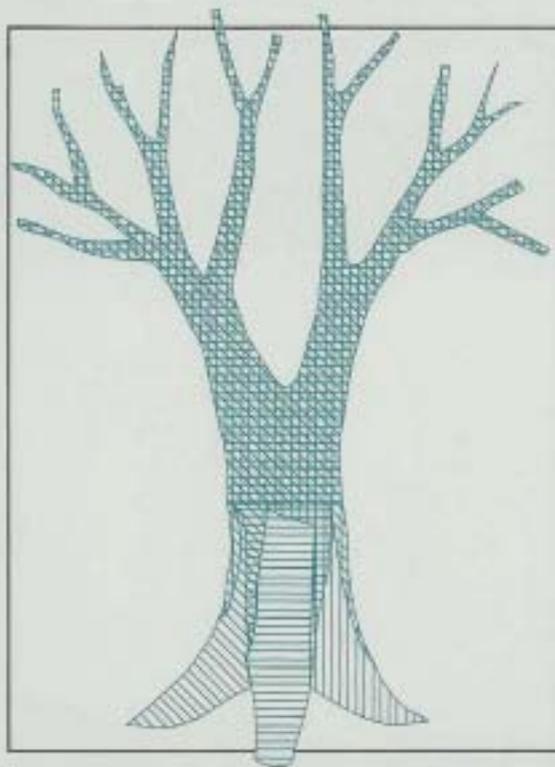


Core Principles and Outcomes

OF GERONTOLOGY, GERIATRICS AND AGING STUDIES INSTRUCTION



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Core Principles and Outcomes of Gerontology, Geriatrics and Aging Studies Instruction

1993

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This project was supported in part by Award #90-AR-0127 from the Administration on Aging, Department of Health and Human Services, Washington, D.C. 20201. Grantees undertaking projects under government sponsorship are encouraged to express freely their findings and conclusions. Points of view or opinions do not, therefore, necessarily represent official Administration on Aging policy. Copies of this publication can be ordered for \$10.00 (AGHE Members) or \$20.00 (AGHE Non-members), from the Association for Gerontology in Higher Education, 1001 Connecticut Avenue, N.W., Suite 410, Washington, D.C. 20036-5504. Orders must be prepaid.



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PROJECT BACKGROUND AND OVERVIEW

In October 1990 the Association for Gerontology in Higher Education (AGHE) and the University of Southern California (USC) received funding from the Administration on Aging (AoA) to conduct a project on “Improving the Match Between Jobs in the Field of Aging and Gerontologically Trained Personnel.” The primary objectives of this 32-month research project were to:

- develop descriptions of the major orientations of gerontology, geriatrics and aging studies programs of instruction in higher education;
- identify and validate core organizing principles for gerontology, geriatrics and aging studies instruction in higher education;
- clarify and validate the knowledge and skill outcomes of three major orientations of gerontology education; and
- provide an accurate description of the orientation, outcomes, size, structure and stability of current programs of gerontology instruction in higher education.

This monograph reports on the results of the first three objectives. The report on objective number four can be found in *Development of Gerontology, Geriatrics and Aging Studies Programs in Institutions of Higher Education* (Peterson, Wendt & Douglass, 1993).

In the 1980s, gerontology education began with the landmark Foundations Project (Johnson, Britton, Lang, Seltzer, Stanford, Yancik, Maklan & Middleswarth, 1980) report that became the cornerstone of gerontology curriculum development in higher education for the whole decade. The panelists on the project—prominent researchers, teachers and administrators in the field of aging—concluded that there was indeed a core of knowledge essential for all students of gerontology and geriatrics. They recommended that the biology and psychology of normal aging changes and health and aging be considered essential components of the curriculum. Courses with variations of these titles became common in gerontology instruction.

Further refinement occurred as numerous additional curriculum development projects took place during the rest of the decade that encompassed work done by college and university fac-

ulty with input from employers within the field, students of gerontology, government hearings and professional associations (see review in Wendt & Peterson, 1993b). The 1980s closed with the publication of *Standards and Guidelines for Gerontology Programs* (Rich, Connelly & Douglass, 1990) by the Standards Committee of AGHE. At each level of programming, courses in psychology, sociology and biology/physiology of aging were identified as required, with additional courses in gerontological research methods, health and multidisciplinary integration required for specific types or levels of programs.

During the decade of the 1980s, the field of gerontology education expanded, evolved and matured. Gerontological research and practice have developed and have influenced what takes place in the classroom. Higher education curriculum development in gerontology now needs to reflect that increasing sophistication. In most educational review processes, it is *concepts* instead of *courses* that educational standards address. *This project sought to move the field beyond a listing of course titles and general areas of study to the identification of concepts and principles which are basic to gerontology education. Core concepts, encompassing the common body of knowledge, skills and attitudes considered so essential that every student should master them before leaving the educational environment, are the cornerstone of formal education throughout more established fields, professions and disciplines.*

A panel of nine faculty with significant experience in gerontology, geriatrics and aging studies (GGA) program development was selected to be the working Task Force for this project. Members of the Task Force represented each level of higher education, each of the major orientations of GGA instruction and each of the major disciplines and fields contributing to the multidisciplinary core of gerontology, geriatrics and aging studies. The task of the panel was to draft a set of core organizing principles and knowledge outcomes for the field of gerontology, geriatrics and aging studies education. Meeting with project staff in Educational Outcomes Conferences in February 1991 (Los Angeles) and January 1993 (Washington, D.C.), the panel helped formulate the products discussed in this report.

A validation study of the core organizing principles and knowledge outcomes, written during the 1991 Educational Outcomes Conference, was undertaken in a national survey of GGA programs of instruction from January to September 1992. Respondents did validate the items, and the task force was assembled for a second Educational Outcomes Conference in 1993 to refine and expand their original work. Open forums describing the process and outcomes of the project were held at the 1991, 1992 and 1993 AGHE Annual Meetings, and paper presentations on various aspects of the project were presented at the 1991 and 1992 Gerontological Society of America Annual Scientific Meetings. We submit this work as one of the steps in the continuing process of GGA curriculum development in higher education. We view this as a refinement and extension of previous work, and we look forward to future efforts for clarification of the content and processes in gerontology, geriatrics and aging studies education.

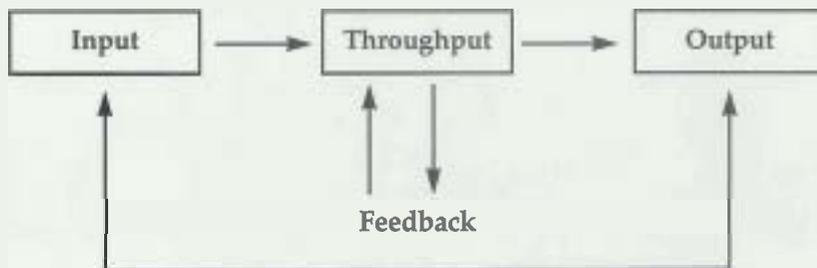
This document describes the rationale and processes we used to develop and test the major products of this project. The educational framework is presented in Chapter 1. Chapter 2 is a description of gerontology, geriatrics and aging studies programs of instruction and the archetypical orientations to that instruction. In Chapter 3 we discuss the development of the trans-disciplinary and trans-orientation core content for GGA instruction. Core knowledge and skill outcomes for GGA instruction for each major orientation are introduced in Chapter 4, and their revision is discussed in Chapter 5. Also in Chapter 5 we describe the national study undertaken to validate the core organizing principles and the knowledge and skill outcome statements. Chapter 6 contains brief statements about some of the uses of the core organizing principles and knowledge and skill outcome statements.

Chapter 1. FRAMEWORK FOR THE PROJECT

Organizations interested in quality and permanence inevitably turn to an evaluation of their services and products. Those most successful have indicated that a dynamic interaction of monitoring and feedback for regular modification is critical. Gerontology, geriatrics and aging studies (GGA) instructional programs can apply these same principles in their search for quality and permanence.

Individuals and educational programs function within a larger society, influencing and shaping the changes in one another. Changes that occur simply to accommodate the demands of various components are adaptations and may have either positive or negative influences on the other components and eventually on the originator of the demand. Planned changes directed at moving toward predetermined standards are modifications and are intended to have positive influences on quality and stability. Using the basic systems model to demonstrate graphically these interactions (Figure 1), it can be shown how feedback between components can contribute to either adaptation or purposeful modification over time.

Figure 1. BASIC SYSTEMS MODEL



Applying this systems model to education, it is evident that attaining educational quality and permanence is possible through a time-ordered mechanism of cycles of action, observation, feedback and refinement. The critical element is the existence of predetermined standards against which changes are evaluated and their direction is charted.

The dynamic interaction of the results of performance/activities measurement based on standards for each component of the system can produce successful system refinements and improvements that result in quality education. Figure 2 details a systems model of the dynamic interaction of the components of educational programs.

Generically, *inputs* are the elements that enter or shape the system by providing values and resources or making demands and are indicators of a system's capacity to provide quality services. Inputs are compared to structural standards for resources, number and qualifications of staff, and licensure and accreditation (Atchley, 1991). In the case of education, the traditional measurement of quality of input involves standards of students' academic ability (e.g., GPA, achievement tests), motivations and commitments; faculty educational and experiential credentials, publications and leadership in the field; institutional resources; and institutional and program accreditation.

Throughputs are the actions or procedures that members of the system implement and are compared to process standards to document compliance and observe sample processes (Atchley, 1991). In education the measurement of the quality of throughput involves evaluation of program implementation compared with its stated goals and purposes.

Outputs are the products or effects of the system and are indicators of expected results. Outputs are compared to both objective and subjective outcome standards derived from a knowledge of potential outcomes under optimal conditions (Atchley, 1991). In education the measurement of the quality of the output involves national and professional registration or certification examinations, in some cases, and accomplishment of educational outcomes/objectives/competencies in others, as well as the ability of graduates to obtain employment and specific salary levels. "During the past twenty-five years, an important

shift has taken place in education evaluation— from an emphasis on process to a focus on product (outcomes) evaluation” (Young, Chambers, Kells & Associates, 1983, p. 12; see also Chaffee & Sherr, 1992).

The time-ordered cyclical nature of action, observation, feedback and refinement is clearly evident in the history of the development of programs of GGA education. From the early beginnings of medical researchers investigating medical problems of the elderly, to the organization of the Midwest Council for Social Research on Aging following the 1961 White House Conference on Aging, to the first Administration on Aging grant awards to educational institutions in 1966 for undergraduate students in interdisciplinary core courses in the psychobiological and socioeconomic aspects of aging, to the Foundations Project of 1980 and the Standards Project of 1989, GGA programs have been evolving. They have grown rapidly during the past years, increasing the number of courses, programs, faculty and students, and gaining the recognition necessary for program stability on many campuses (Peterson, Wendt & Douglass, 1993).

The field of aging continues to reflect extreme diversity of content, credentials, and organizational structure, but it is now mature enough to benefit from clearer program conceptualizations and the development of educational outcomes.

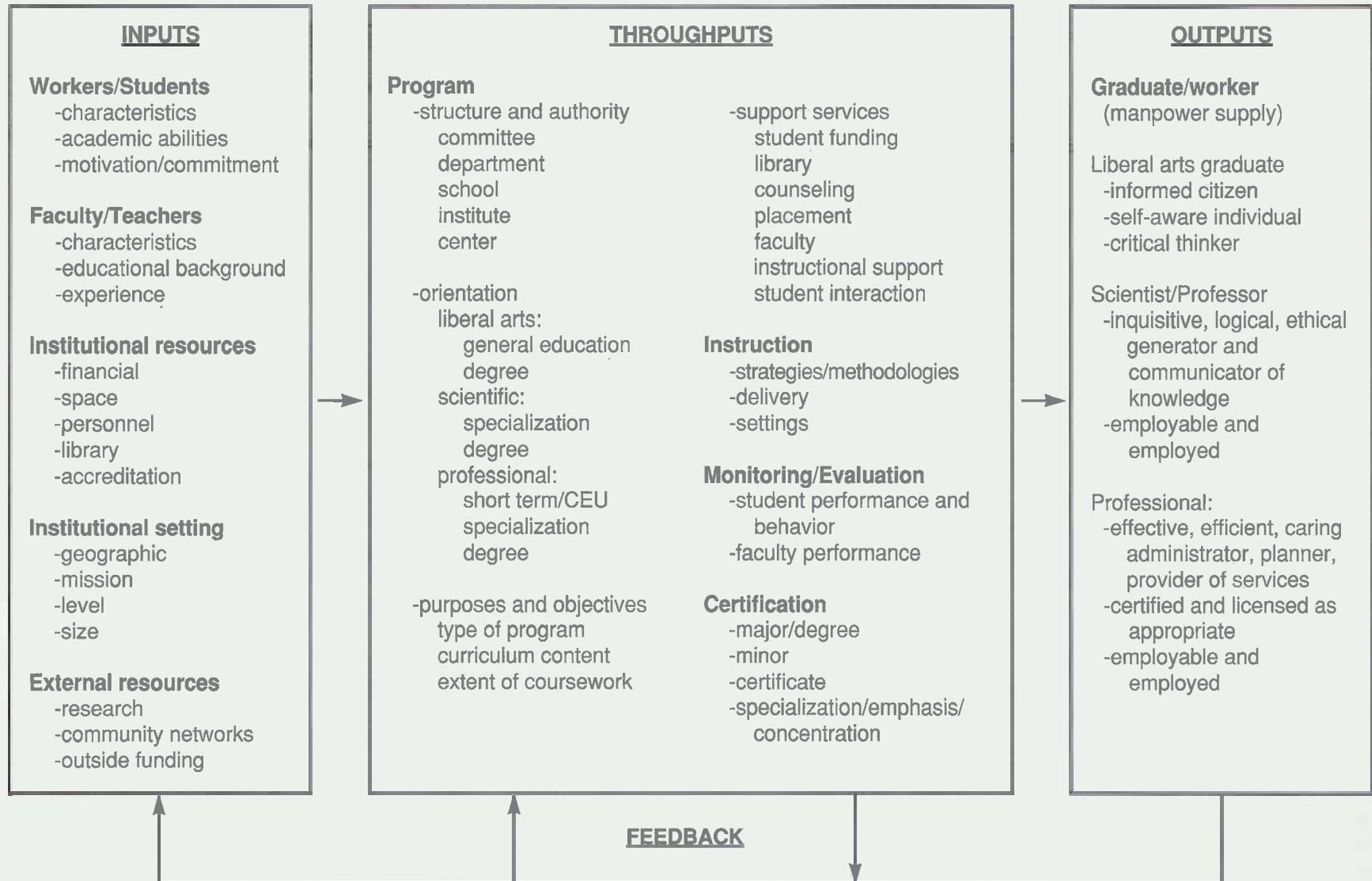
We agree with Young and colleagues (1983) that “Combinations of conflicting factors, such as declining enrollments and higher costs, will make maintaining and improving educational quality increasingly difficult... assurances of program quality will be more and more important to prospective students and to the public in general” (p. 206).

The dynamic interaction of the various standards and measurements (i.e., structural, process, and outcome) is necessary since each by itself has limited value in contributing to the ability of an educational program to promote quality programming. Structural standards alone assess the capacity of the program to educate, but not the quality of the actual teaching and learning. Process standards alone determine whether the program and instruction are provided according to appropriate guidelines, but not whether learning has occurred. Outcome standards alone measure what the student knows, but not whether the program was responsible for what the student knows (Atchley, 1991).

It is our hope and intention that this project, funded by the U.S. Administration on Aging, will contribute to the enhancement of process and outcome standards for gerontology, geriatrics and aging studies (GGA) programs of instruction.

Figure 2. SYSTEMS MODEL OF THE DYNAMIC INTERACTION OF COMPONENTS OF EDUCATIONAL PROGRAMS

Larger environmental influences: Population characteristics/demographics/imperatives Political climate Social and ethical forces
 Economic environment and resources Technological environment (manpower demand)



Chapter 2. DESCRIPTION AND ORIENTATIONS OF PROGRAMS OF INSTRUCTION

Description of GGA Programs of Instruction

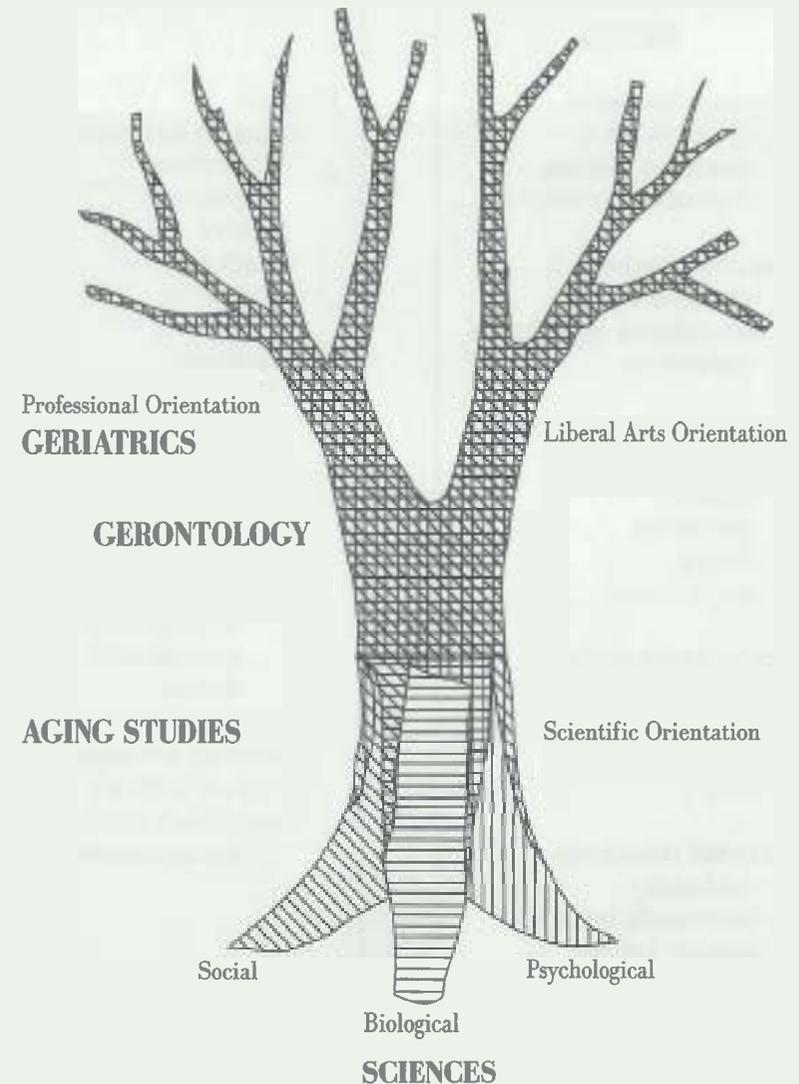
One of the first tasks of the project was to determine how to describe gerontology, geriatrics and aging studies (GGA) programs of instruction. We recognized that instructional programs reflected various stages of development in the field of aging, and we looked for a model that would represent the interactive nature of the biological, psychological and social content issues. At the first Educational Outcomes Conference (EOC), we considered numerous symbolic representations and finally decided that a tree model captured the interactive nature we sought (conceived by Davis Gardner and developed by Pamela Wendt).

The tree in Figure 3 represents the diversity of GGA instructional programs. From the root disciplines of the biological, psychological and social sciences, the trunk represents the studies in aging being conducted by the scientists in the disciplines and the work of the professions in each area. Cross-hatching where the areas of study or research overlap, further up the trunk where the foundational disciplines significantly overlap, the emergence of the new field of gerontology is represented by the creation of a new pattern.

Using this framework to characterize formal education, **aging studies programs** are found in the traditional disciplines and the professions based in the traditional disciplines. Examples are sociology of aging programs, neurobiology of aging programs, and economics and aging programs. The aging content is typically an emphasis, track, concentration or specialization within the major field of study. These would be located in the lower portion of the trunk of the tree.

Gerontology programs/geriatric programs are multidisciplinary by definition. Within these a bio/psycho/social perspective is fundamental, and students are expected to synthesize an integrated paradigm. Gerontology programs may be academic minor or certificate programs, as well as major or degree programs. Geriatric programs are broadly defined in this project as any medical or allied health program that results in a practitioner specifically educated to work with older adults. Examples are geriatric fellowship programs,

Figure 3. ORIENTATIONS TO GERONTOLOGY, GERIATRICS AND AGING STUDIES INSTRUCTION



geriatric nurse practitioner programs and gerontological dietetic programs. The aging content is typically an emphasis, track, concentration or specialization with the professional education. These educational programs would be located in the upper portion of the tree.

We suggest that a GGA program be an organized sequence of courses rather than a loosely confederated group of courses, and that students' knowledge of the field be systematically cultivated through a thoughtfully developed and focused course of study. Indeed, we desire to avoid the criticism levied by the Association of American Colleges (1985) that "the major (*minor, certificate, concentration, etc.*) in most colleges is little more than a gathering of courses taken in one department, lacking structure and depth" (*italics added*).

While the field and its formal educational system are still relatively young and growing rapidly, we are suggesting that *it is time to differentiate types of gerontology, geriatrics and aging studies education based on educational orientation and anticipated outcomes and to articulate more clearly the core organizing principles that cut across all these areas.*

Orientations to GGA Instruction

Many gerontology programs historically have been undifferentiated and general in orientation. This project contends that it is now time to examine GGA instructional programs more closely and consciously differentiate curricula on the basis of intended outcomes. This does not imply that all GGA instruction should be the same; on the contrary, the content and emphasis should differ among programs with different purposes and intended uses. The differences need to be rationally determined, specified by outcome statements, and attuned to the level and need of the anticipated students.

Three archetypical orientations or philosophical frameworks found in higher education (Carnegie Commission on Higher Education, 1973) have very different outcomes based on different sets of competencies (Figure 4). There is no implied hierarchy in these three orientations. Each serves a useful and legitimate purpose. The point is not that one is preferable to the others, but that there is value in clarifying the orientation of each type of program in order to avoid dilution of purpose or efforts. Figure 5 is a description of GGA programs with a specific orientation. The three orientations are:

Liberal Arts Education

This instructional orientation is aimed at liberating the individual from the bonds of ignorance, prejudice and cultural isolation. Liberal arts education has as its purpose the acquisition of a philosophical understanding and appreciation of the processes of life and the development of intellectual capacities. This orientation emphasizes breadth of knowledge, the critical analysis and integration of that knowledge into a whole and conceptualizations within which to consider the larger philosophical questions of life. It focuses on personal awareness and development to assist the individual to grow and to make the best use of personal capabilities.

The liberal arts approach in gerontology education focuses on acquiring the foundation and framework for understanding the aging process. The goal is to explore aging within societies and to facilitate the continuing intellectual growth of the whole person. This approach enhances the development of an understanding of and appreciation for the aging processes as seen from the social, mental and physical perspectives. The emphasis is on a comprehensive integration of many disciplines.

Gerontologists with this orientation examine the attitudes toward older people in various historical periods and across cultures and use philosophical approaches to discover the ways in which aging is portrayed in literature and media. Liberal arts education is not primarily job-oriented.

Professional Education

Professional education is rooted in a concern for the welfare of people and for the application of knowledge to solve problems on their behalf. The focus of professional instruction is to develop "competent professionals (who) are characterized by their ability to link technical knowledge with appropriate values and attitudes when making complex judgements" (Stark & Lowther, 1988, p. 1).

The professional approach in GGA instruction focuses on the acquisition of career-oriented gerontological knowledge, skills and attitudes needed to practice at an appropriate level within the field of aging. This approach encompasses a knowledge of physical, mental and social aspects of aging and articulates with liberal education perspectives and skills. Professionally oriented programs produce competent

Figure 4. PURPOSE, EMPHASIS AND GENERIC EDUCATIONAL OUTCOMES OF THREE ORIENTATIONS IN HIGHER EDUCATION

	<u>Liberal Arts Approach</u>	<u>Professional Approach</u>	<u>Scientific Approach</u>
Purpose	<ul style="list-style-type: none"> • acquire a philosophical understanding and appreciation of the students' cultural heritage • establish a common level of educational foundations upon which to build and develop intellectual capacities 	<ul style="list-style-type: none"> • acquire career-oriented knowledge, skills and attitudes to practice at an entry level within an occupation 	<ul style="list-style-type: none"> • describe, understand and predict natural phenomena • develop an understanding of "truth" ... "more related to current facts...always being discovered and tested and applied anew" (Carnegie Commission on Higher Education, 1973, p 84)
Emphasis	<ul style="list-style-type: none"> • knowledge and understanding, liberating the student from the bonds of ignorance, prejudice, and cultural isolation • critical thinking, analysis, conceptualization • content breadth (distributed course work, integrative seminars, cumulative examinations) 	<ul style="list-style-type: none"> • relevance, assistance, intervention 	<ul style="list-style-type: none"> • the generation and replication of knowledge • research methodology, use of approved techniques and procedures to collect and analyze data • content depth (advanced course work, research on narrowly defined technical topics) • inquisitive, logical, ethical scientist
Goal	<ul style="list-style-type: none"> • informed citizen • creative, broadly-based, self-aware individual 	<ul style="list-style-type: none"> • effective, efficient, caring practitioner 	

Outcomes

Liberal Arts Approach, continued

- higher-order cognitive skills
 - analytic thinking
 - synthetic-creative thinking
 - valuative thinking
 - scientific reasoning
 - using numerical data
- active awareness of one's natural environment
 - structure & function
 - human-environment interactions
 - problem solving
- active awareness of oneself
 - self-identity
 - values
 - learning
- awareness of and effective action in one's social and cultural environment
 - communication
 - interpersonal interaction
 - leadership
 - the contemporary world
 - cultural change
 - artistic response

(Association of American Colleges, 1985)

Professional Approach, continued

- professional competence
 - conceptual competence
 - technical competence
 - integrative competence
 - contextual competence
 - adaptive competence
 - interpersonal competence
- professional attitudes
 - professional identity
 - professional ethics
 - career marketability
 - scholarly concern for improvement
 - motivation for continued learning

(Stark, Lowther, Hagerty, Orczyk, 1986)

Scientific Approach, continued

- intellectual skills
 - broad grasp of field
 - depth in at least 1 specialty
 - logical thinking
 - creativity and innovation
 - intellectual independence
- technical skills
 - use of information resources
 - planning and organizing work
 - oral and written communication
 - scientific methodologies

practitioners who are recognized by society for their professional expertise in gerontology/geriatrics.

Gerontologists with this orientation work to provide direct services to older persons and their families, to administer and plan programs and services and to modify social institutions and policies.

Scientific Education

Scientific education has as its purpose the description, prediction, and ultimate control of natural phenomena. The assumption is that knowledge has intrinsic value and that its verification and expansion are sufficient purposes for its pursuit. It emphasizes the generation and replication of knowledge, the importance of previous findings, research methodology, using approved techniques and procedures to collect and analyze data and verification through replication and open review. Scientific education emphasizes content depth rather than the breadth that is common to the liberal arts education approach.

Education in the scientific approach in GGA encompasses a knowledge of the biological, psychological and social processes of aging within and among individuals and in societal contexts. This orientation adheres to traditional scientific models to study aging processes. The gerontological scientist uses this knowledge to investigate problems and disseminate discoveries about aging.

Gerontologists with this orientation work as researchers and teachers in educational, foundation, corporate and clinical settings.

Instructional programs with different orientations are visually represented in Figure 3. Students completing a course of instruction with any of these orientations should have mastered the same basic core of aging content, but they will have applied that knowledge in different areas to separate sets of issues and experiences resulting in the development of distinctive skills. We agree with Stark and Lowther (1988) that "...decisions professionals (*educators, researchers and citizens*) must make are more complex and demanding than ever before. Effective decision making requires a strong contextual background. In learning to perform professional (*life and employment*) roles competently, students must meld past, current, and future oriented perspectives. They must draw upon values and attitudes as well as skills. To ensure this ability, educators must develop educational programs that

capitalize upon real problems students will face in their professions (*personal lives and work*)" (p. 10, italics added).

It was our expectation that scientifically oriented programs would be found primarily at the master's and academic doctoral levels, that liberal arts oriented programs would be found primarily at the baccalaureate level, and that professional oriented programs would be found primarily at the baccalaureate, master's and medical doctorate levels (see Peterson, Wendt & Douglass, 1993, for results of the national survey of GGA programs).

We acknowledge that these are expressions of archetypes and that numerous combinations of these currently exist within the educational field of aging. In fact, the current movement within higher education to integrate liberal arts and professional instruction during undergraduate education (American Association of State Colleges & Universities, 1986; Association of American Colleges, 1985; Bok, 1986; Boyer, 1987; National Institute of Education, 1984; Stark & Lowther, 1988) is specifically addressed in the description of professionally oriented GGA programs (Figure 5).

Our attempt in this project has been to clarify and describe the ideal-types of GGA instructional programs. Their various combinations exist in many cases for very logical and appropriate reasons. We argue not for the elimination of the combined programs, but that the appropriate principles and outcomes be incorporated in them.

Figure 5. DESCRIPTION OF GERONTOLOGY, GERIATRICS AND AGING STUDIES PROGRAMS WITH A SPECIFIC ORIENTATION

Liberal Arts Orientation

The liberal arts approach in gerontology education focuses on acquiring the foundation and framework for understanding aging processes. The goal is to explore aging within societies and to facilitate the continuing intellectual growth of the whole person. This approach enhances the development of an understanding of and appreciation for the aging processes as seen from the social, mental and physical perspectives. The emphasis is on a comprehensive integration of many disciplines.

Professional Orientation

The professional approach focuses on the acquisition of career-oriented gerontological knowledge, skills and attitudes needed to practice at an appropriate level within the field of aging. This approach encompasses a knowledge of physical, mental and social aspects of aging and articulates with liberal education perspectives and skills. Professionally oriented programs produce competent practitioners who are recognized by society for their professional expertise in gerontology/geriatrics.

Scientific Orientation

Education in the scientific approach in gerontology encompasses a knowledge of the biological, psychological and social processes of aging within and among individuals and in societal contexts. This orientation adheres to traditional scientific models to study aging processes. The gerontological scientist uses this knowledge to investigate problems and disseminate discoveries about aging.

Chapter 3. CORE ORGANIZING PRINCIPLES

Having recognized that GGA instructional programs can have different orientations in the presentation of content, the Educational Outcomes Conference Task Force directed its attention to the task of identifying *core* content in the field; that is, content that is so important that every student completing a GGA program of instruction should be familiar with it. We sought to identify content that could be considered truly *trans-disciplinary and trans-orientation in nature*. Our goal was to clarify and articulate the over-arching organizing principles in the educational arena and not simply to list individual content areas.

We investigated how content is discussed in other fields, and a pattern of using thematic or organizing concepts emerged. For example, the themes of sensation/perception, cognition/intelligence, social/personality, clinical/neuropsychology and psychophysiology are psychological themes used in coursework about all of the stages of development from preschool through adolescence to older adulthood. Health themes such as assessment/diagnosis, intervention planning, implementation, follow-through and reassessment are commonly discussed in courses dealing with various diseases and conditions in physical and mental health and health promotion and disease prevention.

Use of themes promotes critical thinking and integration when a subject is used as a vehicle to convey ideas, concepts, controversies and interpret debates. It helps avoid the pitfall of courses being a presentation of one fact after another without any real exploration of how one course relates to the material in another or contributes to the building of a complete understanding of a course of study.

The Task Force concluded that the same approach is useful in GGA education. Understanding the themes or organizing principles found in GGA programs promotes integration of the inter/multidisciplinary courses students take by helping them organize information. This organizing process results in increased maturity of thought and ability to critically analyze and use information to respond to a problem, proposition or premise. Furthermore, awareness of the complexity of issues in gerontology is enhanced as students experience the process of interpreting and integrating material across disciplines.

The Task Force worked through two Educational Outcomes Conferences, responded to the results of the national validation study, and developed six statements of core organizing principles that, despite programmatic diversity, consistently emerge in GGA education (Figure 6).

These principles are organized roughly into three groups:

- *how we view the world,*
- *what we do with this view of the world, and*
- *a bridge between the two.* (Achenbaum, 1990)

Included in **how we view the world** are:

- *structure/contexts/heterogeneity;*
- *conceptualizations and theories used to study aging; and*
- *stability and directions of change.*

Included in **what we do with this view of the world** are:

- *application/practice and*
- *scholarship and research.*

Bridging between the other two groups are *ethical issues*.

These organizing principles do not represent a comprehensive view of gerontology. On the contrary, they represent only the common body of knowledge considered so essential that every student should be exposed to it as a result of having completed a GGA program of instruction. Individual GGA programs will offer additional coursework, thereby building on this core, and various areas within gerontology, geriatrics and aging studies (e.g., long-term care administration, direct services in health and human services, housing) may be emphasized, depending on the specialization.

The key concept here is that all graduates of GGA programs should be characterized as having increased knowledge, more effective and efficient cognitive and technical skills and preferable attitudes within these six areas than do students just entering the program. They should have the vocabulary and concepts to communicate effectively with others in the field and to evaluate and interpret rapidly expanding knowledge in the field.

Figure 6. CORE ORGANIZING PRINCIPLES*

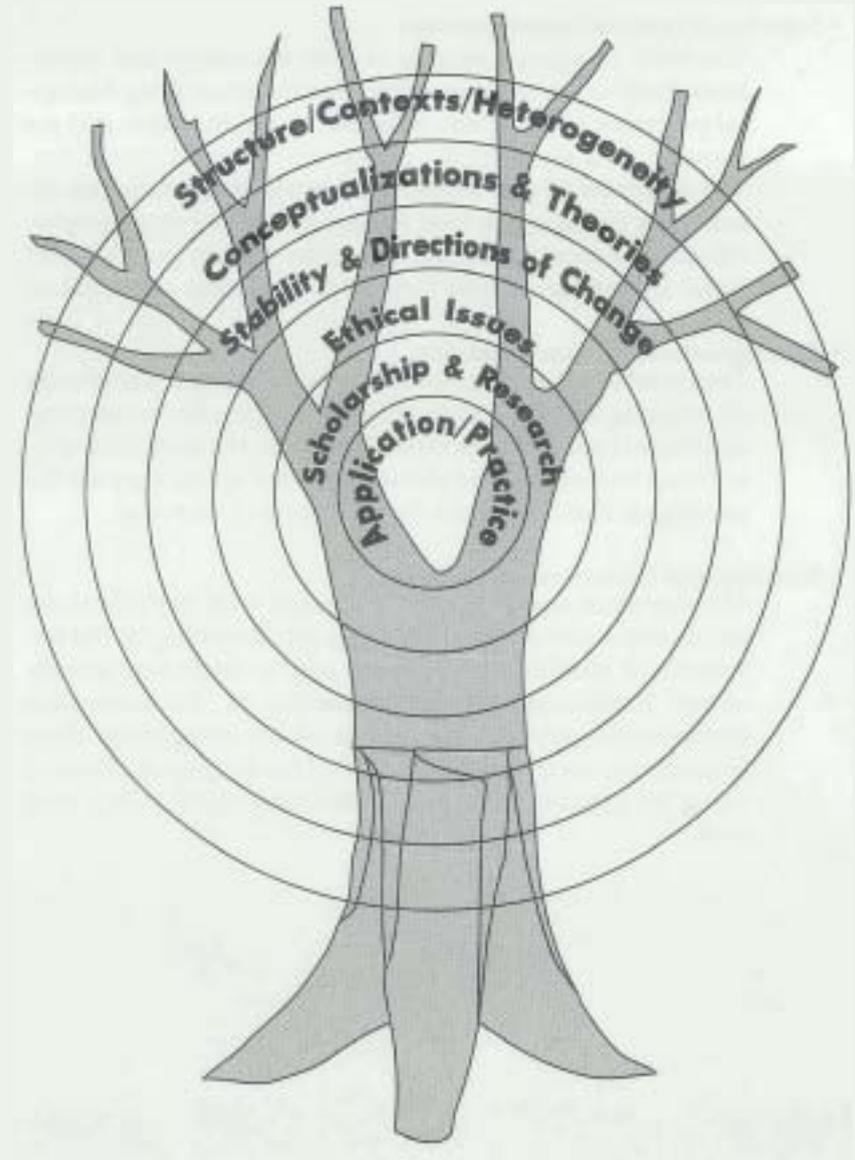
- **Structure/Contexts/Heterogeneity:**
The study of aging occurring at both the macro- and micro-levels built on an understanding that the underlying biological processes of aging unfold within an environment and are manifest as a result of the person-environment interaction. The outcomes of this interaction are affected by diverse dimensions including, but not limited to, culture; demography; ethnicity; economy; geography; gender; history; political and social environments; and mental, physical and social status.
- **Conceptualizations and Theories:**
The foundations and frameworks used to organize knowledge about aging including knowledge of bio/psycho/social paradigms and conceptual models. These form the basis for knowing what we know in and about the field of aging. They are the paradigms that define and describe ways of knowing.
- **Stability and Directions of Change:**
The processes and outcomes associated with individual, familial, and societal aging, defining and describing (a) the trajectories of stability, improvement and/or decrement in individual functioning; (b) the dynamics of the immediate interpersonal environment within which aging takes place (e.g., family, social supports); and (c) the reciprocal effects of aging on groups, social institutions and social policy over time.
- **Ethical Issues:**
The ethical dimensions of current issues in aging and their relationship to personal, social and/or professional value systems.
- **Scholarship and Research:**
The processes of problem solving, critical thinking and spirit of inquiry.
Systematic processes for acquiring, assessing, using and/or generating knowledge about aging.
- **Application/Practice:**
How to use knowledge, skills and attitudes about aging to affect work performance and/or personal behavior.

* Knowledge that is so important that every student completing a gerontology, geriatrics or aging studies program of instruction should be familiar with it.

Figure 7 graphically illustrates that these core organizing concepts cut across GGA education being conducted by each of the orientations and within each of the disciplines housing a program of study. We hope that use of these core organizing principles will promote shared goals and a shared language that will help us overcome some of the current barriers to program and curriculum development and facilitate “the development and refinement of theory that will serve both to integrate what we know and to guide future research” (Birren & Bengtson, 1988, p. ix).

Having given some identity to “core” and thus a beginning definition of introductory material, the way is now open for further efforts to identify a hierarchical progression through intermediate and advanced study within gerontology, geriatrics and aging studies (Wendt and Peterson, 1993a). Once again, we desire to avoid the criticism levied by Zemsky in the 1989 Structure and Coherence Report that “Too many students...are taking ‘advanced courses’ in subjects in which they have had little or no prior or curricular experience” (see Association of American Colleges, 1991, p. vii). We hope that this project will be one of “the steps toward clarifying the sequential learning within the field that will lead to sophisticated understandings, creativity and synthesis” (Association of American Colleges, 1985).

Figure 7. REPRESENTATION OF CORE ORGANIZING PRINCIPLES PERMEATING ALL ORIENTATIONS IN GGA INSTRUCTION



Chapter 4. CORE KNOWLEDGE AND SKILL OUTCOMES

Educational outcomes are the “measurable and/or observable ends toward which educators strive” requiring “clarity and specificity so that the final results of the instruction can be adequately measured and defended” (Peterson & Bolton, 1980, p. 57).

Process

During the two Educational Outcome Conferences, Task Force participants used Bloom’s taxonomy for the cognitive domain (Bloom, 1965). Objectives constructed for this domain deal with the recall, recognition, use of knowledge and the development of intellectual abilities. Terms dealing with the identification, description and comprehension of information (i.e., facts, concepts, principles and procedures) were used in constructing the **core knowledge outcomes**. Terms dealing with the application, analysis, evaluation, and synthesis of knowledge were used in constructing the **core skill outcomes**. Skills were differentiated from knowledge when students were expected to use information in a process.

In as much as the psychomotor and affective domains of Bloom’s taxonomy have relevance for the behavior of graduates of professionally-oriented and scientifically-oriented GGA programs, the Task Force incorporated appropriate core outcomes into the skill outcome statements.

It is expected that faculty in individual programs will use these general statements to develop more specific behavioral and ed-

ucational objectives to determine the conditions under which actual performance will be evaluated, and the degree of or level of achievement which will indicate acceptable performance.

The Task Force accepted the statement from the curriculum development work of Arling and Romaniuk (1980) dealing with the issue of differing levels of achievement between lower division, upper division and graduate coursework. The higher in education or responsibility a student attains, the greater the mastery of the objective, the more independence assumed by the student in carrying out the objective, and the more in-depth the analytical approach in understanding the basis for the knowledge or skill.

Although we suggest that these outcomes be used by all GGA programs in constructing and evaluating core instruction, we also expect that the approaches used in teaching and evaluating students will be increasingly rigorous as the level of instruction increases. Not only will it be appropriate to assign more reading and will the complexity of the reading material increase, but the reliance on secondary interpretation will decrease as well. Additional writing assignments requiring greater depth of analysis, integration of multidisciplinary sources, and theoretical explanations are expected with increasing levels of instruction. Students’ ability to accomplish independently and consistently the outcomes also should increase as the level of education increases. At the higher levels, there should be an increased recognition that the more complex the variables the more diverse the outcomes, as well as an acknowledgement of the need for tolerance of ambiguity.

Content

Core GGA instruction should cover the same content regardless of orientation but should be delivered using instructional strategies appropriate to the specific program orientation. As a result, students graduating from GGA programs of instruction should have a basic understanding of the core organizing concepts, and they should understand and be able to use the correct and preferred terminology when referring to them.

This development of a common basic language and context within which to think will:

- enhance our ability to communicate effectively within this multidisciplinary field;
- allow a more universal codification of the knowledge base; and
- contribute to more systematic development for the transfer of knowledge to students.

GGA programs may choose to emphasize one of the previously described orientations or to use a combination of them. Those selecting the multi-orientation approach for their instruction will need to insure that students acquire all of the knowledge and skill outcome measures of each orientation to avoid graduating students who can not perform adequately in any arena.

In Figure 8 core educational outcomes of GGA instruction are listed with the core organizing principles along the vertical axis and the program orientation along the horizontal axis. It is important to note that these are titled *core* outcomes. They are not a comprehensive listing of all of the knowledge and skills that students may acquire through completion of a course of study in gerontology, geriatrics and aging studies. These statements are, rather, an expression of the foundational knowledge and skills that all graduates of GGA programs should have acquired at a minimum. It is expected that many programs will develop additional knowledge and skills in their students and, thus, will differ program by program depending on the areas of additional study (i.e., medicine, economics, sociology, policy).

Figure 8. CORE KNOWLEDGE AND SKILL OUTCOMES

**FOR GRADUATES OF LIBERAL ARTS
ORIENTED PROGRAMS**

Structure/Contexts/Heterogeneity

Knowledge Outcomes

understand the study of aging occurring along the micro/macro continuum;

understand that the underlying biological processes of aging unfold within an environment and are manifest as a result of the person-environment interaction;

recognize the challenges presented by the contexts within which the individual ages and the reciprocal interactions between the individual and these contexts;

Skill Outcomes

explain the reciprocal influences of individual and social origins of diversity throughout the lifespan;

critique the cultural approach to issues of aging in light of the heterogeneity inherent in the population and reflected in the field of gerontology.

**FOR GRADUATES OF
PROFESSIONALLY ORIENTED
PROGRAMS**

Structure/Contexts/Heterogeneity

Knowledge Outcomes

understand the variety of contexts within which aging can be examined and their implications for practice;

identify how older persons are affected by the person-environment interaction;

Skill Outcomes

use knowledge of contexts to access resources, to frame interventions and to organize individual, family and community efforts;

work effectively with other professionals to provide necessary services and resources for aging individuals, their families or support groups;

appreciate the contributions that aging persons make to each other, families and society.

**FOR GRADUATES OF SCIENTIFICALLY
ORIENTED PROGRAMS**

Structure/Contexts/Heterogeneity

Knowledge Outcomes

understand reciprocal influences among contextual factors and intrinsic aging processes;

recognize levels of complexity and that greater degrees of complexity of interaction result in greater diversity of outcomes;

Skill Outcomes

distinguish intrinsic from extrinsic factors in processes of aging;

design research in light of relevant contextual variables.

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**FOR GRADUATES OF LIBERAL ARTS
ORIENTED PROGRAMS**

Concepts and Theories Used to Study Aging

Knowledge Outcomes

know 3-5 sociological, psychological, and biological theories of aging and recognize their relevance to everyday life;

Skill Outcomes

ability to compare, contrast and synthesize various concepts (theories) of aging and employ them as explanatory tools to understand the aging process;

use theories as a means of understanding phenomena;

develop statements of relationships between problems and solutions.

**FOR GRADUATES OF
PROFESSIONALLY ORIENTED
PROGRAMS**

Concepts and Theories Used to Study Aging

Knowledge Outcomes

identify and define/describe bio/psycho/social concepts and theories used to study aging;

recognize the influence of each theory on policies and procedures in practice;

Skill Outcomes

match theories with situations in which theories would be applicable;

apply to and modify practice and policy as concepts and theories indicate;

develop statements of relationships between problems and solutions;

evaluate the efficacy of theory as a way of designing interventions.

**FOR GRADUATES OF SCIENTIFICALLY
ORIENTED PROGRAMS**

Concepts and Theories Used to Study Aging

Knowledge Outcomes

identify concepts and theories of aging in a variety of disciplines;

Skill Outcomes

use terminology appropriately;

design research reflecting current conceptual and methodological orientations within the field of aging;

critically evaluate existing theories and generate new theoretical frameworks within specialized areas of expertise.

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**FOR GRADUATES OF LIBERAL ARTS
ORIENTED PROGRAMS**

Stability and Directions of Change

Knowledge Outcomes

understand the challenges and opportunities facing individuals, families and societies as members age chronologically and functionally;

understand themes related to aging in the humanities and the natural, social and behavioral sciences;

Skill Outcomes

explore and evaluate the challenges and opportunities facing individuals, families and societies as members age chronologically and functionally;

evaluate the implications of stability and change for aging individuals as they encounter various life situations;

evaluate the implications of stability and change for aging societies;

explain the reciprocal effects of aging on groups, social institutions and social policy over time.

**FOR GRADUATES OF
PROFESSIONALLY ORIENTED
PROGRAMS**

Stability and Directions of Change

Knowledge Outcomes

understand the trajectories of improvement and/or decrement in individual functioning;

identify various dynamics of the immediate interpersonal environment within which aging occurs;

recognize the reciprocal effects of aging on groups, social institutions and social policy over time;

Skill Outcomes

employ appropriate assessment procedures and intervention strategies to enhance quality of living and to maintain functional capacity and adaptation at the optimal level throughout the life cycle;

act to enhance the adaptive capacity of organizations to deal with change.

**FOR GRADUATES OF SCIENTIFICALLY
ORIENTED PROGRAMS**

Stability and Directions of Change

Knowledge Outcomes

understand the basis of age-related differences and changes over time in processes associated with aging and the interaction of diverse levels of functioning;

recognize the relevance of that knowledge in the conduct of research;

Skill Outcomes

design research in light of the dynamic nature of aging that reflects the diversity and heterogeneity of aging populations;

recognize successful, usual and pathological patterns of aging.

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**FOR GRADUATES OF LIBERAL ARTS
ORIENTED PROGRAMS**

Ethical Issues

Knowledge Outcomes

understand personal and social value systems to establish points of reference in formulating one's belief system in relationship to issues in aging;

Skill Outcomes

evaluate and utilize personal and social value systems to establish points of reference in formulating one's understanding of the aging process.

**FOR GRADUATES OF
PROFESSIONALLY ORIENTED
PROGRAMS**

Ethical Issues

Knowledge Outcomes

appreciate that many ethical issues are important in the field of aging;

know and accept the ethics of professional practice in the field of aging;

appreciate the need for ethical accountability in practice;

Skill Outcomes

identify current ethical issues in the field of aging;

relate personal, social and/or professional value systems in research and practice;

behave ethically in relation to clients, colleagues and the profession.

**FOR GRADUATES OF SCIENTIFICALLY
ORIENTED PROGRAMS**

Ethical Issues

Knowledge Outcomes

understand the ethical dimensions and standards of scientific inquiry in the field of aging;

Skill Outcomes

generate research questions in light of current ethical considerations;

recognize and avoid biased perspectives;

protect well-being of research subjects.

FOR GRADUATES OF LIBERAL ARTS ORIENTED PROGRAMS

Scholarship and Research

Knowledge Outcomes

understand the value of scholarship in gerontology that leads to the exploration of questions regarding the aging process utilizing rigorous scholarship as a way of interpreting experience;

Skill Outcomes

use rigorous scholarship to examine general questions about aging;

synthesize ideas from the gerontological literature in posing questions and solving problems relative to individual and societal aging;

disseminate knowledge about aging to promote an understanding of gerontology.

FOR GRADUATES OF PROFESSIONALLY ORIENTED PROGRAMS

Scholarship and Research

Knowledge Outcomes

understand how applied research can be utilized to improve practice;

summarize professional and scientific literature in gerontology to maintain currency in knowledge and skills, to provide valid rationale for practice and policies, and to enhance accurate interpretation of the various aging processes for the public and other professionals;

understand the importance of evaluating popular media representations of aging;

Skill Outcomes

conduct, utilize and disseminate applied research to improve practice;

evaluate and utilize professional and scientific literature in gerontology to maintain currency in knowledge and skills, to provide valid rationale for practice and policies, and to enhance accurate interpretation of the various aging processes for the public and other professionals;

evaluate popular media for scientific accuracy to provide appropriate expert opinion to clients.

FOR GRADUATES OF SCIENTIFICALLY ORIENTED PROGRAMS

Scholarship and Research

Knowledge Outcomes

know how to operationalize descriptive and/or hypotheses -testing frameworks through appropriate methodologies to describe, explain or predict age-related processes;

understand the standards of validity of theories/conceptual frameworks and reliability of methods;

understand how to evaluate and disseminate results and their application;

Skill Outcomes

evaluate validity of theories/conceptual frameworks and reliability of methods;

disseminate and evaluate results and their application;

incorporate interdependence of knowledge generated at each level of analysis as appropriate.

**FOR GRADUATES OF LIBERAL ARTS
ORIENTED PROGRAMS**

Application/Practice

Knowledge Outcomes

understand critical thinking, problem-solving, and effective communications relative to life-span development to affect personal awareness and behavior;

Skill Outcomes

continue the acquisition and integration of knowledge and skills about aging in critical thinking, problem-solving and effective communication and the application of these to life situations.

**FOR GRADUATES OF
PROFESSIONALLY ORIENTED
PROGRAMS**

Application/Practice

Knowledge Outcomes

identify a range of services for elders available in most communities;

understand generally the division of labor among different agencies providing funding and services for elders;

understand the requisite practice skills appropriate to the intended area of gerontological practice;

understand the importance of program review and evaluation for program effectiveness;

Skill Outcomes

demonstrate appropriate socialization, including behavioral and organizational protocols, use of resources, and professional responsibilities;

develop and implement programs and services for individuals, families and communities across the service continuum;

advocate for necessary services and resources.

**FOR GRADUATES OF SCIENTIFICALLY
ORIENTED PROGRAMS**

Application/Practice

Knowledge Outcomes

understand organizational realities and practices, including resource generation and management;

recognize the appropriate application of scientific findings to personal life;

Skill Outcomes

participate responsibly as a member of a research team within the scientific community;

fulfill role as citizen and scientist;

generate support for research endeavors as appropriate.

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Chapter 5. VALIDATION STUDY AND REVISING CORE ORGANIZING PRINCIPLES AND OUTCOME STATEMENTS

Validation Study

For the purposes of validating the conclusions of this project, we used the development of the U.S. Constitution as an analogy. That is, leaders representing a variety of interests met together to debate and reconcile differences. The documents that emerged from their meetings were presented to the states for a vote requiring 75% of them to approve for ratification. We also decided to use 75% as the level of acceptance required for "validation" of the Core Organizing Principles and Educational Outcomes.

The Core Organizing Concepts and Educational Outcomes which resulted from the first Educational Outcomes Conference in February 1991 were submitted to the directors of all GGA programs in the U.S. as part of a national survey. Details of the research design and sampling plan may be found in the publication by Peterson, Wendt and Douglass (1993). The response rates are shown in Table 1.

Based on the comprehensiveness of the sampling, and the fact that 72% of all campuses (98% of AGHE member campuses) and 81% of all individuals responded to the questionnaire, we feel confident in generalizing the findings of this validation study.

Table 1. RESPONSE RATE

<u>Number of Campuses</u>	<u>Sample</u>	<u>Respondents</u>
Total campuses in universe	3005	
Campuses with known GGA programs	1620	1175 (74%)
Random Sample of campuses <u>without known</u> GGA programs	390	235 (64%)
Total number campuses in sample	2010	1410
Undeliverable		36
Campus response rate		1446 (72%)
<u>Number of Surveys</u>	<u>Sent</u>	
Number of <u>known</u> GGA programs	3367	2668 (79%)
Random sample campuses	390	249 (64%)
Total number of surveys	3757	2917
Undeliverable		148
Individual response rate		3065 (82%)

The survey questionnaire contained two major sets of variables pertinent to the validation study. The first was the set of Core Organizing Principles (see Appendix A for questionnaire items). We asked respondents to answer this question using a five point Likert scale: "To what degree do you agree that the following should ideally be included as core themes and issues in GGA instruction?"

The results are summarized in Table 2. In all but one case over 75% of all respondents agreed at the 4/5 level. See below for further discussion.

Table 2. CORE THEMES AND ISSUES VALIDATION RESULTS

	Strongly Disagree		3	Strongly Agree		% at 4/5
	1	2		4	5	
• Conceptualizations and theories used to study aging	2.7% (n=15)	.5% (n=3)	5.4% (n=30)	22% (n=121)	69.3% (n=382)	91.3%
• Stability and directions of change	1.6% (n=9)	1.5% (n=8)	8.5% (n=47)	32.5% (n=179)	55.8% (n=307)	88.3%
• Contexts	2.4% (n=13)	2.4% (n=13)	7.8% (n=43)	28.8% (n=158)	58.7% (n=322)	87.5%
• Ethical issues	1.6% (n=9)	2.5% (n=14)	6.9% (n=38)	26.4% (n=145)	62.5% (n=344)	88.9%
• Scholarship and research	3.1% (n=17)	3.1% (n=17)	14.8% (n=81)	32.5% (n=178)	46.5% (n=255)	79.0%
• Practice	2.6% (n=14)	2.7% (n=15)	11.1% (n=61)	32.7% (n=179)	50.9% (n=279)	83.6%
• Personal/Professional development	2.6% (n=14)	6.4% (n=35)	19.6% (n=107)	37.8% (n=206)	33.6% (n=183)	71.4%

The second set of variables was the Educational Outcome Statements. For each organizing principle there were outcomes specific for each of the three archetypical program orientations. Respondents were asked to identify the orientation of their program, and, based on that, they were directed to read one or more of the appropriate columns of outcomes (see Appendix B for questionnaire items). Of 902 who identified their program as having one or more of the three orientations, 498 indicated that they had a primary or partial liberal arts orientation, 670 indicated that they had a primary or partial professional orientation, and 215 indicated that they had a primary or partial scientific orientation.

Using a five point Likert scale, the question was: "To what extent do you agree that the statement is an appropriate core outcome for students completing a GGA program?" The results are summarized in Table 3. In all cases, over 75% of all respondents agreed at the 4/5 level thus validating the outcome statements to be acceptable as core outcomes of GGA instructional programs.

The degree to which programs felt they were currently addressing the outcome statements is not included in this report.

Table 3. CORE OUTCOMES VALIDATION RESULTS

	Percentage Agreeing at Levels 4/5		
	L.A. Outcomes	Prof. Outcomes	Sci. Outcomes
• Conceptualizations and theories used to study aging	93.2% (N=453)	90.2% (N=593)	87.6% (N=281)
• Stability and directions of change	96.6% (N=447)	92.2% (N=603)	96.3% (N=287)
• Contexts	94.3% (N=439)	93.9% (N=599)	86.7% (N=286)
• Ethical issues	89.3% (N=447)	93.7% (N=603)	87.5% (N=287)
• Scholarship and research	79.1% (N=421)	83.0% (N=553)	77.4% (N=301)
• Practice	92.2% (N=445)	88.3% (N=594)	81.3% (N=279)
• Personal/Professional development	89.3% (N=439)	86.7% (N=599)	79.1% (N=287)

Revising the Core Organizing Principles and Outcome Statements

The national Task Force met again in a second Educational Outcomes Conference after the national survey data were analyzed to consider respondent comments, refine the language of the various statements and extend the work of the first conference.

The Core Organizing Principles were simplified from seven areas (see questionnaire in Appendix A) to six areas (see Figure 6) by consolidating the Practice and the Personal/Professional Development statements. The new category was an Application and Practice area of study. In so doing, the Task Force considered the percentage of respondents strongly agreeing that the areas should be core and the possible explanations for the findings. There was consensus among the Task Force members that the language of the original description was weak and that respondents were probably responding to it (Table 2) rather than to the original meaning of the category, especially since the more detailed outcome statements were validated (Table 3). The Task Force felt that the combined category was a better representation of their original intent than were the original two statements.

Furthermore, based on respondents' comments about other areas to be included in core areas of study, the Task Force expanded the explanatory statements following each area title (see Figure 6).

The Task Force also reviewed and expanded the outcome statements. These were separated into knowledge and skill categories (Figure 8) for each of the three major program orientations. See Chapter 4, "Core Knowledge and Skill Outcomes," for details.

Chapter 6. USE OF THE CORE ORGANIZING PRINCIPLES AND KNOWLEDGE AND SKILL OUTCOME STATEMENTS

The project discussed in this document was designed to facilitate the clarification, improvement and institutionalization of GGA programs. To again use the language of the systems model, this publication should be a mechanism for *feedback* and *refinement* of instructional programs in the field of aging. There follow six practical suggestions of how this feedback might occur.

- **Use this document to develop new programs.** AGHE frequently receives requests for guidance in developing curriculum from colleges and universities interested in establishing new GGA programs. Among respondents to the national survey, 15% indicated that the *Standards and Guidelines* (Rich, Connelly & Douglass, 1990) document influenced the number of course offerings, 23% indicated that it influenced the type of course offerings, and 19% indicated that it influenced their certificate/degree requirements.

This document is a companion to the *Standards and Guidelines* document and will serve as a tool to facilitate conscious discussion and decision-making about the orientation and content of the program of study. The outcome statements are global enough to encompass a wide range of knowledge and skill areas and to facilitate programmatic and individual faculty diversity, while suggesting significant content areas that should not be inadvertently overlooked.

Use this document to define the starting point, the introductory content and processes upon which intermediate and advanced level content and processes are built. Develop a focused, organized, sequential course of study in aging.

- **Use this document during an internal review of an existing program.** Established GGA programs periodically undergo internal reviews. Among respondents to the national survey, 24% indicated that they used the *Standards and Guidelines* document as a reference document during a program review.

This document can serve as an even more specific tool to facilitate programmatic and curriculum review and development. A frequent complaint of GGA educators is, "There isn't enough time to do everything, or include all that we want to." Programs trying to be all things to all students may find it helpful to use this document to identify their strengths and preferences (i.e., to identify the orientation) and concentrate on the most appropriate set of core knowledge and skill outcomes.

Through these deliberations GGA programs may choose to emphasize one of the orientations or a combination. Those selecting the multi-orientation approach for their instruction will need to insure that students acquire all of the knowledge and skill outcome measures of each orientation to avoid graduating students who can not perform adequately in any arena.

Evaluate whether courses relate to your programmatic orientation, goals, and outcomes and restructure accordingly. Develop a coherent course of study with introductory courses, middle-range offerings, and culminating experiences (Association of American Colleges, 1985).

- **Use this document to improve individual core courses.** Faculty members might review the organizing concepts while preparing course outlines to consider how one might include discussions of concepts and theories, stability and directions of change, contexts for studying aging, etc., and how they change one's perspective about aging.

This will be especially critical for GGA programs that have a single introductory course that all students are required to take before selecting more focused GGA instruction. It is incumbent upon the instructor that (s)he take great pains to be sure that the appropriate knowledge and skill outcomes from all three orientations are made.

- **Use this document to let students know what will be expected of them prior to graduation.** "Students come into the academic 'home,' not to become permanent residents, but to be nurtured and supported as they develop the capabilities they need to enter, negotiate, and make connections across communities of discourse both within and without the academy" (Association of American Colleges, 1991, p. 14).

Use these items to develop a learning contract between the GGA program and entering students and to enhance student motivation to learn. Let students accept the responsibility for their learning while in the GGA program and gauge their progress toward their accomplishment. This process can be very helpful when planning a student's course of study and justifying why specific courses should be included (see Stark, 1990).

- **Use this document to let local employers know what to expect of your graduates and to clarify what your students can do for their business or clients.** Employers usually are guided by specific job descriptions when recruiting new employees. The knowledge and skill outcomes contained in this document can become a baseline for GGA programs to develop appropriate descriptions of their graduates' capabilities which can be used to help local employers revise their job descriptions to include GGA graduates rather than exclude them.

Students also can use this document to develop an articulate statement of their aging-specific knowledge and skills and how they can contribute to the goals of employers in the field.

- **Use this document to justify your request for institutional resources to improve your instructional program.** Among respondents to the national survey, 22% indicated that they used the *AGHE Standards and Guidelines* document to make a case for curricula offerings with academic administrators, 12% indicated that they used it to support a request for resources, and 19% indicated that its existence contributed to the "legitimization" of their program in the eyes of their academic administrator.

This document contains more specific educational guidelines than the *Standards and Guidelines* document and, therefore, can offer supporting details to your justification and request for institutional resources.

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Appendix A: National Survey Questions on Core Themes and Issues in GGA Instruction

We would like to know your opinion about the following statements as an expression of core content in gerontology; that is, knowledge that is so important that every student completing a GGA program of instruction should be familiar with it.

In an attempt to move beyond recommendations for core courses, an expert panel was assembled for an Educational Outcomes Conference. They worked to identify thematic or organizing concepts that were transdisciplinary and transorientational in nature, that despite programmatic diversity existed in GGA education in varying degrees at all levels of instruction.

To what extent do you agree that the following should ideally be included as core themes and issues in GGA instruction?

		EXTENT OF AGREEMENT				
		Strongly Disagree		Strongly Agree		
		1	2	3	4	5
67.	- conceptualizations and theories used to study aging: the foundations and frameworks of the body of knowledge in aging;					
68.	- stability and directions of change: processes and outcomes associated with individual, familial and societal aging;	1	2	3	4	5
69.	- contexts: the settings within which the study of aging occurs at both the macro and micro levels, such as cultural, economic, environmental, gender, humanistic, mental, physical, political, social;	1	2	3	4	5
70.	- ethical issues: personal, social, and/or professional value systems applied to aging	1	2	3	4	5
71.	- scholarship and research: systematic process for accessing, using and/or generating aging knowledge;	1	2	3	4	5
72.	- practice: application of aging education to work and personal life;	1	2	3	4	5
73.	- personal/professional development: growth for self and others.	1	2	3	4	5
74.	Do you feel that there should be other thematic concepts included in a statement of <u>core curriculum</u> in gerontology? <input type="checkbox"/> No <input type="checkbox"/> Yes; please describe _____					



Appendix B: National Survey Questions on Gerontology Instructional Outcomes

During the Educational Outcome Conference participants worked at articulating the student outcomes of an integrated gerontology/geriatrics/aging studies curriculum. Outcomes for each of the thematic concept areas were developed within the three educational orientations. These are statements of outcomes as a result of core courses and core curricular content. Students will have other capabilities as a result of additional GGA courses, but these are intended as ideal statements of core capabilities.

If you selected A above, please look at column A below.

If you selected B above, please look at column B below.

If you selected C above, please look at column C below.

If you selected A and B above, please look at columns A and B below.

If you selected A and C above, please look at columns A and C below.

If you selected B and C above, please look at columns B and C below.

If you selected A,B and C above, please look at columns A,B and C below.

1. Please indicate the extent of your agreement that the statement is an appropriate core outcome for students completing a GGA program within the column(s) you chose above.

2. We would like to know your opinion on how well these outcome statements describe the core competencies of graduates of your GGA program. Remember, students will have other capabilities as a result of other GGA courses. We are interested in assessing the degree to which your program currently addresses these outcomes.

A
**OUTCOMES FOR GRADUATES:
 LIBERAL ARTS ORIENTED
 PROGRAMS**

B
**OUTCOMES FOR GRADUATES;
 PROFESSIONALLY ORIENTED
 PROGRAMS**

C
**OUTCOMES FOR GRADUATES;
 SCIENTIFICALLY ORIENTED
 PROGRAMS**

**Concepts and theories of aging
 (161-162)**

compare and contrast various concepts (theories) of aging and employ them as explanatory tools to understand the aging process;

**Concepts and theories of aging
 (163-164)**

compare and contrast concepts and theories used to study aging recognizing their influence on policies and procedures in practice; modify practice as concepts and theories indicate;

**Concepts and theories of aging
 (165-166)**

identify and critically evaluate existing theories and generate new theoretical frameworks of aging;

Appropriate for core outcome
 Disagree Agree
 1 2 3 4 5

Appropriate for core outcome
 Disagree Agree
 1 2 3 4 5

Appropriate for core outcome
 Disagree Agree
 1 2 3 4 5

Your program addresses outcome
 Limited Extensive
 1 2 3 4 5

Your program addresses outcome
 Limited Extensive
 1 2 3 4 5

Your program addresses outcome
 Limited Extensive
 1 2 3 4 5

Stability and directions of change
(167-168)

recognize and appreciate the challenges and opportunities facing individuals, families and societies as members age chronologically and functionally;
recognize themes in the humanities and the natural, social, and behavioral sciences;
understand the challenges and opportunities facing individuals, families and societies as members develop and age chronologically and functionally;

Appropriate for core outcome

Disagree		Agree		
1	2	3	4	5

Your program addresses outcome

Limited			Extensive	
1	2	3	4	5

Ethics (173-174)

evaluate and utilize personal and social value systems to establish points of reference in formulating one's understanding of the aging process;

Appropriate for core outcome

Disagree		Agree		
1	2	3	4	5

Your program addresses outcome

Limited			Extensive	
1	2	3	4	5

Stability and directions of change
(169-170)

understand the challenges that arise as individuals, families and societies interact and evolve as members develop and age;
employ appropriate assessment procedures and intervention strategies to enhance quality of living and to maintain functional capacity and adaptation at the optimal level throughout the life cycle; act to enhance the adaptive capacity of organizations to deal with change

Appropriate for core outcome

Disagree		Agree		
1	2	3	4	5

Your program addresses outcome

Limited			Extensive	
1	2	3	4	5

Ethics (175-176)

recognize that many ethical issues are important in the field of aging;
behave ethically in relation to clients and the profession;
appreciate the need for ethical accountability in practice;

Appropriate for core outcome

Disagree		Agree		
1	2	3	4	5

Your program addresses outcome

Limited			Extensive	
1	2	3	4	5

Stability and directions of change
(171-172)

understand age-related differences and changes over time in processes associated with/causing aging;

Appropriate for core outcome

Disagree		Agree		
1	2	3	4	5

Your program addresses outcome

Limited			Extensive	
1	2	3	4	5

Ethics (177-178)

re-examine standards of scientific inquiry; generate research questions in light of ethical considerations; protect well-being of research subjects;

Appropriate for core outcome

Disagree		Agree		
1	2	3	4	5

Your program addresses outcome

Limited			Extensive	
1	2	3	4	5

A
**OUTCOMES FOR GRADUATES:
LIBERAL ARTS ORIENTED
PROGRAMS**

**Personal/professional development
(179-180)**

recognize the need for continuing acquisition and integration of knowledge and skills, and the application of these in life situations;

Appropriate for core outcome

Disagree Agree
1 2 3 4 5

Your program addresses outcome

Limited Extensive
1 2 3 4 5

Practice (185-186)

develop critical thinking, problem-solving skills, and effective communications capabilities that can be channeled into life situations;

Appropriate for core outcome

Disagree Agree
1 2 3 4 5

Your program addresses outcome

Limited Extensive
1 2 3 4 5

B
**OUTCOMES FOR GRADUATES;
PROFESSIONALLY ORIENTED
PROGRAMS**

**Personal/professional development
(181-182)**

provide appropriate socialization, including behavioral and organizational protocols, resource development, and professional responsibilities;

Appropriate for core outcome

Disagree Agree
1 2 3 4 5

Your program addresses outcome

Limited Extensive
1 2 3 4 5

Practice (187-188)

understand individual, group and organizational theory;
develop and implement programs and services for individuals, families and communities across the service continuum;
understand the principles of effective practice and apply them to the evaluation of your program or practice;

Appropriate for core outcome

Disagree Agree
1 2 3 4 5

Your program addresses outcome

Limited Extensive
1 2 3 4 5

C
**OUTCOMES FOR GRADUATES;
SCIENTIFICALLY ORIENTED
PROGRAMS**

**Personal/professional development
(183-184)**

understand organizational realities and practices, including resource generation, and management;

Appropriate for core outcome

Disagree Agree
1 2 3 4 5

Your program addresses outcome

Limited Extensive
1 2 3 4 5

Practice (189-190)

participate as a responsible scientist;

Appropriate for core outcome

Disagree Agree
1 2 3 4 5

Your program addresses outcome

Limited Extensive
1 2 3 4 5

A
**OUTCOMES FOR GRADUATES;
LIBERAL ARTS ORIENTED
PROGRAMS**

Scholarship and research (197-198)
have the tools necessary to explore questions regarding the aging process utilizing rigorous scholarship rather than anecdotal experience;

Appropriate for core outcome

Disagree Agree
1 2 3 4 5

Your program addresses outcome

Limited Extensive
1 2 3 4 5

B
**OUTCOMES FOR GRADUATES;
PROFESSIONALLY ORIENTED
PROGRAMS**

Scholarship and research (199-200)
understand, conduct, utilize and disseminate applied research to improve practice;
summarize, evaluate and utilize popular, professional and scientific literature in gerontology to maintain currency in knowledge and skills, to provide valid rationale for practice and policies, and to enhance accurate interpretation of the various aging processes for the public and other professionals;

Appropriate for core outcome

Disagree Agree
1 2 3 4 5

Your program addresses outcome

Limited Extensive
1 2 3 4 5

C
**OUTCOMES FOR GRADUATES;
SCIENTIFICALLY ORIENTED
PROGRAMS**

Scholarship and research (201-202)
operationalize descriptive and/or hypotheses testing frameworks through appropriate methodologies to describe, explain or predict age-related processes; evaluate validity of theories and reliability of methods; evaluate application of findings;

Appropriate for core outcome

Disagree Agree
1 2 3 4 5

Your program addresses outcome

Limited Extensive
1 2 3 4 5

**Thank you for completing this section of the survey!
Please return it with Section I in the envelope provided
and/or mail to:**

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