

## ABILITY-BASED LEARNING PROGRAM

Since the early 1970s, the Alverno College faculty have been developing and implementing ability-based undergraduate education. More recently, educators at every level — elementary, secondary, undergraduate, postgraduate, and professional — have become involved in an effort to redefine education in terms of abilities needed for effectiveness in the worlds of work, family, and civic community.

One of the greatest challenges to faculty in shaping an ability-based program is the tendency to think of the development of abilities in contrast to a mastery of subject matter or content, as if one precludes the other. Through our practice, we have learned that it is impossible to teach for abilities without a subject matter context. The distinctive feature of an ability-based approach is that we make explicit the expectation that students should be able to do something with what they know.

Few educators would argue with the proposition that a close reading of a philosophic text should have an impact on the thinking of students beyond merely grasping the meaning. The encounter with complex ideas should help develop the students' ability to reason and question and help them one day to think and act effectively in contexts removed from the original concern of the text. By making such expectations explicit and by clarifying steps one can take to develop cognitive and affective habits, we assist students in learning how to learn.

### Ability-Based Learning Outcomes

The specific abilities identified by our faculty as central to our approach to liberal arts and professional education are:

Communication  
Analysis  
Problem Solving  
Valuing in Decision-Making  
Social Interaction  
Developing a Global Perspective  
Effective Citizenship  
Aesthetic Engagement

These are the most visible features of our learning program. However, it would be a fundamental misperception to see students' development and demonstration of these eight abilities as the primary outcome or end of an Alverno education. Our ultimate goal is the development of each student as an educated, mature adult with such personal characteristics as

- a sense of responsibility for one's own learning and the ability and desire to continue learning independently
- self-knowledge and the ability to assess one's own performance critically and accurately
- an understanding of how to apply knowledge and abilities in many different contexts

Essentially, our goal for students is independent lifelong learning, and the development and demonstration of specific abilities in disciplinary and interdisciplinary contexts are a means to that end. For example, our formal requirement that students develop specific abilities in one course context and then apply them to the subject matter of other courses encourages *every* student in the college to transfer learning independently because the explicit expectation makes *every* student aware of the possibility.

### Individual Abilities as Frameworks for Learning

In the educational program described above, individual abilities cannot be separated from each other or from the individual who performs them. There can be no effective social interaction, for example, without the ability to speak clearly and persuasively; one cannot engage aesthetically with works of art without a sensitivity to the values that underlie judgment.

But we make conceptual distinctions among the abilities in order to teach for them. Each ability provides a framework or a plan for students to work effectively with the subject matter of their courses. As students gain experience, they begin to draw upon various abilities they have learned and combine them in more complex ways.

*(Continued on back)*

## 1. Communication: Speaking, Writing, Listening, Reading, Quantitative Literacy, Computer Literacy

**Beginning Levels:** Uses self assessment to identify and evaluate communication performance

**Level 1** — Recognizes own strengths and weaknesses in different modes of communication

**Level 2** — Recognizes the processes involved in each mode of communication and the interactions among them

**Intermediate Levels:** Communicates using discipline concepts and frameworks with growing understanding

**Level 3** — Uses communication processes purposefully to make meaning in different disciplinary contexts

**Level 4** — Connects discrete modes of communication and integrates them effectively within the frameworks of a discipline

**Advanced Levels in Areas of Specialization:** Performs clearly and sensitively in increasingly more creative and engaging presentations

**Level 5** — Selects, adapts, and combines communication strategies in relation to disciplinary/professional frameworks and theories

**Level 6** — Uses strategies, theories, and technologies that reflect engagement in a discipline or profession

## 2. Analysis

**Beginning Levels:** Accurately observes individual parts of phenomena and their relationship to one another

**Level 1** — Observes accurately individual parts of phenomena and their relationship to one another

**Level 2** — Draws reasonable inferences from observations of individual parts of phenomena and their relationship to one another

**Intermediate Levels:** Uses disciplinary concepts and frameworks with growing discernment and transparency

**Level 3** — Perceives and makes relationships using disciplinary concepts and frameworks with growing understanding

**Level 4** — Analyzes structure and organization using disciplinary concepts and frameworks with growing understanding

**Advanced Levels in Areas of Specialization:** Consciously and purposefully applies disciplinary frameworks to analyze complex phenomena

**Level 5** — Refines understanding of frameworks and identifies criteria for determining what frameworks are suitable for explaining a phenomenon

**Level 6** — Independently applies frameworks from major and minor discipline to analyze complex issues

## 3. Problem Solving

**Beginning Levels:** Articulates and uses a process to solve a problem

**Level 1** — Articulates own problem solving process

**Level 2** — Identifies and uses elements of problem solving processes

**Intermediate Levels:** Demonstrates increasing independence in implementing and evaluating disciplinary problem solving

**Level 3** — Implements a disciplinary problem solving process in a real or simulated context and evaluates the process and/or the solution

**Level 4** — Independently analyzes, selects, uses, and evaluates various disciplinary approaches to solve problems

**Advanced Levels in Areas of Specialization:** Solves problems effectively in professional situations

**Level 5** — Collaborates effectively in designing and implementing potential solutions to complex disciplinary problems

**Level 6** — Independently adapts problem solving processes in addressing evolving professional situations, recognizing personal values and adhering to professional standards

## 4. Valuing in Decision-Making

**Beginning Levels:** Explores the valuing process

**Level 1** — Identifies own and others' values and some key emotions they evoke

**Level 2** — Connects own values to behavior and articulates the affective, cognitive, spiritual and behavioral dimensions of this process

**Intermediate Levels:** More precisely analyzes the role of groups, cultures, and societies in the construction of values and their expression in moral systems or ethical frameworks

**Level 3** — Analyzes reciprocal relationship between own values and their social contexts and explores how that relationship plays out

**Level 4** — Uses the perspectives and concepts of particular disciplines to inform moral judgments and decisions

**Advanced Levels in Areas of Specialization:** Explores and applies value systems and ethical codes at the heart of the field

**Level 5** — Uses valuing frameworks of a major field of study or profession to engage significant issues in personal, professional, and civic contexts

**Level 6** — Consistently examines and cultivates own value systems in order to take initiative as a responsible self in the world

## 5. Social Interaction

**Beginning Levels:** Learns frameworks and self assessment skills to support interpersonal and task-oriented group interactions

**Level 1** — Recognizes analytic frameworks as an avenue to becoming aware of own behaviors in interactions with diverse others and to participating fully in those interactions

**Level 2** — Gains insight into the affective and practical ramifications of one's interactions, in their social and cultural context, by observing others' examples, experiencing new situations, and applying analytic frameworks

**Intermediate Levels:** Uses analytic frameworks and self awareness to engage with others in increasingly effective interaction across a range of situations

**Level 3** — Increases effectiveness in group and interpersonal interaction based on careful analysis and awareness of self and others in social and cultural contexts

**Level 4** — Displays effective interactions in group and interpersonal situations, reflecting cognitive understanding of social and cultural contexts, and awareness of affective components of own and others' behavior

**Advanced Levels in Areas of Specialization:** Integrates discipline-specific frameworks with social interaction frameworks to function effectively with diverse stakeholders in professional roles

**Level 5** — Consistently and with increasing autonomy demonstrates effective professional interaction using multiple disciplinary frameworks to interpret behavior and monitor own interaction choices

**Level 6** — Uses leadership abilities to facilitate achievement of professional goals in effective interpersonal and group interactions

## 6. Developing a Global Perspective

**Beginning Levels:** Identifies what shapes own opinions and judgments with regard to global issues, and uses course concepts to broaden own perspective

**Level 1** — Explores one's understanding of the world's diversity and interconnection, identifies some of the sources of one's own knowledge and beliefs, and articulates own perspectives on issues with global dimensions

**Level 2** — Learns and uses concepts from a variety of courses to describe the world's diversity and interconnections

**Intermediate Levels:** Uses frameworks from multiple disciplines to deepen understanding of global issues from a variety of perspectives

**Level 3** — Selects and applies disciplinary frameworks in order to identify implications of the world's diversity and global interconnections within a particular context

**Level 4** — Draws on disciplinary frameworks to articulate a perspective markedly different from one's own on a topic with global dimensions, demonstrating awareness of the worldviews underlying that perspective as well as the likely implications of holding the perspective

**Advanced Levels in Areas of Specialization:** Uses selected discipline theories to analyze the connections between and among complex global systems

**Level 5** — Selects, adapts, and uses theoretical approaches from the major/discipline to analyze, evaluate, or generate a response to issues with global dimensions

**Level 6** — Integrates theoretical frameworks, both from within and beyond the major/discipline, to analyze, evaluate, or generate an independent approach to topics of global significance

## 7. Effective Citizenship

**Beginning Levels:** Identifies significant community issues and assesses ability to act on them

**Level 1** — Begins to assess one's own knowledge, skills, and other background relevant to thinking about and acting on community issues

**Level 2** — Applies concepts from the disciplines to identify and describe issues that affect communities as well as strategies to address the identified issues

**Intermediate Levels:** Works within both organizational and community contexts to apply developing citizenship skills

**Level 3** — Recognizes that effective citizenship is exercised in the context of society; learns to analyze individuals and organizations in terms of roles and structures to see how individuals work within organizations and how organizations coordinate with one another to achieve common goals

**Level 4** — Applies developing citizenship skills in service to a selected community by developing an action plan with criteria for evaluation

**Advanced Levels in Areas of Specialization:** Takes a leadership role in addressing organizational and community issues

**Level 5** — Uses discipline concepts, frameworks, and theories to identify, analyze, and recommend change in a political, social, or professional setting

**Level 6** — Develops a plan for effecting change in a political, social, or professional setting, modifies plan as a result of feedback, and attempts to implement the plan to the extent practicable

## 8. Aesthetic Engagement

**Beginning Levels:** Develops an openness to the arts

**Level 1** — Makes informed artistic and interpretive choices

**Level 2** — Articulates rationale for artistic choices and interpretations

**Intermediate Levels:** Refines artistic and interpretive choices by integrating own aesthetic experiences with a broader context of disciplinary theory and cultural and social awareness

**Level 3** — Revises choices by integrating disciplinary contexts

**Level 4** — Develops awareness of creative and interpretive processes

**Advanced Levels in Areas of Specialization:** Creates works of art and/or interpretive strategies and theories that synthesize personal preferences and disciplinary concepts

**Level 5** — Develops and expresses personal aesthetic vision

**Level 6** — Integrates aesthetic vision into academic, professional, and personal life

## Teaching and Assessing Student Abilities

In order to make these complex abilities teachable, we have articulated each one as a series of developmental levels corresponding to student progress across the college career, from general education (levels one through four) to specialized work in the majors and supporting areas of study (levels five and six). For each level of ability we have devised criteria for the ability being performed.

These criteria serve two purposes. They provide a student with a tangible goal for learning, and they give the faculty a standard for judging and certifying that the student has demonstrated the ability. These collegewide criteria are generic in the sense that they are not tied to specific courses. Each faculty member writes explicit performance criteria in language appropriate to the context of specific courses. But the common understanding on the part of faculty helps to ensure that the student recognizes that the same basic ability has relevance in multiple course contexts and that the student is refining each ability through multiple applications.

As a context for evaluating student demonstration of abilities, we have developed the concept of student assessment as a multidimensional process of judging the individual in action. Assessment is multidimensional, both in the sense that students have multiple opportunities to demonstrate specific abilities, and that individual assessments engage students in multiple ways — as writers, as speakers, as creators of artifacts.

In both course-based assessments and integrative assessments that focus student learning from several courses, we elicit samples of performance representing the expected learning outcomes of a course or program. Faculty and other trained assessors observe and judge a student's performance based on explicit criteria. Their diagnostic feedback, as well as the reflective practice of self assessment by each student, helps to create a continuous process that improves learning and integrates it with assessment.

## General Education

Each department emphasizes the abilities most closely related to its studies and takes responsibility for providing learning and assessment opportunities for those abilities. In beginning courses, students develop and demonstrate levels one and two of the abilities. They continue to advance through the levels within a coherent arrangement of courses. The distribution of learning and assessment opportunities among all general education courses in the humanities, fine arts, natural and behavioral sciences as well as the introductory courses in majors and supporting areas of study, assures students of multiple opportunities to demonstrate all eight abilities through level four. And since each course beyond the introductory level carries ability prerequisites as well as course prerequisites, students are assured of taking each course when they are ready to develop the levels of abilities emphasized there.

## Specialization

Each department has specified the integrated knowledge/performance expectations of advanced level undergraduate specialization in its major and has related those to the appropriate general abilities of the entire college curriculum. For example, English faculty have determined that one of the outcomes they expect for their majors is to “communicate an understanding of literary criticism, question its assumptions, and use its frameworks to analyze and evaluate works.” The department has made explicit connections between this outcome and communication, analysis, valuing, and aesthetic response abilities at the advanced levels.

For a major in chemistry, students must “use different strategies and models of chemistry to analyze and synthesize chemical data” and “critique the data, strategies, and models of chemistry.” The primary focus of these outcomes is level six of analysis — independent application of theory. But students must also draw upon their valuing ability to critique the underlying assumptions of the theoretical models, and they must be able to communicate their analysis and criticism effectively in different modes. In essence, students at the advanced level must be able to engage all of their abilities to be effective.

This brief overview represents a curriculum in the process of ongoing development. Over the years we continue to revise our sense of the meaning of the abilities. Our insights grow from our experience of teaching them and studying how our students develop them. We expect that our ability-based curriculum will always be a “work in progress” and that we will be able to serve as models of lifelong learners for our students.

Materials for further reading on teaching for outcomes across the curriculum, on student assessment, on ability-based curricula in major fields, and research and evaluation studies of the value, worth, and effectiveness of the curriculum are available from:

Alverno College Institute  
PO Box 343922  
Milwaukee, WI 53234-3922  
414-382-6087  
alverno.edu