Alverno
C O L L E G E

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 her own learning and the ability and desire to continue learning independently

- self-knowledge and the ability to assess her own performance critically and accurately

- an understanding of how to apply her 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.

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: Observes individual parts of phenomena and their relationships to one another

Level 1—Observes accurately

Level 2—Draws reasonable inferences from observations

Intermediate Levels: Uses disciplinary concepts and frameworks with growing understanding

Level 3—Perceives and makes relationships

Level 4—Analyzes structure and organization

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—Applies frameworks from major and minor discipline independently to analyze complex issues

3. Problem Solving

Beginning Levels: Articulates problem solving process and understands how a discipline framework is used to solve a problem

Level 1—Articulates problem solving process by making explicit the steps taken to approach a problem

Level 2—Practices using elements of disciplinary problem solving processes to approach problems

Intermediate Levels: Takes thoughtful responsibility for process and proposed solutions to problems

Level 3—Performs all phases or steps within a disciplinary problem solving process, including evaluation and real or simulated implementation

Level 4—Independently analyzes, selects, uses, and evaluates various approaches to develop solutions

Advanced Levels in Areas of Specialization: Uses problem solving strategies in a wide variety of professional situations

Level 5—Demonstrates capacity to transfer understanding of group processes into effective performance in collaborative problem solving

Level 6—Applies methods and frameworks of profession/discipline(s): integrating them with personal values and perspectives; adapting them to the specific field setting; demonstrating independence and creativity in structuring and carrying out problem solving activities

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 cognitive and spiritual 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 and to participating fully in those interactions

Level 2—Gains insight into the affective and practical ramifications of interactions in their social and cultural context

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 and continues to practice increasingly 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 models 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, as well as the extent to which these opinions and judgments reflect multiple perspectives

Level 1—Assesses own knowledge and skills with regard to ability to think about and act on global concerns

Level 2—Examines the complex relationships that make up global issues

Intermediate Levels: Incorporates response to multiple perspectives and uses frameworks from disciplines to reflect on own judgments about issues

Level 3—Uses disciplinary concepts and frameworks to gather information to explore possible responses to global issues

Level 4—Uses frameworks from a variety of disciplines to clarify and articulate own informed judgment on the issues

Advanced Levels in Areas of Specialization: Refines general abilities by integrating them with frameworks and concerns of major areas of study to further develop own global perspective

Level 5—Uses theory to generate pragmatic approaches to specific global issues

Level 6—Creatively and independently proposes theoretical and pragmatic approaches to specific global concerns

7. Effective Citizenship

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

Level 1—Develops self assessment skills and begins to identify frameworks to describe community experience

Level 2—Uses discipline concepts to describe what makes an issue an issue and to develop skills necessary to gather information, make sound judgments, and participate in the decision making process

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

Level 3—Learns how to "read an organization" in terms of how individuals work with others to achieve common goals

Level 4—Develops both a strategy for action and criteria for evaluating the effectiveness of plans

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

Level 5—Works effectively in the civic or professional realm and works effectively with others to develop their ability to participate

Level 6—Tests developing theory, anticipating problems that are likely to emerge, and devising ways to deal with them

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 her 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 her learning, and they give the faculty a standard for judging and certifying that she has demonstrated the ability. These college-wide 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 she is refining her 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 models of chemistry to analyze and synthesize chemical data and to critique the data, strategies, and models of chemistry." The primary focus of these outcomes is level six of analysis — independent application of theory. But a student must also draw upon her valuing ability to critique the underlying assumptions of the theoretical models, and she must be able to communicate her 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.