student at the earlier levels does so in the context of a set of courses she selects from among discipline courses generally regarded as an integral part of a general education program. As she pursues her development of a given competence or set of competences at advanced levels, her work along with courses in her area of concentration (i.e. a

liberal art or area of professional study) will also include considerable independent study, individually designed.

As might be expected, there has been a considerable evolution in our academic structure since we inaugurated this new curriculum. There are now eight competence divisions in addition to the six academic divisions. Academic policy is made by a committee of the 14 chairpersons.

Each level of each competence may be - and is - developed effectively in a variety of different courses and experiential settings. For each course, therefore, the instructor develops a syllabus outlining the competence levels available, the means by which they will be taught, and the methods to be used for validating attainment.

Using these syllabi, each competence division makes a semesterly review of the settings in which that competence is being offered. The division also holds at least one workshop a semester to discuss problems, discoveries and questions that have arisen in teaching and assessing that competence.

## Introduction

From the student's perspective, there are 32 "general" levels—four in each competence area—which she must attain and demonstrate. In addition, when she has chosen an Area of Concentration, she will become responsible for eight "specialized" levels.

In several professional disciplines, e.g. music performance, medical technology, these "specialized" levels include a professional competence which also has a learning sequence of six levels. This competence is designed to enable the student to develop specific abilities required in the professional area.

At all levels of competence, multiple validations are required. Thus the student may, for example, be required to demonstrate a Level 1 competence in Analysis in three different courses during her first year. She is free, however, to choose when and in which of her eligible courses she will attempt her demonstrations.

While we still count semester hours for student transfers, funding, and other outside reporting, they are less and less used to create pre-defined career preparation paths. We still find them valuable as a record of the student's knowledge base, although we do not attach grades.

The majority of our students find that achieving the 32 basic levels occupies about half of their time at Alverno, most of that in the first two years. A student is usually absorbed in work for her Area of Specialization, including her specialized competences, for her last two years. This may include a smaller number of courses, partly due to an increased use of on and off campus experiential learning opportunities, and partly because the projects she is involved in at this level are more extensive.

Distinctions between "freshman," "sophomore" and so on have all but disappeared. Few students as yet show any tendency to deviate very far from a four-year degree pattern. However, the proportion of midyear graduates is growing steadily.

Adopting a competence oriented curriculum has meant more work for both faculty and students, particularly during these first years. But it has also made for more rewarding work, since articulated goals are more possible to attain.

Thus, for example, the increased amount of time we spend together as a faculty—three faculty institutes a year, every Friday afternoon reserved for workshops and meetings—is both a cause and result of our heightened consciousness of ourselves as educators. By rigorously examining ourselves and what we profess, we have developed a consensus about our educational goals. And we have been able to articulate that consensus into meaningful, specific detail so that we are indeed working together on the same tasks however diverse our disciplines and teaching styles.

Indeed, we are now finding that those very diversities which used to separate and threaten us are our most valuable assets in tackling the complex teaching assignment we have set ourselves. To us as a faculty this has been the greatest benefit of the adventure that began six years ago with a set of difficult questions.

The students have likewise benefitted. Our expectations and their goals are much more clearly stated, and the means of assessment more clearly defined. As a result, we are finding that "self-direction" and "self-confidence" - two obviously desirable qualities we had reluctantly concluded were unteachable and unmeasurable - are emerging quite clearly after all as by-products of developing the more tangible competences.

We are also more flexible than before. No longer can any of us look at a stack of final exams or term papers and conclude, "Well, some of them just didn't quite make it." We are committed to design alternative learning situations to enable the student to demonstrate that she has learned. And we also have at hand the resources of the entire college - including the competence division and every colleague who is likewise attempting to foster that competence. For the student there are always other courses in which she may elect to develop and demonstrate the competence without having to repeat a course.

Finally, we have recovered a sense of the adventure of teaching and learning. Some of the competences we have identified (notably the final three) represent distinctive modes of thought that we could perceive at work in certain areas of content, though we could not yet isolate or describe them as exactly as we can more classical modes like "analysis" and "valuing." Working with these competences we are constantly discovering what it is that makes them unique, and how they function.

Expanding our repertoire of teaching and assessment methods is even more of an adventure. It is hard to convey the steady level of excitement and enthusiasm that pervades a faculty who have labored together to articulate their common aims, and are now working together to achieve them. And it is even harder to measure - but impossible to mistake - the effect such an atmosphere has on students newly embarked upon a liberal education.



## 1. Effective communications ability

Communications as a required competence in the Alverno learning program focuses on sustained presentation of messages by the student as sender, and on response by the student as receiver to a variety of presentations.

A student develops the ability to make clear and forceful presentations of any message she sends, with and without the aid of graphs, visuals and electronic media. She also learns to take in such presentations—even if they lack clarity and force—so that she can make meaning from them in relation to her thinking and her life.

Preparing students to present an extended message was classically focused on forms. We have tried to focus the Alverno Communications Competence on a process—the process of making connections between a presenter and an audience.

The competent communicator habitually makes such connections. She can adapt a message to an audience, and she can act as an involved and analytic audience herself. She recognizes innumerable instances in life that require this ability to “make meaning”—whether the setting is a TV program, a classroom, a business organization, or a neighborhood group.

The criteria of effectiveness in this process are all based on *clarification* and *involvement*. When the student developing her communications competence speaks, writes, graphs, or presents in mixed media, she must clarify her message for an audience and use means to involve them in it. Reading, listening to, or interpreting a presentation, she must clarify the sense of the message for herself and involve herself with it.

How do students learn to clarify meaning and to involve others or themselves as audience?

Besides offering classroom instruction and practice, communications teachers require each student to look among her ongoing experiences—with peers, parents, college personnel, employers, in textbooks, newspapers, letters—for situations that demand connections between presenter and audience. In each situation, she learns to present ideas and convictions in terms of her own experience and to involve the experience of the audience as far as possible.

As audience, she learns to assume the same kind of responsibility. She practices taking in presentations accurately, translating them into her own experience, relating them to her

own ideas, confronting them with her own values and convictions, and examining them for limits, implications, and possible applications.

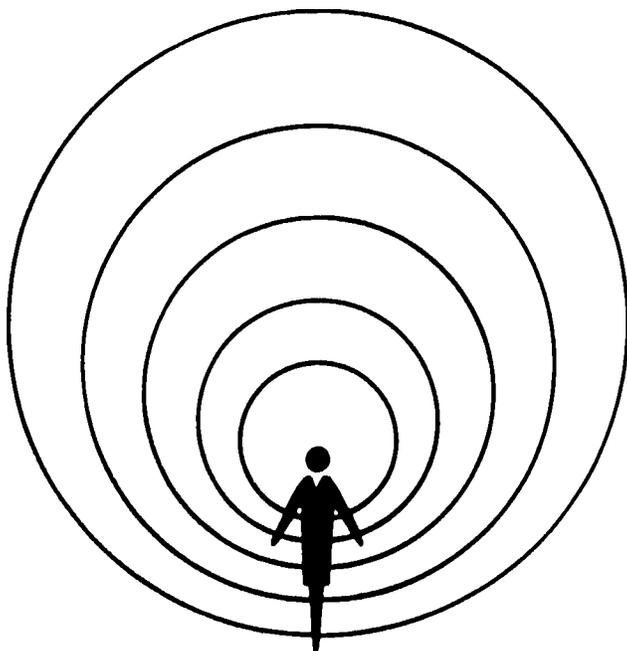
The process by which the Alverno student develops her competence in communications begins by establishing a base where she is. It builds consistently on that base, extending into something new at each of the six levels.

Throughout the process, the abilities developed are speaking, writing, reading, and listening, with the supplementary skills of graph making and illustrating through media. These abilities are separated from other aspects of communication (such as interpersonal skills, which make up a whole

separate competence) to allow enough emphasis on each for fruitful development.

The consistent building of these abilities moves from self-assessment into learning from models, then toward effective performance with increasingly complex content. The student at advanced levels develops an interiorized theory to undergird her communications activities, and applies that theory to effective presentations using electronic and other media.

At all levels, the student demonstrates her developing competence in two distinct roles: initiator/presenter and responder/audience. She does so before an instructor/assessor, or a team of assessors, who evaluate her performance using the same criteria she has learned to apply.



## 1. Effective communications ability

### General Competence: Levels 1-4

Level 1 of the Communications Competence starts the student on a track of self-assessment toward more effective performance. She has done speaking, writing, reading, listening, and perhaps some graphing before she came to college. Now she exercises each of these in situations involving explanation and/or persuasion based on non-technical information. In the process she learns to isolate and analyze her strengths and weaknesses, so she can consciously work at development and can understand her own successes enough to repeat them.

At Level 2 the student works with model performances within different disciplines to increase her understanding of the strengths and weaknesses she has discovered. She analyzes models in speaking and writing, sometimes supplemented by graph making. In doing so, she consciously practices listening, reading, and interpreting.

She learns to make distinctions among audiences: How does a popular audience affect the way she might talk about her college education? What kind of letter does she write to a professional person whose aid she wishes to enlist? While learning adaptation

to audience from effective models, she also begins directed observation of audio-visual techniques as they relate to effective speaking and listening.

The student at Levels 3 and 4 develops effective performance by building on her strengths and eliminating obstructive weaknesses. She puts into practice her growing understanding of effective communications and of herself as a communicator.

The topics she deals with at Level 3 are aspects of her studies which are sufficiently limited for her to understand them thoroughly. They are sufficiently complex, however, that she must combine her growing communications skills with her abilities in other competence areas—analysis, synthesis, and application.

She performs as a speaker, writer, and grapher of information. In a speaking situation, she shows that she can use graphs and other simple visuals effectively. She shows that she can analytically listen to and read verbal communications and graphs. And in listening, she shows that she understands the effect of more complex media on the presentation of information.

At Level 4 the student continues her development by working with increasingly complex content. Here each situation involves clarifying basic concepts, like biological adaptation or civil rights, from three different areas of knowledge. In a situation that integrates all her communication abilities, she demonstrates ability to adapt her message to a variety of audiences and purposes.

### **Specialized Competence: Levels 5-6**

The student develops these levels of the Communications Competence within the context of her Area of Concentration, such as religious studies or education. She has already studied model performances, and has effectively performed on several occasions as a speaker, a writer, a listener, a reader, and a maker and reader of graphs.

With this background, she now studies communications theory at Level 5, and begins to interiorize some integrating concepts. She develops a theoretical understanding of several aspects of meaning and form. She learns how and why some things clarify while others confuse. She learns which aspects in a communications encounter work to involve the audience and which tend to dissociate them. She must then apply these understandings in responding to a presentation, and in planning and executing one.

At Level 6 the student develops her ability to respond to her audience, in different situations related to her discipline or profession, with an integrated presentation of an extended message. She addresses a variety of audiences, each for a different purpose.

She learns to integrate the use of media in her presentations. Although she need not become a photographer or commercial artist, she does learn how and where to acquire good photographic, cassette, film or other software. And she learns to make them work smoothly and effectively for clarifying her message and involving her audience.

In a variety of instances, the student at this level is asked to explain how her written, oral, and mixed media presentations relate to theory. Specifically, she is asked how individual choices she has made in creating a performance relate to audience and purpose, and how they promote clarification and involvement.

The student who achieves Level 6 competence has developed an understanding of how meaning is made from experience in the process of communicating. She has cultivated a repertoire of abilities with which to contribute to the making of meaning in her society.



## 2. Analytical capability

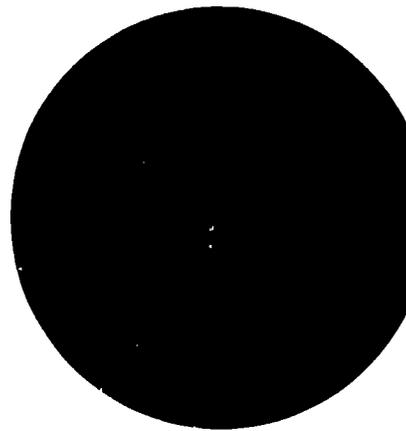
In Plato's academy, in the Renaissance "trivium" (rhetoric, logic, and grammar), and in modern "general education" requirements, educators seem always to have valued a fundamental competence in "clear thinking" as essential to the well educated person.

Mathematicians stress the inherent logic that enables number systems to describe and predict; philosophers rely upon systematic investigation of arguments and issues; physical and behavioral scientists teach the imperatives of careful data analysis and scrupulous verification of hypotheses. Critics of art and literature express judgments that result when analytic minds join with experience to reveal the beauty and pattern of expressive works.

Educators have thus been committed to the development of human reason for nearly as long as the historian can help us remember. Yet it is more common for students today to study the *products* of reason rather than the *process*—to become adept at reiterating and cataloging the products instead of creating their own unique fusions of experience and reason.

Some say the changing student population has made it absurd for each student to engage in such a process. For most, they say, imitation and explication are all that is attainable or even desirable.

At Alverno, however, we believe this very student population makes it mandatory that we renew our commitment to teaching the processes of reason—what we call analytic competence.



A student should leave college equipped to sift the multitude of products—from opinion polls to urban plans, from art “movements” to religious philosophies—which do appear, and to judge them reasonably. She employs the same analytic abilities in making personal and professional decisions.

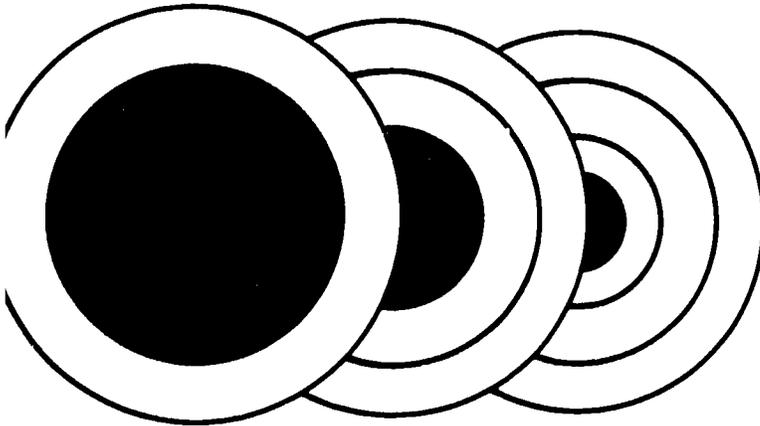
#### General Competence: Levels 1-4

The entire range of what is generally called “cognitive skill development” is included in the six developmental levels of the Analysis Competence. The student learns to analyze different *works*—problems, situations, issues, ideas, substances or processes—in a manner which is primarily inductive.

Before she can understand the whole, a student must learn to *observe* the individual parts and their relationships to one another. Generalizations about meaning or significance of a work are possible *only* after this “breaking apart” has been undertaken.

The student is first encouraged to notice carefully the obvious parts of her subject (the *explicit elements* of a work), and then to make reasonable inferences about the less obvious parts (the work's *implicit elements*). In the early stages, there is constant emphasis on grounding her inferences in the reality of the observable—the “facts” she is dealing with.

A student analyzing a short story might thus demonstrate Level 1 competence by identifying the story's most obvious components, such as narrator, setting, characters and chronology of events. She would also be asked to show some awareness that more subtle elements, such as conflict and tone, can be identified only through reasonable inference.



## 2. Analytical capability

Level 2 then focuses on the student's ability to *infer* significant implicit components of a work and requires her to distinguish reasonably between fact and inference, evidence and assumption. For example, a student in a literature class might learn to infer a theory of human motivation from several authors' portrayals of a person's intent and subsequent conduct. The explicit element at this point would be the various portrayals, and the implicit element the theory.

The student moves toward Level 3 competence as she begins to see how some of her inferences about specific, isolated parts of a work *relate* either causally or functionally to one another. She also begins developing more sophisticated classification schemes to organize her understanding of a work.

The student at this level can recognize patterns, trends and emphases- she sees specific ways in which she can show how the

meaning of a work flows out of the relationships within it. A student in an environmental psychology course, analyzing the relationship between chair placement and verbal interaction, might begin by observing different placements and recording the amount of verbal exchange (explicit behavior). Then she might develop a set of hypotheses (implicit assumptions) about why verbal exchange differs with different arrangements. Finally, she might set up several placements in order to test her hypotheses.

At Level 3, the student has not necessarily shown how all the patterns or relationships she has identified fit with each other to explain the whole work. This is the essence of Level 4--discovering organizational unity in a work, and learning to *integrate* most or all of the patterns discovered at Level 3 and arrive at a description of unity or at conclusions about meaning. A student in a nursing course, for instance, might be asked to analyze the relationships among certain key factors known to influence nutritional adequacy in individuals adapting to adolescence, pregnancy, lactation or old age in order to determine whether a prescribed diet meets RDA standards.

### **Specialized Competence: Levels 5-6**

Level 5 of the Analytic Competence provides opportunities for a student to explore works that are usually more complex and more broadly defined than those she studied at Levels 1-4. Her main goal here is to become a habitual analyst: to perceive the myriad ways in which one can proceed analytically.

The process at Level 5 includes both the inductive means described above and deductive processes more suited to testing the concepts of her particular discipline. She learns to test her own analytic procedures against those employed by "experts" in her field.

She also learns to vary her analysis and conclusions by the application of different "theoretical frameworks." This means, essentially, that she learns to analyze from a variety of perspectives, not always taking the same approach to every work. She studies at Level 5 under the close guidance and supervision of professionals in her area of specialization.

At Level 6, on the other hand, the student demonstrates her ability to work independently on a single large, complex project. Here, she must use all her previously developed analytic skills to unravel the work; she must show that she can draw verifiable conclusions while dealing with a complex work, or a set of works tied together by a common denominator.

She will probably design her own project, in consultation with her professors. This, too, will help to demonstrate that she can think through large, complex projects logically and can convince others of their inherent rationality.



### 3. Problem solving ability

Asking a critical question, making an educated guess, proposing alternate solutions – these are generally recognized as distinctive features of human intellect.

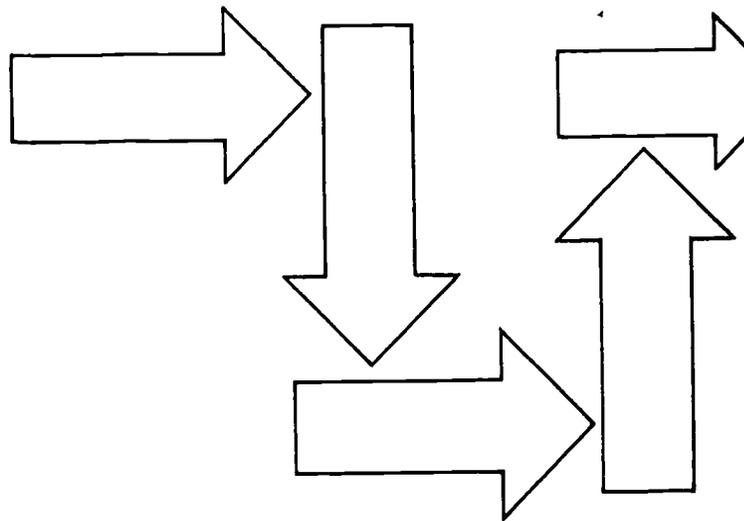
Getting things done, adapting a plan to the constraints of time and resources, critically evaluating performance in midstream – these, too, are admitted hallmarks of applied intelligence.

At Alverno we have grouped these abilities, readily acknowledged as desirable yet rarely planned as deliberate outcomes of education, under a generic Problem Solving Competence. We have attempted to design a

plan for their development in response to the need – and the opportunity – for the educated person in our society to enter into innumerable processes of planning and change, in both public and private life.

The competence is focused on developing a student's ability to get things done through a conscious, organized process. At the advanced levels, it further explores the distinction between working toward a goal and the accomplishment of that goal.

Problem solving, which coordinates many separate abilities, clearly overlaps other competence areas in the Alverno learning program. It draws on abilities fostered in



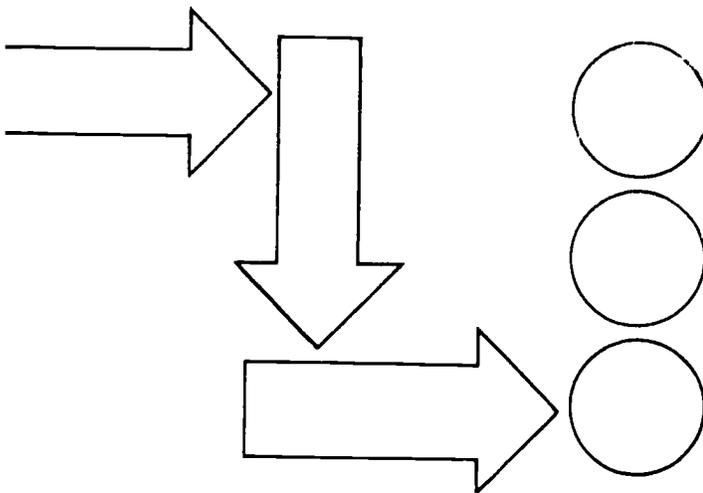
Analysis (the habit of trained observation, identifying relationships) and Valuing (the ability to apply values at each stage in making a decision). It also involves the ability to formulate a goal and to articulate obstacles, alternate approaches and costs—skills developed in Communications and Social Interaction.

At the same time, however, problem solving calls for its own unique and often difficult-to-assess qualities. One is the imaginative ability to project consequences, and to pursue intuitive “hunches.” Another is the affective strength to risk implementing a solution, and to persist in the face of drudgery and frustration. A third is the feasibility to adapt to constraints, and to accept and learn from negative results.

### General Competence: Levels 1-4

The first four levels, required of all students, begin with an introduction to problem solving and its various elements and conclude with the student demonstrating her skills in a complete problem solving process.

At Level 1, the student learns theoretical frameworks for problem solving. She isolates the assumptions, techniques and limitations inherent in several different approaches. She comes to recognize the common elements in models from a variety of disciplines.



### 3. Problem solving ability

For instance, the scientific method used in chemistry or biology will usually involve lab experimentation and the use of controls. A philosophical approach, on the other hand, is likely to depend on logic and questioning techniques.

As she learns to perceive the analogies underlying such diverse approaches, the student frames her theoretical understanding of problem solving. She also becomes sensitive to the multiplicity of goals toward which human efforts may be directed.

The student works at Level 2 on what is probably the most difficult part of problem solving: defining the problem. It is not enough that she be given a problem and, applying a specified approach, design a solution. She must become able to discern in an unfocused situation what the problem is, and to formulate its central question clearly.

For example, in a management course a student might analyze a case study of an institution's personnel department to formulate the problem revealed by lowered productivity and morale.

Work at this level calls for careful observation and description, as well as some analysis and goal-setting. The student also begins bringing into play her imaginative and projective abilities. She must also use her skills at synthesizing and communicating to set forth her statement of the problem.

At Level 3, the student actually employs the process of problem solving. She is responsible for defining a problem, designing a solution process and carrying it out. At this level she will often develop genuinely new data—such as that generated by a field survey or a lab experiment—rather than rearranging information from other sources. She also writes a descriptive log or abstract, explaining her methods and conclusions.

At Level 4 the student compares approaches to problem solving. This comparison may take many forms. For example, in a

psychology course a student may investigate experimentally the question of which of two leadership styles is more effective in working with adolescents. In a musicianship course she may be required to create a piano composition within certain prescribed constraints. Then she may compare the approaches used in the two problem situations from the standpoint of assumptions involved, risks taken, certainty of results obtained, alternative solutions, and so forth.

The objective at this level is to have the student clarify for herself several legitimate approaches to problem solving, based on her own experiences as a problem solver. She also begins dealing with problems that require her to coordinate her efforts with others.

#### **Specialized Competence: Levels 5-6**

The student who enters the advanced levels is called upon in Level 5 to design and implement an original problem solving project that challenges the range and depth of her specialized knowledge, and necessitates her directing or collaborating with others.

An important final step at this level is an intensive review and analysis of the entire problem solving process as she has employed it. This capacity for reflective evaluation is essential to an effective problem solver.

At Level 6, the student functions independently as a problem solver in a number of different situations. Her assessors focus here on whether she has internalized the elements of an effective problem solving approach.

She is expected to show ability to perceive and define problems from ambiguous situations; to concentrate and persist until a task is completed; to accept uncertainty and act upon limited information; to generate feasible alternatives, and to respond creatively to constraints, changes and her own evaluation of her performance.



## 4. Facility in forming value judgments within the decision-making process

Alverno College includes valuing and decision making at the core of the student's learning process on the assumption that her value system will be crucial to the direction and meaning of her life. Our age of alienation and mass society gives us ample warning, moreover, that these skills are survival tools on which not only the individual but the whole of Western culture must well depend.

Decisions about "What is the good?" and "What is worth striving for?" are implicit in every human endeavor. The attempt to make those decisions explicit, to deal consciously and consistently with such questions, is one of the classic enterprises of the mind.

In the spirit of this enterprise, the Alverno faculty addresses itself directly to developing a student's abilities to discern values, to resolve value conflicts through a decision-making process, and to evolve and articulate a personal value framework for committed living.

Because valuing is pervasive, the broadest range of disciplines- aesthetic, scientific, political, economic, philosophical, religious, literary -are included as the proper context for the student's development of her abilities. Because values are dynamic, her learning environment attempts to challenge her to a continuous choosing of goals and restructuring of her values.

### General Competence: Levels 1-4

The first major task to engage the student at Level 1 is *making values explicit*. She works at identifying those beliefs and attitudes by which she understands and organizes her experience. She works at becoming aware of the sources of her values, and the relationships between them.

Through recorded journals and logs, through simulation and role playing the student examines her own behavior patterns for the values they express. She looks at her decisions, and the processes by which she makes them, and begins developing a vocabulary with which to analyze values and decisions.

At Level 2, the student extends her attention beyond individual values to historical and cultural expressions. Interring values from literary, artistic, historical, philosophical and religious works, she begins to understand the impact of individual and group value choices upon the human community.

The student at this level establishes a base from which she can distinguish individual from societal values and goals. She gains insight into the causal relationships between values and the cultural matrix.

The student at Level 3 looks at some problems of valuing technological change. She examines how scientific developments

influence the scope and consequences of responsible moral decision making.

In an era dominated by enormous technological power and extreme human need, she must learn how new technology brings new problems, and how it forces reconsideration of both personal and cultural values. She must face the question: "Whose values are to guide future development?"

At Level 4 the student *applies* valuing to the process of decision making. First, she examines the role of valuing in several instances of both personal and public decision making.



#### 4. Facility in forming value judgments within the decision-making process

Then, in a selected context, she formulates goals from a complex of issues. She identifies the values underlying these goals, then works through the process of accomplishing them in a decision making plan of her own design. Frequently, actual use in field projects will further acquaint her with various tools and models in decision making.

At this level, the student gains facility in several skills she has been developing. She projects consequences, develops alternatives, identifies resources and obstacles and learns to apply her own and/or group values at each step. Finally, she practices reviewing and evaluating her own decision making behavior.

Moving through these four basic levels, the student has engaged in processes of increased complexity. She has identified and examined

her own value framework and developed a working vocabulary for valuing and decision making. Analyzing diverse expressions of value in human history, she has learned to infer, interpret and judge value problems and decisions from a broad base of awareness.

She has investigated complex issues of technical and social development, assessed relationships between private decision making and public policy, and learned to isolate and confront value problems raised by change. Finally, she has practiced defining, projecting and evaluating the elements of decision making in both theory and practice.

#### Specialized Competence: Levels 5-6

At Level 5, the student broadens her understanding of value dimensions in cross-cultural problems. Through experiential learning in the local community off campus, she becomes more familiar with the ways of life of other people. Interacting with persons of different cultures and convictions, she examines the deep value assumptions and attitudes that underlie cultural differentiation.

In this experience the student confronts a whole new range of social, legal and moral issues that contemporary society's global culture contacts have brought into being. She comes to recognize and empathize with the value systems of diverse human groups. This acceptance of pluralism can be the beginning of a constant exploration, in which she regularly reexamines and reorders her beliefs and priorities in light of what she discovers.

Level 6 directs the student's energies into the complementary process—articulating and expounding her own value judgments. She works to synthesize her own constellation of value and goal decisions about a selected issue, then distinguishes her judgments from alternate patterns generated by differing cultural, disciplinary or other approaches.

She must outline the differing value positions and their sources and implications and, finally, apply her own evaluation in an articulate, persuasive presentation. This "apologia" (together with her own critique of it afterward) integrates her insights and skills in valuing and decision making, along with several abilities fostered in other competence areas.

The student who achieves this level of competence has also begun to experience commitment. To draw together and seriously attempt to communicate her value judgments and priorities inevitably involves her in the lifelong process of "standing for something." Most important, she does so not as an ideologue, but as a skillful and sensitive seeker of the good, who dedicates herself and encourages others to pursue value in life through conscientious decision making.



## 5. Effective social interaction

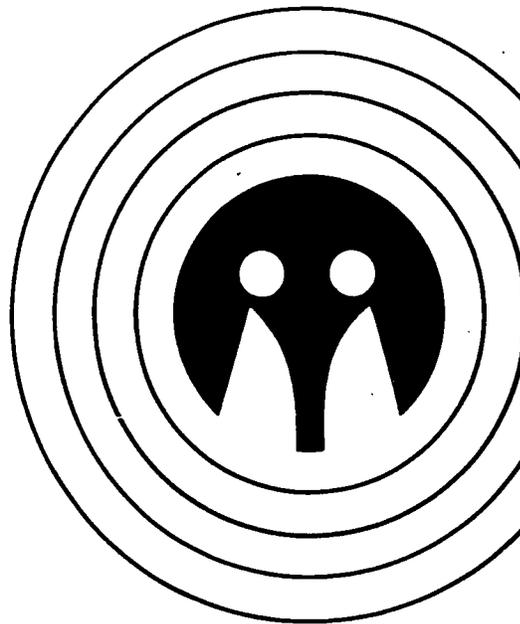
Competence in dealing with others is crucial to personal and professional success. A society that accomplishes the bulk of its work in consultation, discussion and debate, on committees and task forces, must depend heavily upon those members who can be effective in interpersonal situations.

Yet seldom since the Renaissance notion of the "gentleman" has the development of socially effective persons been an explicit focus of higher education. Particularly in the last two centuries, under the influence of the German university model, collegiate curricula have found social skills to be less and less amenable to development in the

formal classroom context. As universal higher education intensifies the pressures of time and population upon teaching, the difficulties are magnified.

At the same time, however, a rapid coming of age in the behavioral disciplines has begun to offer tools and techniques for isolating, measuring and evaluating social interactions. These new resources, together with our situation as a small college, have encouraged the Alverno faculty to attempt defining a Social Interaction Competence as an integral part of the learning program.

Effective social interaction, as defined at Alverno, is two-fold: interpersonal competence in one-to-one situations, and



competence in task oriented groups. Though the two overlap considerably, certain abilities characteristic of each have been distinguished for the purposes of learning and assessment.

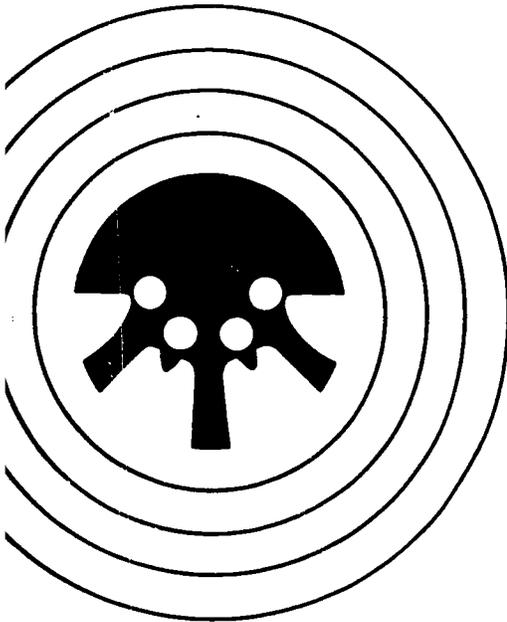
The developmental sequence is guided by a pedagogic rationale similar to that in the Communications competence, with which it is closely allied. The student is brought to take an active role in the time-honored educational sequence—reflection—performance—critique—by entering at once into the performance phase.

This experiential plunge quickly focuses and makes explicit the diffuse and only partly apprehended elements of her own interpersonal behavior. With her own

performance as a subject, the student begins developing her abilities to observe interactive patterns and to evaluate their effectiveness.

As this evaluation and reflection proceed, the student is given increasingly complex models and categories with which to frame her analysis and judgment. By the end of the required learning sequence, she returns to the intensive performance phase to demonstrate a variety of skills as an effective participant in both dyadic and group situations.

The student whose career plans call for an especially high degree of interactive competence may further extend her abilities in the advanced levels.



## 5. Effective social interaction

### General Competence: Levels 1-4

Level 1 initiates the student by requiring her to observe and assess her own behavior in a task oriented group. This initial group simulation exercise, and the subsequent feedback sessions with an assessor, help her to identify and evaluate her interpersonal behavior patterns. These include her ability to perceive the effect on others of her verbal and non-verbal contributions, her ability to articulate her own goal in the situation and that of the group, and her ability to assume roles designed to help the group achieve its objectives.

With some first-hand experience observing and assessing interactive behavior in a group, the student at Level 2 begins analyzing social behavior systematically. She learns theoretical frameworks for both one-to-one and group situations, employing them in live and videotaped seminar and laboratory sessions.

Level 3 engages the student further in evaluating interpersonal effectiveness. In her increasingly complex analysis of group processes, she learns to discern proximate and long-term goals, and to make critical judgments regarding the effectiveness of both her own and others' specific choices of behavior.

At Level 4, the student is required to demonstrate effective behavior in a variety of settings, according to criteria she and her assessors have agreed upon. The settings vary depending upon her individual academic and career directions.

Examples include a panel discussion leader's role in a biology seminar, chairing a student senate meeting, or an interview with a prospective field experience mentor. At this final required level, competence involves her theoretical skills, her performance capabilities and the often laborious work of recording and reflection.

The student who has achieved competence at this level has reached a degree of interpersonal effectiveness that will ensure

her continued successful involvement in various social contexts. She has also gained a perceptual and reflective sophistication that will enable her to approach increasingly complicated situations with confidence and skill.

### **Specialized Competence: Levels 5-6**

Level 5 extends the student's operating range, by having her demonstrate her interaction skills during task oriented activities amid various cultures and subcultures.

Three criteria are looked at with special care: her ability to manage the demands for conformity and/or change imposed by the task; her ability to relate to things, to information and to people in accomplishing the task; and her ability to appropriately perform specific roles. These criteria will take shape differently, of course, for a student nurse working with a group of terminally ill patients than for a student artist leading a mural project in a minority area school.

Both Level 5 and Level 6 require consistency -- the demonstration of competence over a period of time. At Level 6 this commitment of sustained effort is directed toward organizational activity.

This level demands that the student take responsibility and initiative, and employ her theoretical awareness and active skills in leadership--enabling others to cooperate in perceiving and achieving their goals, both individually and in groups.

The student competent in all these areas of social interaction should leave college ready to participate effectively in any social environment she may enter. In friendship, family and counseling roles, in professional, civic and intercultural situations, she will have the demonstrated knowledge and practiced skill to contribute effectively.



## 6. Understanding of individual/environment relationships

Since classical times, the *economic* "ruling the household" and *civic* "participating in the city" arts have been among the most highly esteemed fruits of education. In our highly urbanized society, learning to manage one's life effectively is perhaps more critical – and more difficult – than ever.

These concerns lie at the heart of the Environment Competence at Alverno College. It is developed in a series of learning situations that enable the student to understand and deal with the complexity and ambiguity of the metropolitan environment, and that habituate her to making the difficult decisions needed to maintain and improve life for herself and her fellow citizens.

Environmental literacy begins with a disciplined awareness of complexity. It also implies a willingness to affirm and cope with the complexity inherent in a living environmental system, instead of reducing to simplistic, less demanding terms. At the same time, competence in managing one's life and one's environment implies learning to make decisions in the face of uncertainty on the best available information.

The first three Environmental Competence levels help the student to cope with increasingly complex environmental situations. The last three require her to exercise various aspects of decision making in such settings.

### General Competence: Levels 1-4

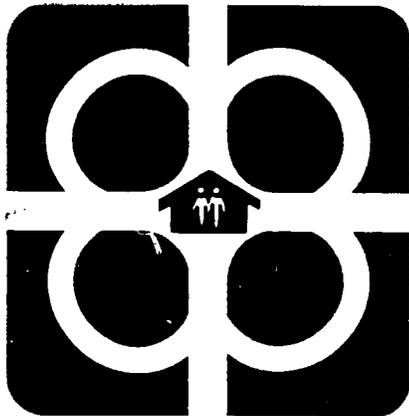
Most students enter college today with little systematic understanding of environmental concepts. As an introduction, therefore, the student learns to identify basic component

of a metropolitan environment. The natural sciences provide her with concepts for analyzing its natural and technological aspects. From the behavioral and social sciences, she learns to see its social, political and economic dimensions. And the humanities offer perspectives for considering the metropolis in relation to history and culture, value and meaning.

Understanding the environment also requires a synthetic capability. The more the student learns to *perceive and analyze* the environment's components, the more they pose problems of integration for her. Level 1 therefore provides her with a systematic framework, enabling her to work toward an integrated approach.

When she has demonstrated her ability to perceive components of the environment and to synthesize a systematic understanding of their interrelationships, the student at Level 2 focuses on the human component-- the individual person or group in the urban environment.

She concentrates on how people's values, attitudes, beliefs and resulting behavior affect the metropolitan environment. By making inferences from individual or group behavior, the student begins developing the ability to specify the effects of behavior on a system.



## 6. Understanding of individual / environment relationships

An example of such behavior might be the increasing use by older citizens, rather than children, of a local recreation area. The student analyzes the effects of this change on park services, personnel, related recreation areas and so forth.

At Level 3, the student develops an understanding of the interaction effects of cultural and physical settings upon group behavior. This complements Level 2, in that it examines how the environment affects people.

Level 3 also demands a more sophisticated analysis and synthesis: Instead of dealing with diverse components, the student must organize the elements into physical and cultural settings. In determining how these settings affect human attitude and behavior, the student comes to appreciate that any system is located within a particular physical setting, and is part of a broader culture which it influences and is influenced by.

In these first three levels, the student operates mainly as an observer and analyzer. She takes no active role in the environments she studies. At Level 4, she moves beyond observing toward identifying problems and making decisions in a given environmental context.

The student herself must select an environmental problem and create alternative solutions for it. She must first show that the problem is researchable and that the information it yields can be generalized. She then delimits the problem, identifies the goals to be achieved, and outlines several alternate means of achieving them. She concludes by analyzing the alternatives for feasibility, cultural acceptability and technical accuracy.

At this point the student has achieved a solid fundamental literacy in analyzing and comprehending an urbanized environment. She has integrated complex information into a viable framework for decision making.

### Specialized Competence: Levels 5-6

Level 5 requires the student to assess the consequences of various courses of action in a given environment, and the likelihood that given goals can be achieved. While expanding already developed skills, this level stresses the ability to weigh risks and calculate probabilities.

To assess risk, the student works at isolating the likely "trouble spots" in a system, particularly as possible action plans may intersect those weak areas. She then attempts to determine the probabilities involved, and to estimate the seriousness of the risks.

To evaluate chances of a plan's success, she uses three further criteria: objectivity (Can it be replicated?), structuralization (Is it comprehensive?) and flexibility (Does it allow for more than one resolution?).

At Level 5, the student has focused on developing and analyzing alternative modes of solution for an environmental problem. At Level 6, she must defend her choice among the alternative paths, and develop detailed strategies for implementing her choice.

She learns to apply such basic implementation concepts as where decisions are made in the system, which lines of communication are available, how to mobilize support and generate formal action, and how to develop a working timeline.

The student then evaluates her strategic approaches by identifying potential difficulties, determining their seriousness and developing contingency plans as needed. She must then present and argue her scheme of resolution to an appropriate audience, including her assessors.

These six levels encourage the student to sustain her awareness of her environment's complexity, sensitize her to the personal and cultural dimensions of the urban setting, and challenge her to make, evaluate and revise active decisions under the uncertain but lively conditions of the metropolis.



## 7. Understanding of the contemporary world

The end and essence of *liberal* education is freedom, and to live in freedom is to develop responsibility for self and society. This latter responsibility - the social function of the educated person - is defined by the Alverno faculty as the Contemporary World Competence.

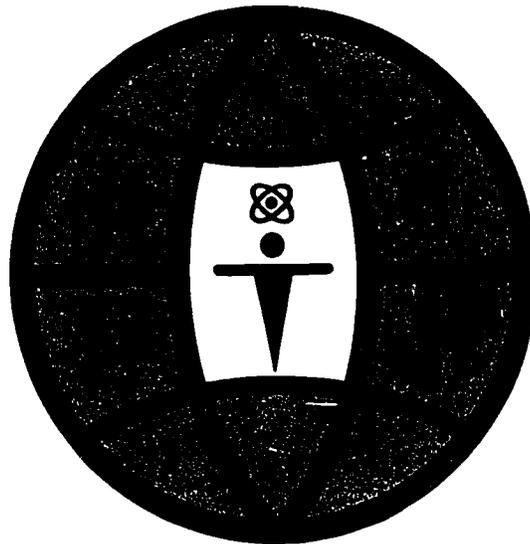
Other sources, of course, contribute importantly to a student's developing sense of social responsibility. In Valuing she confronts the need to clarify the values supporting public and private action. In learning to manage her civic life effectively, she enters into a continuing, responsible dialog with her metropolitan environment. In the Contemporary World Competence, she is particularly led to develop a sense of responsibility for and involvement with the global human society.

### General Competence: Levels 1-4

Involvement, concern and a sense of responsibility are grounded in awareness. A student, therefore, in developing the Level 1 of this competence broadens her understanding of the contemporary world in both formal and informal learning settings.

She demonstrates her perception of international, national and local events in an interactive setting which includes members of the off campus community as well as her peers. The social context of the learning and assessment processes is crucial to her developing sense of involvement in societal concerns at this first level.

At Level 2 the student deepens her ability to understand the complexities of the



contemporary world by pursuing a question in its *historical context*. She explores selected events in any of a number of contexts: a scientific breakthrough or a Nobel award, under the direction of her science professor; a Supreme Court decision affecting the committal of patients, with the direction of her psychology professor; and so on.

She comes to appreciate that even the seemingly unrooted, unexpected event has deep historical antecedents. Probing these antecedents, she develops her awareness of the ways in which affecting events—the level of knowledge in a given science, an individual's or a nation's breadth of perspective about a decision's implications—have an impact upon the event she is studying and on how it is seen by participants and observers.

By involving herself in the extended time frame surrounding a contemporary event, the student begins entering vicariously into the developmental process that has shaped her world. And she learns that the process of shaping the world is carried out by men and women themselves, not by indeterminate forces.

At Level 3 her pursuit of responsibility is broadened by *specifying relationships* among various contemporary events and conditions. Probable cause-effect relationships are focused upon, to promote understanding of the immediate and long-range consequences of such events as legislative actions, scientific discoveries, economic decisions or artistic creations.

## 7. Understanding of the contemporary world

In this difficult process of identifying causal, conditional and correlated events, the student learns to raise questions about individual or group actions (direct or indirect) and non-actions (deliberate or indeliberate) in local, national and global settings. She also projects their implications for the future on as broad a spectrum as she can.

At Level 4 the student explores the contemporary world as a *global system*, in which events in one society impact upon other societies in ways that cut across the spectrum of human activity. A physical event like drought in Africa has political, social and economic consequences, for people in the immediate area and also for other societies, who may be affected in turn by these

consequences or by the desire to influence the situation based on their own values and interests.

The special emphasis at this fourth level is the requirement that the student study a society different in major ways from her own. By exploring similarities and differences between societies, she learns to identify her own and others' biases and to reflect upon the effect of these biases in a world understood as a global unit.

Throughout the four required levels, the student develops her Contemporary World Competence almost entirely in the role of observer and analyst. To an extent, this is unavoidable given the difficulty of on-site involvement in global problems.

But it is also a crucial element in the learning design: throughout her life, the student's effective involvement in the worldwide context of events must necessarily be generated by her awareness, rather than by her personal experience or interest in the

situation. It is this very "dis-interested" quality, this involvement in spite of distances of geography and culture, which characterizes the developed sense of responsibility to one's world.

### **Specialized Competence: Levels 5-6**

Level 5 requires demonstration of a student's ability to research a complex contemporary world issue and of her acceptance of personal responsibility with respect to that issue or some aspect of it. Besides utilizing the available written and other resources for information and analysis, she is required to undertake field work in probing the issue.

This direct involvement in penetrating the hidden consequences of an event and ascertaining diverse views regarding it, fosters an awareness of the impact of world events on the lives of individuals and institutions. Although taking an overt public stand is not required at this level, the student

still experiences engagement and commitment—particularly as she commits herself to becoming identified with her issue in the eyes of those with whom she works in the field.

The student then undertakes, at Level 6, to define and make public her personal position regarding the implications of a contemporary event. After setting forth her position before a public audience, she analyzes her impact on their views and, in the light of audience responses, reassesses her own position. The student thus demonstrates the ability to formulate a position based on her own synthesis, to present that position publicly, and to examine the effects of her interaction with other informed citizens.



## 8. Educated responsiveness to the arts and humanities

Without providing a neat rationale, society has consistently required of the liberally educated adult a degree of aesthetic understanding and sensitivity. The Alverno student, who is required to demonstrate Aesthetic Competence, learns to ask why art is important to society and to probe the question with an ongoing discovery of what can be expressed verbally and what must be expressed symbolically. She learns to perceive, analyze, and evaluate the kinds of patterns that create an aesthetic effect wherever they exist.

As part of that competence, she develops an understanding of the difference that aesthetic dimension makes in those forms of thought and expression which seek to illuminate the human condition.

At Alverno, the student's interaction with both these spheres of human expression is the focus of the Aesthetic Competence. In the arts, she develops her understanding and response to visual, musical, poetic, dramatic, or dance form. In the humanities, she interacts with philosophical, historical and religious thought expressed in both discursive and aesthetic forms.

Clearly, the two perspectives are not mutually exclusive. Some works, like an epic or a symphony, can be studied in either context. When a student is asked to consider a work as art, therefore, she is directed, as audience, performer, and/or creator, toward the elements which characterize it as a particular art, and how they are combined to produce the work's effect. When she considers it as a humanity, she learns how it fits into the development and scope of human thought.

In developing competence in these areas, the student calls on aspects of her analytic, communicative, problem solving and valuing

abilities. In at least two media she develops an educated response that combines cognitive and affective perception to probe how works in the arts and humanities organize meaning.

#### General Competence: Levels 1-4

At Level 1 the student *establishes a framework for breadth* by studying one art and two humanities (or vice versa). She learns the elements that characterize medium and mode in each given art and the method of the humanity.

She develops her ability to identify the basic formal elements in an art work, whether it is an existing piece like a Breughel painting or a Shakespeare sonnet, a Brahms sonata she performs herself, or an original piece of her

own creation. She also learns to articulate her response, and to analyze how the organization of the work relates to emotional effects in the perceiver.

Dealing with a humanity, she identifies those elements that characterize its method and she demonstrates how it organizes human experience according to its unique approach to meaning. She might, for example, learn how the religious studies approach to Scripture reflects the assumption that the transcendent is a significant dimension of human experience. In contrast, she might then study Scripture as history, analyzing it in the context of a process governed by sequence and causation.



## 8. Educated responsiveness to the arts and humanities

At Level 2, the student moves to comparative analysis, clarifying the commonalities and the differences among these modes of expression. She works with at least two art forms, and she also focuses on one work from the humanities as aesthetic expression.

She might, for example, analyze works of sculpture and poetry to discover their commonalities and differences and then examine the aesthetic dimensions of a philosophical or literary work.

The student at Level 3 continues to analyze human expression for the effects of form on relationships within content—here, an individual to society. Studying works specifically in the humanities, she discovers

how their methods imply certain questions and assumptions about the human person's relation to social matrix. Reading Aristotle and Sartre, for example, she may see that certain responses to general philosophical problems lead to a stance of social identification, while others yield alienation.

Dealing with an art form, she discovers how an artist's combination of formal elements can integrate the emotional and cognitive responses of the perceiver, by symbolic presentation of felt thoughts about the human person and society. She learns, for instance, how the contrasting uses of line, space, and color can express celebration of sensuous form in a Rubens and de-sensitizing fragmentation in a Duchamp.

Level 4 further expands the student's competence by drawing her to make comparative analyses beyond the boundaries of her own culture. From careful observation and analysis, she learns to generalize about an artistic genre in her own culture and in another culture different from but related to it. She compares the approaches of two cultures to basic humanistic questions as well.

Having begun by focusing on a single work and its organizing structure or conceptual approach, and having consistently dealt with that work in a broadening series of relationships, the student who has achieved Level 4 has become inductively aware of the questions of aesthetic theory by raising them out of her own analysis and participation.

#### **Specialized Competence: Levels 5-6**

Developing advanced levels of the Arts and Humanities Competence requires a concentration in at least one art form or humanity, which provides a student with enough depth and familiarity for independent judgment and committed involvement.

At Level 5, she develops the ability to make a persuasive formal presentation in which she communicates her judgments about the meaning and value of a complex artistic or humanistic work, utilizing her analytic

insight and sensitivity to relationships of form and content. The student at this level is also expected to exhibit a consistent, educated response to works in her chosen field and to perceive connections with related arts and humanities.

Level 6 requires that the student take another step in commitment to a lifelong involvement with arts and/or humanities. She must develop facility of expression in at least one art medium or mode in the humanities, and she must establish and articulate her commitment to its importance. In effect, she has at this level chosen to make a creative statement that embodies her personal aesthetic/humanistic perspective as part of her ongoing effort to create and discover meaning in her life.



## Degree Programs

Alverno College, a private college for women, offers a four-year liberal arts curriculum leading to the following degrees: BACHELOR OF ARTS, BACHELOR OF MUSIC, and BACHELOR OF SCIENCE in education, nursing and medical technology.

The College offers both a major area of concentration and a support area in the following fields:

### Major Areas of Concentration

- Art
- Biology
- Chemistry
- Education
  - Early Childhood
  - Elementary
- English
- History
- Management
  - Administration
  - Health Care
  - Performing Arts
- Mathematics
- Medical Technology
- Metropolitan Affairs
- Music
  - Applied Music
  - Church Music
  - Music Education
  - Music Theory
  - Music Therapy
- Nursing
- Psychology
- Religious Studies
- Sociology
- Studies in Environment

**Broad Fields Major** (i.e., area of concentration + supporting area)

- Science (Elementary and Secondary Education)
- Social Science (Elementary and Secondary Education)

### Supporting Areas of Concentration

- Education
  - Adult
  - Bi-lingual
  - Secondary
- Library Science
- Philosophy
- Physical Education
- Physics
- Speech
- Theatre Arts

### Pre-Professional Studies

- Pre-Dentistry
- Pre-Veterinary Medicine
- Pre-Medicine
- Pre-Law

### Associate of Arts Degrees

- Chemical Technology
- Church Music
- Early Childhood Paraprofessional
- General Studies
- Library Science
- Nuclear Medical Technology
- Paraprofessional Teacher
- Piano Pedagogy