

CHAPTER 4:
THE LIBERAL LEARNING AREA
&
Competence Criteria for Assessment

- A. Arts & Ideas**
- B. Human Community**
- C. Scientific World**
- D. Advanced Elective**
- E. X Competencies: Writing Your Own Statements**

Overview

The Liberal Learning Area encompasses those fields of study that are generally referred to as the Liberal Arts. These fields cover material as diverse as ancient history and computer science, but they also are closely related one to the other. The study of history, for example, is vastly improved by access to new technology. Use of technology is informed by understanding various theories of ethics. Knowing history helps us appreciate the arts.

At SNL, these materials are divided into three categories. We call these categories the Arts and Ideas (A), the Human Community (H), and the Scientific World (S). Each of the areas is further divided into three subcategories, representing different aspects of knowledge and understanding within the area. Each of these subcategories also includes an option to create an individualized X competence. Go to **Section E** for further description of this option.

SECTION A: THE ARTS AND IDEAS CATEGORY

This category includes competence in the arts, philosophy, theology, literature, and other fields that focus on expression of values and aesthetics. The three subcategories in the A area are: Interpreting the Arts, Creative Expression, and Reflection and Meaning. In the Arts and Ideas category, competencies 4 and 5 are required. You must also choose at least one competence from each of the subcategories listed below.

Sub Category A-1: Interpreting the Arts

The dual process of experiencing the arts and bringing one's own experience to bear on them leads to rich interpretative possibilities. Therefore, relating one's experience to the work of artists, writers, and other thinkers is one of the objectives of this subcategory. Here, the Arts broadly include a number of expressive modes such as visual, textual, and performance. All competencies here call for analysis and interpretation. You must choose at least one competence from this subcategory.

A-1-A: Can interpret works of art and relate them to one's own experience.

1. Chooses one or more works of art (broadly defined).
2. Analyzes the expression of meaning, values, and experience through these works.
3. Relates one's interpretation to that of others.
4. Relates the work(s) to one's own experience.

Students demonstrate this competence by choosing one or more works of art (music, literature, visual art, etc.) to study and discuss. In reflecting upon their appreciation of the work, students should make explicit links to their own life experience.

A-1-B: Can use public or private institutions as resources for exploring arts or ideas.

1. Using the resources of the institution, investigates a question or an issue relevant to this category.
2. Assesses the appropriateness and reliability of an institution for such investigation.

Students demonstrate this competence by using various public and private institutions (e.g.,

museums, libraries, historical and cultural societies, government agencies) as settings for investigations and as sources of information for inquiry. The scope of possible institutions is limited only by whether the institution can provide for significant learning associated with one or more branches of the arts and humanities.

A-1-C: Can analyze artistic or textual works in terms of form, content, and style.

1. Uses the vocabulary of criticism appropriate to the chosen art form.
2. Examines at least two works of art with respect to form, content, and style.

Students demonstrate this competence by showing that they understand and can discuss at least two works of art using recognized approaches to artistic analysis. Appropriate genres include (but are not limited to) painting, sculpture, architecture, music, literature, drama, and dance.

A-1-D: Can analyze writers' or artists' representations of human experience.

1. Chooses particular artistic or literary works to consider.
2. Analyzes the works of the artists or writers as those works relate to an aspect of the human experience.

Students demonstrate this competence by articulating how the representations of one or several artists or writers inform and enrich our understanding of human experience (for example, friendship, racism, suffering, love, work, leisure, sexuality, class, etc.).

A-1-E: Can interpret the work of writers or artists within a historical or social context.

1. Chooses an artistic or literary work to consider.
2. Identifies a historical or social context relevant to the work.
3. Analyzes the work from the perspective of that historical or social context.

Students demonstrate this competence by choosing a work, locating it within a historical moment, describing the social context, and focusing on the issues manifested in the work.

A-1-F: Can evaluate how the aesthetics and function of an object or environment's design enhances the quality of life.

1. Articulates principles and elements of design.
2. Evaluates how the design affects the aesthetics of an object or environment.
3. Evaluates how the aesthetics and function of a design affects the quality of life for those who experience the environment or use the object.

Students demonstrate this competence by identifying and analyzing elements of design from an aesthetic and functional perspective and by evaluating a design's effect on quality of life. Examples could include: ergonomics, architecture, interior and landscape design, planned communities, etc.

A-1-G: Can explain the functions of public art and its relationship to communities.

1. Defines public art, differentiating it from other art forms.
2. Describes the relationships among community values, artistic expression, and aesthetics.
3. Applies this description to an appropriate example of public art.

Students demonstrate this competence by defining public art, including historical and contemporary views. Students may examine the social impact or the political context in which public art is proposed, funded, and produced. Students may also consider the impact of community values on the production of this art.

A-1-H: Can explain the function of folk arts in the transmission of culture and values.

1. Explains the characteristics of folk art.
2. Describes dynamics or mechanisms of how culture and values are transmitted.
3. Describes the role folk art may play in the transmission of culture and values.
4. Applies (3) to one or more specific examples.

Folk art reflects the beliefs, customs, and rituals of a culture and the values that inform their creation in a way that the members of a culture easily understand. Students demonstrate this competence by analyzing the way in which at least one work of folk art contributes to the preservation or evolution of the values of a culture and communicates them to members of the culture. Singling out folk art as a category is meant to draw attention to it, rather than to devalue it.

A-1-I: Can use two or more theoretical approaches to interpret a work in the arts or popular culture.

1. Identifies a work within the arts (literature, drama, music, painting, etc.) or popular culture (film, television, advertisements, etc.).
2. Identifies and describes two or more theoretical approaches appropriate to the study of this work.
3. Compares the differences in interpretation that these two approaches yield.

Students demonstrate that they understand how criticism and theory inform perceptions of the work.

A-1-X: Written by student/faculty. This competence allows students to create statements that meet their specific learning needs.

Subcategory A-2: Creative Expression

This subcategory deals with the sources and uses of inspiration, imagination, and creativity in artistic expression. It requires original creative activities and reflection about the creative process. Students will also discuss their creative work in the context of other artists or designers and appropriate theories or principles. You must choose at least one competence from this subcategory.

A-2-A: Can create an original work of art, explore its relationship to artistic form, and reflect on the creative process.

1. Produces an original work of art.
2. Describes the elements of the artistic form used.
3. Articulates criteria by which this work may be considered an example of an art form.
4. Discusses the technique and the creative process used to create the original work.

Students demonstrate this competence by creating an original work of art. The original work

may be visual, musical, literary, performance, etc. Students must place their original work in a broader context than their own creative process.

A-2-B: Can perform proficiently in an art form and analyze the elements that contribute to proficiency.

1. Performs in one or more media, demonstrating technical proficiency.
2. Articulates criteria by which a work performed may be considered an art form.
3. Describes elements that constitute technical proficiency in its performance.

Students demonstrate this competence by performing a work of art proficiently. This competence is specifically located in the performing arts, including dance, music, theatre, etc. Students must define proficiency within the context of performance, articulate the tension between process and ability, and describe how one evaluates proficiency in this art form.

A-2-C: Can employ principles of design to enhance the functions and aesthetics of objects or environments.

1. Designs an object or environment.
2. Articulates the elements and principles of the design.
3. Discusses them in terms of aesthetics and function.

Students demonstrate this competence by designing an object or environment and articulating the principles of design. It is also essential to explore the relationships between aesthetic issues, function, and the design process.

A-2-D: Can create an original work of art using an electronic medium and can discuss the creative process.

1. Demonstrates technical ability in a form of electronic media.
2. Discusses concepts, themes, or ideas expressed through this medium.
3. Discusses the limits and possibilities of the chosen technology in the creative process.

Students demonstrate this competence by combining both technical ability and the expression of ideas through an audio or visual medium, augmenting this demonstration with a discussion of the choices made, and the reasons for making those choices. Digital video, digital photography, digital mixing and recording, and computer animation are suited to this competence.

A-2-X: Written by student/faculty. This competence allows students to create statements that meet their specific learning needs.

Subcategory A-3: Reflection and Meaning

This subcategory invites students to explore fundamental questions about their experience of the universe. It challenges them to reflect critically and appreciatively on their basic assumptions about the meaning, purpose, and values of their lives. Since they are not the first to ponder these questions, the subcategory also asks students to relate their interpretations to the insights of significant thinkers and cultures from around the globe. Philosophers, theologians, ethicists, artists, mystics, prophets, and sages throughout history have created distinctive worldviews that students can examine in relationship

to their own. By interacting with these different interpretations of the world, students can develop a deeper understanding of their own experience and the choices they face. You must choose at least one competence from this subcategory.

A-3-A: Can interpret experience in relationship to the perspective of a significant thinker or tradition.

1. Identifies and describes an individual, social, or cultural experience.
2. Identifies one or more significant thinkers or traditions with philosophical or theological ideas relevant to this experience.
3. Explains one's ideas about the meaning of this experience in relationship to the ideas of this thinker(s) or tradition(s).

Students demonstrate this competence by thinking philosophically about their experience or the experience of others. Students will develop their own ideas about the meaning of an experience and compare or contrast these ideas to those of a significant thinker or tradition. For example, students might reflect on their experience of gender roles in relation to the ideas of feminist thinkers. Or they could use the insights of a philosopher to help clarify their thinking about their relationship to nature.

A-3-B: Can explore a model of spiritual development and apply it to oneself or others.

1. Discusses the assumptions and implications of a model(s) of spiritual development.
2. Discusses the model in relation to one's or other's experience.

Students fulfill this competence by discussing a model of spiritual development. Such models always imply assumptions about the meaning of the spiritual and the value and purpose of spiritual development. They also have implications for how we choose to live. Models of spiritual development might include twelve-step, evangelical, feminist, contemplative, Eastern, or liberation spiritualities.

A-3-C: Can examine a social issue from an ethical perspective.

1. Identifies and describes a social issue or situation.
2. Identifies an ethical perspective relevant to the issue or situation.
3. Uses that perspective to raise or explore questions about this issue or situation.

Students demonstrate this competence by using an ethical perspective to analyze a social issue. They may create their own ethical perspective, but should always engage the ideas of one or more significant ethicists. The issues or situations that students address in this competence should affect large groups of people. Students should explore the implications of this analysis for their own experience.

A-3-D: Can assess the assumptions and implications of a significant thinker's ideas about work or leisure.

1. Identifies one or more philosophers, theologians, or thinkers with ideas relevant to work or leisure.
2. Explores the assumptions in these ideas.
3. Explores the implications of these ideas for one's approach to work or leisure.

Students fulfill this competence by thinking critically about their own experience of work or

leisure in light of a significant thinker(s) ideas. Such ideas always imply certain assumptions about the meaning, value, and purposes of human life. Students are invited to explore those assumptions as well as the implications these ideas have for their own approach to work or leisure.

A-3-E: Can compare substantially different theological or philosophical systems.

1. Identifies two theological or philosophical systems.
2. Determines the basis for meaningful comparison between these two systems.
3. Articulates key assumptions and ideas of both systems as they apply to a particular issue.

Students demonstrate this competence by identifying and comparing the key assumptions and ideas of two substantially different systems of thought. These systems of thought should have distinct interpretations of the human experience in relation to the universe. Philosophical and theological ideas inform certain practices and rituals but are not completely explained by them, so therefore a comparison of religious practices alone would not fulfill this competence.

A-3-F: Can compare two or more philosophical perspectives on the relationship of the individual to the community.

1. Selects two or more philosophical or theological perspectives on the relationship of the individual and community.
2. Select and explain criteria for comparison.
3. Compares the perspectives (selected in #1) and discusses the individual and social dimensions of being human.

Students fulfill this competence by comparing two or more perspectives on the relationship between the individual and social dimensions of being a human person. Such perspectives always imply assumptions about the meaning, value, and purpose of life. They also have implications for how we live our lives. For example, students might compare the individualism in some Western philosophical traditions to the more communal concepts of the self in other traditions. Students should relate the perspectives they examine to their own experience.

A-3-G: Can assess the assumptions and implications of significant ideas about human experience.

1. Identifies a significant philosopher, theologian, tradition, or thinker's ideas that address the meaning of human experience.
2. Identifies appropriate criteria to assess these ideas.
3. Applies these criteria to the assumptions and implications of these ideas.

Students demonstrate this competence by analyzing the ideas of one or more significant thinkers or traditions about the meaning of some aspect of human experience (for example, friendship, racism, beauty, suffering, hope, sexuality, oppression, etc.). Students will identify appropriate criteria to assess these ideas and their assumptions and implications. Students should reflect on how these ideas relate to their own experiences.

A-3-X: Written by student/faculty. This competence allows students to create statements that meet their specific learning needs.

Ethics in the Contemporary World

A-4: Can analyze a problem using two different ethical systems. REQUIRED

1. Identifies and describes an ethical issue or problem
2. Describes the distinctive assumptions of two different ethical systems
3. Analyzes the problem by comparing and contrasting how these two different systems would apply to that particular ethical issue or problem.

Students demonstrate this competence by applying two ethical systems to a particular issue or problem that permits substantial ethical examination (for example, business practices, uses of technology, reproductive rights, class structures, institutional racism, sexual behavior, etc.). Students may choose any ethical system that is associated with particular thinkers. Students may consider the choices these thinkers identify, and the standards or measures by which these choices are made to obtain desired outcomes.

Creativity

A-5: Can define and analyze a creative process. REQUIRED

1. Can define the concept of creativity.
2. Can identify, analyze, and describe the components of a creative process in one or more fields of human endeavor.
3. Can explain how engaging in a creative process affects one's perception of the world.

Creativity is often associated with forms of human expression in the literary, fine, and applied arts. Because it involves the development of innovative ideas and fresh approaches to problems, however, the practice of creativity is no less integral a component of the social, physical, and technological sciences. In any field of human endeavor, the creative process requires ability to question accepted and "acceptable" ways of perceiving and thinking, as well as a willingness to forge connections and refine knowledge through doubt, curiosity, and imagination. Through engagement, reflection, and analysis, this competence invites the student to understand how a creative process is born, how it functions, and how it changes our perception and experience of the world. Such insights may develop, for example, by analyzing the creative process in the writing of a poem, the production of a visual narrative, the planning of a city, the design of a web site, or the development of an innovative way of perceiving and explaining a natural phenomenon.

SECTION B: THE HUMAN COMMUNITY CATEGORY

This category includes competencies in human relations, history, political science, and other fields closely aligned with the development and maintenance of human society. The three subcategories in the H area are: Communities and Society, Institutions and Organizations, and Individual Development. In the Human Community category, competencies 4 and 5 are required. You must also choose at least one competence from each of the subcategories listed below.

Subcategory H-1: Communities and Societies

The world is becoming more and more interdependent and no country, including the U.S., can operate in isolation. This section emphasizes the ideas and abilities that will help individuals thrive in a global

system. You must choose at least one competence from this subcategory.

H-1-A: Can understand and apply the principles of effective intercultural communication.

1. Understands and can explain at least two ways in which culture and communication are closely connected.
2. Understands and can identify at least two reasons for intercultural miscommunication.
3. Develops effective intercultural communication strategies.

Students demonstrate this competence by explaining intercultural communication, using appropriate models or theories that are acceptable in the field. Students may choose to analyze reasons for intercultural miscommunication such as misperception, misinterpretation or misevaluation and recommend ways to improve intercultural communication. They may concentrate on strategies such as increasing cultural self-awareness and improving cross-cultural awareness or they may study the role of empathy in intercultural interactions. Students may also focus on topics such as the role of language and/ or non-verbal skills in intercultural contexts. Students can fulfill the competence through courses and independent learning pursuits that analyze one or more aspects of intercultural communication.

Culture is used here in the anthropological sense and is defined as an integrated system of learned behavior patterns that are characteristic of the members of a given society. Intercultural communication happens when the message sender is from one culture and the message receiver is from another culture. This competence does not apply to organizational culture.

H-1-B: Can explain how two or more of the factors of race, ethnicity, nationality, socioeconomic status, age, gender, sexual orientation, or religion interact to shape communities.

1. Defines “community” and identifies a community that embodies the definition.
2. Discusses two or more of the following: race, ethnicity, nationality, class or economic status, age, gender, sexual orientation, or religion.
3. Explains how the attributes of a community (listed in #2) interact.
4. Examines the impact of these interactions on the community.

Students demonstrate this competence by describing the community they have selected and explaining how its attributes (race, ethnicity, etc.) interact to shape past, present, or future circumstances of the community. In this instance “communities” refers to demographic realities rather than the behavior of individual persons (a phenomenon that is addressed in H-3-B). Students may approach this competence from a variety of perspectives, including history (such as the impact of slavery on southern towns), economics (such as the impact of industrialization on rural communities), and sociology (such as the impact of an aging population on a neighborhood), to name a few.

H-1-C: Can explain the emergence, maintenance, or evolution of an economic or political system.

1. Identifies a political or economic system and describes its elements.
2. Explains how the system functions and how it has changed over time.

Students demonstrate this competence through an understanding of the origins, functioning, and change over time of an economic or a political system. An economic system refers broadly to a system of production, exchange, and distribution of resources that are critical for the

survival of a whole society. A political system is the set of formal legal institutions that constitute a government or a state.

H-1-D: Can explain a system of law that governs a society.

1. Identifies a system of law for analysis.
2. Understands the interrelationships among the laws of that system.
3. Interprets the presuppositions or applications of the laws of that system.

Students demonstrate this competence by examining a specific system of law. Business, environmental, constitutional, and criminal law are among the examples that are appropriate to demonstrating this competence.

H-1-E: Can explain the concept, function, and expression of culture and illustrate the explanation with one or more cultures.

1. Defines culture as a concept through which to see and interpret the world.
2. Chooses a theoretical model for analyzing cultures.
3. Describes two or more dimensions present in one or more cultures using this model.

Students demonstrate this competence by explaining “culture” using appropriate explanatory models or theories. The dimensions of culture that students choose to analyze may include traditions, rituals, religious beliefs, laws, or arts. Students can fulfill the competence through courses and independent learning pursuits that analyze their own or another culture.

H-1-F: Can describe and explain the roles of individuals, groups, societies, or states in history.

1. Demonstrates an understanding of connections among selected events over time.
2. Uses an informed historical approach to interpret events or roles of individuals, groups, or states.

Students demonstrate this competence by explaining why a particular event or series of events occurred when they did or why different circumstances are likely to result in particular outcomes. Students will consider a variety of conditions that may have influenced a particular event or process and demonstrate knowledge of current historical approaches.

H-1-G: Can effectively speak, read, or write in a language other than English.

1. Speaks, writes, or reads intelligibly in a language other than English.
2. Understands spoken or written sentences in a created or natural cultural environment.
3. Maintains conversations, writes, or reads effectively in a language other than English.

Students demonstrate this competence by showing that they can read, listen, speak, or write in in a language other than English. The emphasis of this competence is on the communicative aspects of language and therefore refers both to receptive competence (reading or listening comprehension) and to productive competence (speaking or writing) or any combination of these sufficient for effective communication.

H-1-H: Can describe and analyze the challenges faced by communities in urban, suburban, or rural areas.

1. Articulates the characteristics of an urban, suburban, or rural geographic area.

2. Identifies one or more communities that embody the attributes of an urban, suburban, or rural geographic area.
3. Provides an in-depth description and analysis of one or more challenges for the selected area(s).

Students demonstrate competence by describing the elements of a geographic area that define it as being urban, suburban, or rural. Analysis may concentrate on either change over time within one location, or, compare and contrast of several locations and their challenges (such as adequacy of housing and transportation, development of an adequate tax base, migration or emigration of population, planning for land use). Students should consider experiences they have had in their own community as the basis for approaching this competence.

H-1-I: Can understand change methodology, plan change within a community, and assess its likely impact.

1. Defines “community” and identifies a community that embodies these characteristics.
2. Identifies a problem that affects the community chosen.
3. Describes one or more theories of change methodology and develops a plan to address the problem using these principles.
4. Assesses the anticipated consequences of implementing the plan.

Students demonstrate this competence by developing a plan to change a community. The plan must identify specific actions, resources, and time frames required for implementation, and must be connected to theories of change methodology that permit generalizations beyond the particular community or problem being addressed. Problems that are important to a community as a whole (such as drought, epidemics, and quality of life generally) are appropriate, rather than problems that residents encounter individually (such as divorce). Problems that relate to organizational change are addressed in H-2-C.

H-1-X: Written by student/faculty. This competence allows students to create statements that meet their specific learning needs.

Subcategory H-2: Institutions and Organizations

Institutions and organizations are an important part of everyday life that change over time in the intensity and nature of their influence. This section emphasizes abilities that will help individuals understand and interact with institutions and organizations. You must choose at least one competence from this subcategory.

H-2-A: Can understand a social problem and can analyze the effectiveness of social institutions in addressing it.

1. Identifies and frames a significant social problem.
2. Identifies a social institution that addresses this problem.
3. Articulates criteria used to assess the effectiveness of the social institution.

Students demonstrate this competence by choosing an institution that addresses an important social problem. Students develop a rationale for the selection that speaks to the following questions: What is a social institution? Does it address a significant social problem? Students explore the ways the institution may or may not be effective. Courses applied to this

competence will emphasize the analysis of institutional effectiveness.

H-2-B: Can use public or private institutions as resources for understanding a social issue.

1. Using the resources of an institution, investigates a social or historical issue.
2. Assesses the appropriateness and reliability of an institution for the exploration of this specific issue or question.

Students demonstrate this competence by using a public or private institution (for example, a museum, special library, government agency, industry) as the setting for investigations and as sources of information in inquiry. The scope of possible institutions is limited only by whether the institution can provide for significant learning associated with any branch of the social sciences.

H-2-C: Can identify an organizational problem and design a plan for change based on an understanding of social science theories or models.

1. Identifies one or more problems of strategy, structure, or process that affect an organization.
2. Describes one or more change theories or models that explain these problems.
3. Uses these theories or models to address the problem(s).

Students demonstrate this competence by presenting a plan that addresses a relatively complex problem in an organization. Students must connect the solution to theories or models of change and show it has significance beyond the specific example. The plan may focus on growth and transformation through the acquisition of new skills and may identify specific actions, resources, and time frames required for implementation

H-2-D: Can use two or more social science theories in the analysis of one's experiences in an organization.

1. Describes two or more organizational theories.
2. Describes a situation in an organization that can be explained by these theories.
3. Applies (1) to (2) and to one's own experiences.

Students demonstrate this competence by showing familiarity with the approaches, models, and principles that help explain human interactions within organizations. A comparative approach or case study may be an effective demonstration of competence.

H-2-E: Can compare one social, cultural, economic, or political institution in a society to a comparable institution in a different society.

1. Identifies two comparable institutions in two different cultures or societies and analyzes their significant similarities and differences.
2. Links the characteristics of these institutions to the cultures or societies they represent.

Students demonstrate this competence by comparing two similar institutions in two different cultures or societies and showing why and how these institutions represent specific cultures or societies. For example, they may compare the educational system of Chile and the US, or Japanese and American business institutions, or the political system of Sweden and the US.

H-2-F: Can explain the development, roles, and maintenance of social institutions.

1. Identifies and describes a specific social institution(s).
2. Analyzes the dynamics of the development and change of this social institution(s).

Students demonstrate this competence by showing how it contributes to their interaction and relationships with institutions. They will need to demonstrate a theoretical understanding of the changing nature of institutions in society. A presentation of independent or prior learning for this competence should identify a specific institution that fits the accepted definition and describe its development through examples. Courses that apply must have a clearly identified social institution as the focus.

H-2-G: Can evaluate the role and impact of mass media or information technology on society.

1. Specifies a medium of mass communication or an information technology and articulates its scope.
2. Describes the role that this medium or information technology plays in society.
3. Evaluates the impact of this medium or information technology on society or on one's perceptions of societal norms and issues.

Students demonstrate this competence by evaluating the effect of a medium of mass communication or information technology on society. The demonstration should include definitions of all the terms – mass media or information technology, society, role, and impact.

H-2-H: Can work with community partners to implement a service learning project.

1. Spends a minimum of 20 hours engaged in social action or service.
2. Analyzes the value of social involvement from both one's own and the community partner's perspective.
3. Demonstrates an understanding of the larger social, political, or cultural implications of the service-learning site.

Students demonstrate this competence by becoming active and knowledgeable volunteers within a reciprocal learning setting outside the classroom. In cooperation with a public benefit organization (either a private nonprofit or government agency), students will develop, carry out, and reflect upon the implications of a social action or service project.

H-2-X: Written by student/faculty. This competence allows students to create statements that meet their specific learning needs.

Subcategory H-3: Individual Development

Knowledge of self is critical as one strives to function effectively in the world. Self-awareness is an important factor in personal growth and change, and is a pre-requisite for understanding and interacting with other people. This section focuses on comprehension of the dynamics of individual behavior and development, independent of and in relationship to others. You must choose at least one competence from this subcategory.

H-3-A: Can use two or more theories of human psychology to understand and solve problems.

1. Articulates two or more theories or models explaining human behavior.
2. Identifies a problem and proposes a solution using appropriate theoretical approaches.

Students demonstrate this competence by showing their familiarity with recognized theories and models of behavior, and by their ability to select appropriate ones to address a problem. In addition, students must evaluate the effectiveness or expected results of applying the theory to the problem.

H-3-B: Can explain how two or more of the factors of race, ethnicity, nationality, socioeconomic status, age, gender, sexual orientation, or religion interact to shape oneself or others.

1. Discusses two or more of the following: race, ethnicity, nationality, class or economic status, age, gender, sexual orientation, or religion.
2. Chooses a context in which they interact.
3. Explains how the chosen factors interact with each other.
4. Articulates the impact of these factors and their interactions on oneself or others.

Students demonstrate this competence by discussing the social factors that they wish to examine and explaining how they (race, ethnicity, etc.) function together to shape oneself or others. Students may approach this competence from a variety of perspectives, including history, economics, and psychology, to name a few.

H-3-C: Can use theories or models of adult growth and development to understand one's own experience.

1. Articulates one or more models or theories that treat changes in attitudes, values, and understandings as components of adult growth and development.
2. Applies (1) to phases of one's adult life.

Students demonstrate this competence by applying theories or models of adult growth and development to one's adult history. Fundamental to this competence is an understanding that "change" and "growth" are not synonymous. Growth can be described and measured in different ways and change may be an indicator of growth.

H-3-D: Can employ the skills of negotiation, mediation, or interpersonal communication in the resolution of a problem.

1. Identifies the components of a specific interpersonal relationship and describes the problem that exists within that relationship.
2. Applies principles of mediation, negotiation, or interpersonal communication to resolve the problem.
3. Evaluates the effectiveness of the intervention and of the theoretical model underlying it.

Students demonstrate this competence by applying principles of negotiation, mediation, or interpersonal communication to an actual situation. Students need to articulate their reasons for employing a given approach and to evaluate the effectiveness of that approach.

H-3-E: Can speak effectively in public settings.

1. Understands the principles of effective public speaking.
2. Engages in more than one type of public speaking (narrative, inspirational, instructional, persuasive, etc.).
3. Assesses effectiveness based on established criteria.

Students demonstrate this competence by articulating principles of public speaking, applying those principles, and evaluating the effectiveness of their public speaking experiences. Students might think about developing this competence as they proceed through the program, compiling a portfolio (including audio and video demonstrations, if desired) and assessing public speaking experiences in individual classes.

H-3-F: Can understand the interrelationships among intellectual, psychological, spiritual, and physical health in one’s own life.

1. Defines health as a holistic concept, comprised of intellectual, psychological, and spiritual as well as physical components.
2. Describes how two or more intellectual, psychological, spiritual or physical aspects interact to contribute to one’s health.

Students demonstrate this competence by understanding how intellectual functioning and psychological, spiritual, and physical health interact and contribute to overall health. Definition of each component is critical to understanding that interrelationship, and students must apply their knowledge to an example from their own lives.

H-3-G: Can analyze the impact of social institutions on individual human development.

1. Identifies a social institution and describes its characteristics.
2. Articulates criteria for analyzing the impact of this institution on individual development.
3. Analyzes the impact of this institution.

Students demonstrate this competence by understanding how the existence and operation of social institutions, such as a family, a business, the criminal justice system or an educational institution, affect human development.

H-3-H: Can explain cultural differences in the interpretation of adulthood.

1. Identifies two different cultural groups and describes their characteristics.
2. Describes how each group understands the process of becoming an adult.
3. Compares and contrasts each group’s perspective on adulthood.

Students demonstrate this competence by understanding the extent to which different cultural groups have different definitions and expectations of adulthood. Students should clearly identify the distinctiveness of their chosen cultural groups in terms of this issue. Students may use different cultural groups within the United States or other countries.

H-3-I: Can explain how the self is interpreted in a variety of cultures.

1. Identifies two or more substantially different cultures.
2. Articulates a set of criteria for examining interpretations of the self in different cultures.
3. Applies (2.) to two or more substantially different cultures.

Concepts of the self differ from culture to culture and “self-development” is shaped, in turn, by the cultural context in which a person grows up. Students can demonstrate this competence by looking, not only at other notions of the self, but by comparing those notions to their own cultural experience.

H-3-J: Can manage one’s ongoing development as a writer using principles and tools of assessment and feedback.

1. Can assess his or her own writing and address areas of weakness
2. Uses revision to produce significantly improved final drafts
3. Demonstrates improvement in writing as documented in a writing portfolio.
4. Presents a plan for continuous, ongoing improvement of writing.

H-3-X: Written by student/faculty. This competence allows students to create statements that meet their specific learning needs.

Power and Justice

H-4: Can analyze power relations among racial, social, cultural, or economic groups in the United States. REQUIRED

1. Describes the unequal power relations between at least two racial, social, cultural, or economic groups in the U.S.
2. Discusses the historical, sociological, or economic dynamics under which these groups came to be in conflict.

Students demonstrate this competence by analyzing the historical, sociological or economic dynamics that lead to inequalities in power among groups in the United States. To the extent possible, we hope that students will relate this to their experiences as well as their responsibilities as a citizen. In many ways this competence is about democracy in action; for example, how groups have negotiated and attained power and voice in a complex and diverse society. Since, however, inequalities persist in this country, it is important to understand the ways in which some groups have been systematically denied economic, social, and political justice.

Global Perspectives

H-5: Can analyze issues and problems from a global perspective. REQUIRED

1. Analyzes one or more global issues, problems, or opportunities facing the human race.
2. Explains how these issues affect individuals or societies in both positive and negative ways.

Students demonstrate competence by discussing such issues as how local communities (in the U.S and elsewhere) deal with global concerns such as hunger, health, education, welfare, illiteracy, environmental issues, or infectious diseases. Or they might explore the impact of science and technology on people's lives worldwide. They may study world religions, literature or the arts as a means of better understanding other cultures. Students can fulfill the competence through courses and independent learning pursuits that analyze one or more aspects of global competence. International travel and work may also be helpful.

Global connections affect our lives in many ways. Many local issues have worldwide implications, and none are merely matters of science or of economics or of politics. Some may have cultural or ethical or religious components as well. This competence invites students to explore and demonstrate these connections bearing in mind that if an issue is big enough to

cross geographical borders, it is complex enough to cross disciplinary borders.

SECTION C: THE SCIENTIFIC WORLD CATEGORY

This category includes competencies that grow out of fields related to scientific inquiry, technology, and relevant skills. The three subcategories in this area are: Experiencing Science, Patterns and Processes, and Science, Technology and Society. In the Scientific World category, competencies 4 and 5 are required. You must also choose at least one competence from each of the subcategories listed below.

Subcategory S-1: Experiencing Science

Science is the systematic exploration of the universe — from the commonplace to the invisibly small or invisibly distant. These competencies encourage students to engage directly in scientific investigation, relating experience and observations to scientific concepts, models, principles, and theories. You must choose at least one competence from this subcategory.

S-1-A: Can explore natural phenomena or the world of everyday experiences using scientific methods, and can use theories to interpret observations.

1. Identifies aspects of the natural world or everyday experiences that spark interest or curiosity or that pose problems.
2. Applies a generally accepted model(s) of scientific inquiry to (1).
3. Uses or develops a theory, model, or set of principles to interpret observations and experience.

Students demonstrate this competence by experiencing science as a systematic and reflective process. Spurred on by curiosity or a perceived problem, students make observations and draw well-supported, justified generalizations. Wondering, getting familiar with the phenomena, posing questions, hypothesizing answers, observing, testing, interpreting results, framing conclusions, revising hypotheses — this is the process of scientific reasoning.

S-1-B: Can use public or private institutions as resources for learning science.

1. Uses the resources of an institution to investigate a scientific problem or question.
2. Assesses the appropriateness and reliability of the institution for this investigation.

Students demonstrate this competence by using a public or private institution (for example, a museum, zoo, botanical garden, government agency, industry, National Park) as a laboratory or setting for investigations and as a source of information. The scope of possible institutions is limited only by the institution can provide for significant learning associated with one or more branches of science.

S-1-C: Can explain personal interactions with the physical environment using scientific principles.

1. Identifies and describes a type of personal interaction with the environment.
2. Uses scientific principles to explain aspects of the selected environment, the student's response, and the interaction between the student and the environment.

Students demonstrate this competence by examining the conditions and consequences of

human interactions with the environment, such as rock climbing, skydiving, scuba diving, bird watching, and spelunking. Demonstrating this competence is not limited to gaining knowledge about environments. Students also need to examine the interactions with, responses to, or adaptations to the environment. Potential sources for principles and knowledge include ecology, physiology, environmental biology, and other branches of science.

S-1-D: Can design and plan an information technology solution for a problem.

1. Assesses a problem that can be solved with the application of a computing program.
2. Designs and plans an approach to solve a problem through a computing program.
3. Understands user interaction with the problem in question.

Demonstration of this competence calls for significant work in assessing a problem and developing a computing solution to it through programming and/or existing specialty software. Examples of acceptable demonstration of competence include: Application of HTML and/or advanced scripting to enhance web pages in business or non-business setting; Database design, including conceptualization, development, maintenance, monitoring, and evaluation; Spreadsheet solutions incorporating more than standard functions and macros commonly used at the introductory level; Programming in common computing languages (COBOL, C++, etc.), graphical designing applied to specific solutions in the media, businesses, or non-profit environments, and knowledge; Application of specialty software at an advanced level (statistical analysis, simulation, Internet programming - database functionality or advanced user interface design, etc.)

S-1-E: Can analyze inventions or technologies and can understand their underlying scientific principles.

1. Describes a complex invention or technology in terms of its component parts and functions.
2. Analyzes the parts and functions in terms of scientific principles.

Students demonstrate this competence by analyzing the workings of inventions or technologies. This analysis should go deeper than a simple description of a given invention and its function(s). It requires insight into basic laws of the physical world (for example, motion, thermodynamics) or essential ideas from various branches of science (physics, chemistry, biology, etc.). Students may use an invention of their own if they wish or a technology in which they have been involved. The invention or technology selected should be either complex enough, or of sufficient number, to gain competence in both the process of analysis and the range of unifying principles that underlie their functioning.

S-1-X: Written by student/faculty. This competence allows students to create statements that meet their specific learning needs.

Subcategory S-2: Patterns and Processes

Whether in a distant star or in a microscopic cell, we find in nature repeating forms and functions, together with variations and changes within and among them. The competencies in this group ask students to observe the natural world in order to identify patterns and processes within it. Patterns are observable repetitions in time, space, or organization; process is the means by which patterns are caused or changed. Both are connected with scientific theory, because theories arise to explain pattern, process, or both. You must choose at least one competence from this subcategory.

S-2-A: Can describe, differentiate, and explain form, function, and variation within biological systems.

1. Describes at least one biological system (for example, circulatory, skeletal, and ecological) in terms of its structure and organization.
2. Describes the healthy functioning of this system.
3. Compares this system to an unhealthy one, or
4. Compares and contrasts two healthy biological systems (of the same or different organisms or species).

Students demonstrate this competence by looking at biological systems (plants and animals as individuals or in groups, at the macroscopic or microscopic level) in terms of their forms and the way those forms function. In addition, this competence asks students to analyze the way a biological system is structured and how that system functions. Examining variation may include study of irregularities and abnormal forms or functions, with reference to a healthy or normal baseline.

S-2-B: Can describe, differentiate, and explain form, function, and variation within physical systems.

1. Describes the structure and organization of a physical system (for example, mountain, ocean, galaxy, star, and atom) in terms of its constituent parts.
2. Analyses the functions of the physical system's constituent parts.
3. Articulates at least one theory from a physical science that explains the interrelation between form and function of the phenomenon's parts.
4. Discusses how this physical system varies: internally, in comparison to related systems, or through time.

Students demonstrate this competence by looking at physical systems, including those described by branches of science such as geology, astronomy, chemistry, and physics. Students demonstrate awareness of the ways in which scientists typically describe and define such systems. They also articulate how that system functions and varies.

S-2-C: Can describe, categorize, and explain development or change within physical or biological systems.

1. Articulates the process by which change occurs in at least one physical or biological system, or
2. Describes the sequence of development or evolution in that system.
3. Analyzes the variations in the development or change of physical or biological systems.

Students demonstrate this competence by examining the way systems change or develop over time. This competence includes both physical systems (chemical, geological, astronomical, and other) and biological systems (plant, animal/human, communities, ecosystems, all of life). Change and development can be understood as they occur within small-scale systems (e.g., human aging) or large scale ones (e.g., evolution of the cosmos).

S-2-D: Can describe, categorize, and analyze the interactions and exchanges between living organisms and their physical environments.

1. Articulates the distinction between an organism and its environment.

2. Describes the ways in which an organism relates to its environment.
3. Categorizes and assesses two or more interactions of an organism and its environment in terms of their effects on each other.

Students demonstrate this competence by examining ecological relationships and articulating the ways any living organism or group of organisms, including humans, exist within specific environments. Students may work on either on the micro (small-scale) or macro (large-scale) level, and on either the individual or group level (the actions of an amoebae seeking food or humans mining fossil fuel are equally appropriate possibilities). This competence differs from the required S competence in that it is limited to the interaction of organisms and their environments.

S-2-E: Can use mathematics or statistics to describe the patterns and processes of natural phenomena.

1. Knows a branch of mathematical or statistical theory.
2. Uses this theory to describe or define patterns or processes of the natural world.

Students demonstrate this competence by applying mathematics or statistics to an issue in the physical or biological sciences.

S-2-X: Written by student/faculty. This competence allows students to create statements that meet their specific learning needs.

Subcategory S-3: Science, Technology and Society

Science and technology increasingly determine the way in which we live our lives, shape our communities, and structure of our nation and its interaction with global society. The inherent power of science and technology obscures the fact that, as with every element of culture, individuals like ourselves create the wonders of science and technology. Demonstrating this set of competencies involves explaining the relationship among society, values, and science or technology. Learning experiences should examine the manner in which social and cultural dynamics shape technological or scientific developments. They should also examine the ways in which technological or scientific changes frame social and cultural actions, values, and priorities.

You must choose at least one competence from this subcategory.

S-3-A: Can understand different perspectives on the relationship between technology and society, and describe the scientific principles underlying technological innovations.

1. Defines technology and explains the scientific principles that underlie a technological development.
2. Analyzes social, political, economic, or cultural factors that influence the creation or success of a technology.
3. Evaluates the impact of a technology on social, economic, or cultural structures and beliefs.

Students demonstrate this competence by developing a definition of technology and understanding the role it plays in shaping our lives and ideas. Students describe the underlying scientific principles, methods, goals, or reasoning of a technological development. Students examine these issues for their social, political, economic, or ethical assumptions.

S-3-B: Can assess health care practices based on an understanding of the biological and social factors that contribute to definitions of health.

1. Identifies biological and social or cultural factors that contribute to a definition of health.
2. Articulates one or more definitions, theories, or models that describe health-care.
3. Articulates criteria for assessing health-care practices, for the individual or the community, based on the considerations of (1) and (2).
4. Assesses and articulates an approach to the maintenance of promotion of health using (1), (2), and (3) as the basis for forming generalizations.

Students demonstrate this competence by examining “health” and the functions of a healthy human. What does it mean, in medical or social terms, to be healthy? The functions of a healthy human suggest an understanding of the underlying mechanisms of health and disease. At a fundamental level, a student addressing this competence must demonstrate knowledge of human biology and relate that knowledge to forming a definition of “health.” Students may explore disease or abnormal states in both biological and social terms, but in so doing should demonstrate an understanding of the normal state.

S-3-C: Can understand the scientific and social dimensions of an environmental issue.

1. Uses environmental science to understand a local, regional, or global environmental concern.
2. Demonstrates an understanding of the economic or social elements contained in an environmental problem.

Students demonstrate this competence by gaining an appreciation for the methods, models, and principles of environmental science or ecology. As humans strive to shape the environment, our actions have both beneficial and deleterious consequences, as well as unintended ones. In the most general sense, this competence directs the student to explore the relationship between society’s actions and their consequences in the environment.

S-3-D: Can use scientific knowledge to understand varying perspectives on a policy issue.

1. Identifies and describes a current public policy issue that has significant scientific or technological elements.
2. Analyses the scientific theories, methods, or standards taken by two or more perspectives on this issue.

Students demonstrate this competence by taking the role of a scientifically literate citizen and investigating various scientific or technological perspectives on a public policy issue. Students should compare and contrast the varying scientific perspectives relevant to the debates on this issue.

S-3-E: Can describe how scientific or technological knowledge affects perspectives on the relationships between humans and nature.

1. Identifies a case (past or present) that shows the influence of scientific knowledge on a social group’s view of relationships between humans and nature.
2. Articulates the scientific or technological knowledge underlying this case.
3. Explains how (2) supports a different view of relationships between humans and nature.

Students demonstrate this competence by identifying the primary features that shape their

perspectives or those from other cultures on relationships between humans and nature. On this basis, the students explore the development of science and technology and the development's effect on different cultural perspectives.

S-3-F: Can analyze the integration of new technology into a specific field of human endeavor from at least two perspectives.

1. Identifies a field of human endeavor (for example, business, the arts, the professions, the military, academic disciplines, etc.) that has been reshaped by new technology (for example, robotics, information/communication technologies, specialized software applications, medical technologies, etc.).
2. Analyzes the significance of the integration of new technology into that field from at least two different perspectives (for example, historical, ethical, sociological, economic, aesthetic, or scientific).

Students demonstrate this competence by analyzing the impact of technology on the chosen area. Emphasis should be placed not just on newly emerging tools, but on how increased reliance upon technology has affected the social, legal, economic, and/or ethical dimensions of living. Students will bring at least two such perspectives to bear on this analysis.

S-3-X: Written by student/faculty. This competence allows students to create statements that meet their specific learning needs.

Interconnections in the Natural World

S-4: Can describe and explain connections among diverse aspects of nature. REQUIRED

1. Describes one or more natural systems.
2. Explains how parts of the system are interconnected.
3. Demonstrates how such connections are found elsewhere in nature.

Students demonstrate competence by articulating how exchange occurs among seemingly disparate parts of nature and how interconnection among systems is basic to nature and results in an integrated whole. "Connections" is the most important word in this competence. All seemingly distinct parts of nature, including humans, are integrally connected to all other parts.

Scientific Reasoning

S-5: Can explain and evaluate the nature and process of science. REQUIRED

1. Can explain and analyze the types of questions, assumptions and claims that define science as a way of knowing.
2. Can assess how evidence, theories, and hypotheses are used to establish scientific claims.
3. Can explain the role of uncertainty in science.
4. Can evaluate the role of communication, collaboration, diversity and peer review in the scientific process.

Students demonstrate this competence through methods provided by SNL or specific courses designed to introduce the student to scientific tools and their use.

SECTION D: ADVANCED ELECTIVES

There are two competencies required to fulfill the Advanced Electives. Learning experiences for these competencies must be at an advanced level. Transfer courses must be at the 300-400 level, and must fall within one of the three liberal learning categories. Other learning experiences must be sufficiently advanced to demonstrate synthesis of complex ideas, understanding of significant research in the field, and originality of perspective. *Research Seminar* is a pre-requisite for SNL courses or new independent learning in these competencies. These competencies can fit anywhere in the Arts and Ideas, Human Community, or Scientific World Categories. The assessment criteria below pertain to each competence.

E-1: Written by student/faculty. (pre-requisite: LL 300 *Research Seminar*)

E-2: Written by student/faculty. (pre-requisite: LL 300 *Research Seminar*)

1. Identifies a phenomenon, problem, or event of personal significance.
2. Identifies at least 2 approaches to the creation of knowledge that could appropriately be applied to (1).
3. Evaluates the limitations and possibilities of these approaches to the creation of knowledge.
4. Articulates a perspective in relation to this phenomenon, problem or event that integrates aspects of these approaches.

In *Advanced Elective* experiences, students explore the value and practice of being an integrating thinker in today's increasingly complex world. The competencies here draw connections among the categories and disciplines of liberal learning. Students will demonstrate this competence by considering one phenomenon, problem or event (tears, breast cancer, the bombing of Hiroshima) through the lenses of at least two different approaches to creating and expressing knowledge. They will ask questions such as, what is knowledge? How is knowledge created? What are its sources? How can it be expressed? How is knowledge accorded value or privilege in a particular culture or society?

Students will examine different sources of knowledge, such as inspiration, deductive reasoning, or revelation. They will explore how different sources of knowledge lead to different ways of knowing, and to different forms of expressing knowledge. For instance, an artist's expression of a phenomenon is a form of knowledge, and so is a scientist's examination of the same phenomenon.

By choosing two approaches to exploring an event or a phenomenon, students will discuss how different sources and expressions of knowledge are accorded different kinds of value and privilege depending on the cultural context. This will also help students to understand how their own values and assumptions influence the way they experience or understand an event or a phenomenon.

SECTION E: X COMPETENCIES: WRITING YOUR OWN STATEMENTS

Occasionally, students have particular experiential knowledge or specialized coursework that is not addressed by the SNL competence framework. X competencies are unique competence statements you design with mentor approval that reflect your unique competence. In these cases, you develop

statements and assessment criteria similar to prewritten competence statements and criteria that articulate your knowledge in the Arts and Ideas, Human Community, and Scientific World areas. Discuss this option with your Faculty Mentor before proceeding with your evidence.

NOTE: You will also write your own statements for Focus Area competencies.

A competence statement is a generalized definition of knowledge and/or skill. It can indicate the level at which you are competent, can address the depth of your knowledge, or can demonstrate your performance. X competencies can be demonstrated in the same variety of ways we have already discussed for competencies already written by SNL. The language you use in a competence statement should be understandable, and it should also refer clearly to your topic.

After you have defined an area of your learning and knowledge not addressed by the written statements in the framework, make a list of concerns, controversies, or vocabulary relevant to that area. Write a few descriptive words beside each entry. Use words indicating that you know something, that you know how to do something, that you can do something, and/or that you have reached some conclusions on how and why things are done. Use verbs that indicate your role in the experience.

Competence Statement Model #1

- Select a verb – “knows” or “understands”
- Choose an item from column A if theoretical aspects are emphasized, from column B if practical aspects are emphasized
- Select a preposition from column C
- Enter area that specifies the subject of your competence

Verb	A	B	C	D
Knows	Theory	Methods	Of	Enter subject,
Understands	History	Techniques	For	Issue, or,
	Concepts	Methodology	To	Problem.
	Principles	Procedures		
	Ideology	Approaches		
	Rules	Processes		
	Laws	Treatments		
	Relationships	Skills		
	Structure	Research		
	Classification	Functions		
	Systems			
	Roles			
	Patterns			

Competence Statement Model #2

- Begin statement with the verb “can”
- Choose an action verb from column A
- Enter the area, issue or subject of competence under column B

Verb	A	B
Can	Apply	Enter subject, issue, or
	Use	Problem.
	Translate	
	Interpret	
	Determine	
	Create	
	Analyze	
	Evaluate	
	Relate	
	Plan	
	Compare	
	Function as	
	Write	
	Make	

Consider the following examples of X competencies using these models:

Student A has taken a series of courses in music performance. Her specialty in music was in performance. Much of the work she has done revolved around increasing her own skills, but these courses are covered in the A-2 subcategory. On her own, she has acted as an assistant in her daughter's fifth grade classroom, helping kids discover their own interests in music. Student A wants to write a competence statement in the A-2 subcategory which indicates that she has mastered the skills of performance herself, and that she can devise methods for passing this knowledge and ability on to her children.

Topic	Concerns, etc.	Descriptors	Verbs
Kids' performance	What age? What skill level?	Elementary school Beginners	Understand Assess
	Performance ability	Ability vs. expectations	Describe
	Teaching ability Using resources	How to write a lesson plan Materials on teaching and on music theory	Know Employ

Possible Competence Statements for Student A:

Model #1: A-2-X: Understands theories of music performance and can design materials to teach music performance to children at the elementary level.

Model #2: A-2-X: Can describe methods for teaching music performance to elementary school children.

Student B has a fascination with Asia and has taken many courses in Asian history. While most of these are relevant to the H-1 subcategory, one course in particular, *Asian vs. Western Thought* taught Student B to understand how cultural communication problems are related to philosophical and historical differences. He would like to write a competence statement in the H-3 category, because he feels that the course has contributed substantially to his personal development.

Topic	Concerns, etc.	Descriptors	Verbs
Asian vs. Western thought	Misunderstandings in business & travel	Japanese expectations for business practice	Analyze
	Another point of view	Language barriers; Europe vs. Asia	Use
		My own adjustment to life in Asia	Understand Explain
	Long vs. short(er) term culture	History of the US vs. history of China	Know

Possible Competence Statements for Student B:

Model 1: H-3-X: Understands the relationship between history and philosophy in Asia and in the West.

Model 2: H-3-X: Can explain how international cultural problems relate to history and philosophy.

Student C has a history of patented inventions. While she can use competence S-1-E, she also would like to receive credit in the S-1 subcategory for her other inventions.

Topic	Concerns, etc.	Descriptors	Verbs
Kitchen inventions	Developed patterns	Materials (wood, metals, plastics)	Utilize
	Interviewed potential customers	Ideas/problems	Describe
	Watched customers using similar, but inefficient products	Watched for how much time operation took, what had to be done manually, etc.	Observe Understand

Possible competence statements for Student C:

Model 1: S-1-X: Understands the nature of materials used for products related to food preparation, and can create designs for product improvement.

Model 2: S-1-X: Can use methods of scientific inquiry to improve the design of kitchen products.