

# FCCJ's STATEWIDE GENERAL EDUCATION COMPETENCY AREA DEFINITIONS\*

*\*Definitions (with the exception of Communication) updated based upon faculty feedback in October 2008*

## COMMUNICATION

Effective communication is defined as an individual's ability to choose the appropriate means for obtaining, generating and using information and language to interact successfully in the world. To be an effective communicator, one must possess the ability to:

- receive, comprehend, synthesize and integrate information through reading, listening, and observation, and
- transmit and exchange such information through the appropriate means of expression including writing and speaking.

## INFORMATION LITERACY

Information literacy is defined as an individual's ability to find, retrieve, analyze, and use information. Being information literate requires the ability to:

- identify the need for information,
- select the most appropriate information retrieval system,
- acquire pertinent information,
- evaluate the information obtained,
- manipulate information in a usable form, and
- communicate the information appropriately, ethically, and legally

## CRITICAL THINKING

Critical thinking is defined as an individual's ability to apply logic, effective reasoning skills, sound judgment, and reflection in order to problem solve, to make informed decisions, and to examine an issue from a variety of points of view.

An effective critical thinker is able to:

- compare and contrast,
- establish appropriate hypotheses,
- recognize assumptions and biases,
- apply deductive and inductive reasoning to problem solve, and
- synthesize, evaluate, and reflect upon the information gathered.

## SCIENTIFIC AND QUANTITATIVE REASONING

Scientific reasoning is the interpretation of measurable, observable, or empirical information through inference, analogy and induction to direct the formulation of hypotheses and conclusions.

Specifically, scientific reasoning includes the ability to:

- identify a scientific problem,
- recognize and generate hypotheses,
- identify relevant experimental variables,
- make logical deductions using empirical or observed evidence,
- distinguish between causal and correlation relationships,
- distinguish between scientific and non-scientific arguments,
- weigh and assess the quality of scientific information,
- derive generalizations from data, and
- use generalizations to make predictions.

Quantitative reasoning is the ability to understand and communicate mathematical information. Specifically, quantitative reasoning includes the ability to:

- interpret and make inferences from information presented in formulas, tables, graphs and charts,
- represent mathematical information symbolically, visually, numerically and verbally,
- use arithmetical, algebraic, geometric and statistical methods to solve problems,
- recognize appropriate and inappropriate applications of mathematical and statistical models,
- estimate and check/consider the reasonableness of numerical results,
- use appropriate technology in the evaluation, analysis and synthesis of information in problem-solving situations, and
- evaluate information, make logical deductions and arrive at reasonable conclusions.

## GLOBAL SOCIOCULTURAL RESPONSIBILITY

Global sociocultural responsibility is defined as the way of recognizing and responding to different ethnic and cultural groups by analyzing from multiple perspectives the means by which each group serves a global community that contributes to local, national, and environmental events and concerns of humanity. An individual who is globally and socio-culturally informed and responsible has the ability to:

- comprehend the historical, political, social, economic and cultural influences on the development of societies,
- demonstrate an understanding of diversity within economic, social, cultural, civil and political infrastructure and its underlying value systems,
- acknowledge the wide range of differences among individuals and the diversity among socioeconomic and global communities,
- recognize the effect of historical and current perceptions, assumptions, and beliefs on individuals and groups,
- recognize the value of contributing to the welfare of the community, and
- understand the impact of individuals and groups on the local and global community.