Big Picture Learning Goals and Competencies

At Big Picture Schools, we believe that high school graduates must know how to reason, problem-solve, and be active members of the community. At Big Picture Learning schools, there is no canon of information that all students must know. In a world where available information is growing exponentially, we believe that the most important thing a student needs to know is how to learn. Integral to the Big Picture Learning design are five Learning Goals, a framework for looking at concepts, skills, and abilities and a guide for creating personalized curriculum.

The Five Learning Goals are:

- Personal Qualities
- Communication
- Quantitative Reasoning
- Empirical Reasoning
- Social Reasoning

Big Picture holds very high standards for our students. We have designed our educational program from the end-goal backwards – meaning, we have a clear vision of the skills, knowledge, and personal qualities that will help lead our graduates success and fulfillment. However, we also know that to truly educate one student at a time, our goals for student learning must be flexible enough to accommodate the diversity of student needs and personal aspirations. Our assessment system is based around two sets of goals – the five school-wide Learning Goals and each student's own personal goals. Woven throughout all of the goals is the belief that learning should be authentic and meaningful, as well as a commitment that each student should become a life-long learner.

The five Learning Goals are tools for problem solving and offer a framework for looking at the real-world knowledge and abilities necessary to being a successful, well-rounded person. They are not content-oriented curricula, nor are they completely distinct categories. Each goal focuses on an aspect of reasoning or community behavior. Students' learning and project work will often incorporate many overlapping elements of the Learning Goals. Associated with the Learning Goals on the following pages are clusters of competencies aligned to Common Core State Standards and the admissions expectations of four-year colleges in Washington and beyond.

Personal Qualities (PQ)

"What do I bring to this process?"
This goal is to be the best you can be: to demonstrate respect, responsibility, organization, leadership, and to reflect on your abilities and strive for improvement.

Questions to develop your project:

- How can I demonstrate respect?
- How can I empathize more with others?
- How can I look out for my health and well-being?
- How can I communicate honestly about this?
- How can I be responsible for this?
- How can I persevere at this?
- How can I better organize my work?
- How can I better manage my time?
- How can I be more self-aware?
- How can I work cooperatively with others?
- How can I take on more of a leadership role?
- How can I enhance my community through this?

Productive Mindset	Develop positive self-concept, realistic self-appraisal, and a growth mindset; cultivate healthy choices in personal and work relationships.
Proactive Learning	Long-term goal planning and achievement. Define work in complex and varied contexts; establish a vision and set goals, individually and in groups; effectively translate goals into projects and tasks; manage workflow in context of conflicting priorities; apply effective technologies of managing workflow; access resources to get help when needed; establish and maintain clarity of purpose; persevere.
Reflective Learning	Reflect individually and in groups to identify strengths and growth areas. Explore personal history and how current perspectives originated; address strengths and weaknesses in personal learning plans.
Community Engagement and Leadership	Navigate systems; engage in community leadership, quality mentorship, and learning inside and outside of school. Apply awareness of group goals and one's potential to influence others; apply appropriate strategies of facilitation, collaboration, and public speaking. Foster positive community relations in school and other contexts; mentor new members of the community; actively listen and empathize, recognizing one's own views as a product of personal history and experience and honoring other perspectives; apply conflict mediation strategies; apply an understanding of group dynamics in work with small and large groups; accept responsibility.
Personal Wellness	Become aware of and manage choices toward a more successful existence; develop knowledge and skills related to mental, spiritual, financial, community, emotional, and physical wellness. Acquire the knowledge and skills necessary to maintain an active life through movement, flexibility, strength, and nutrition.

Communication

"How do I take in and express ideas?"
This goal is to be a great communicator: to understand your audience, to write, to read, to speak and listen well, to use technology and artistic expression to communicate, and to be exposed to another language.

Questions to develop your project:

- How can I write about it?
- What is the main idea I want to get across (thesis)?
- Who is my audience?
- What can I read about it?
- Whom can I listen to about it?
- How can I speak about it?
- How can technology help me to express it?
- How can I express it creatively?
- How can I express it in another language?

Understanding	Comprehend, analyze, and critique literary and informational texts across a variety of media. Read to learn about topics of interest; read articles and essays for discussion; read for research; read and interpret creative works.
Expression	Effectively write persuasive, explanatory and narrative texts for various purposes and audiences. Use an effective writing process to reflect, persuade, explain, inform, plan, etc. Summarize and analyze articles, literature, poetry, etc. Practice creative and artistic writing and other means of expression.
Research and Inquiry	Gather accurate and relevant resources from varied media. Engage in inquiry/research to analyze, investigate, integrate and present information. Conduct research to address questions and problems of interest in various contexts; use and cite primary and secondary sources to gather and synthesize information and to create and communicate new knowledge.
Presentation and Feedback	Present and defend work in various contexts. Receive, incorporate, think critically about, and respond to outside feedback and ideas. Practice varied forms of public speaking, public displays and defenses of work, meeting and seminar facilitation, teaching, etc.
Multimedia Literacy	Effectively use technology to acquire, evaluate, produce and present information. Develop fluency in multiple communications media; choose and implement effective media for purpose, audience, and context.

Quantitative Reasoning (QR)

"How do I measure, compare, or represent it?"
This goal is to think like a mathematician: to understand numbers, to analyze uncertainty, to comprehend the properties of shapes, and to study how things change over time.

Questions to develop your project:

- How can I use numbers to evaluate my hypothesis?
- What numerical information can I collect about this?
- Can I estimate this quantity?
- How can I represent this information as a table, graph, and/or formula?
- How can I interpret this formula or graph?
- How can I measure its shape or structure?
- What trends do I see? How does this change over time?
- What predictions can I make?
- Can I show a correlation?

Fluency and Computation	Demonstrate fluency in the language and symbols of mathematics and the ability to perform basic calculations and operations related to the application of mathematics or statistics.
Logical Reasoning	Use stated assumptions, definitions, and previously established results to construct and support arguments. Use deductive reasoning and proofs to test conjectures and develop logical conclusions. Use computation, estimation, and mathematical properties to solve problems; estimate and check the reasonableness of results, including those obtained by technology.
Problem Solving	Formulate and represent mathematical problems and solutions using both convergent and divergent reasoning. Formulate and understand mathematical problems; select or generate relevant information; use mathematical concepts, models, and representations; choose appropriate strategies and tools to devise solutions; evaluate processes, strategies, calculations, and solutions to verify reasonableness; explore alternative approaches, extensions, and generalizations; represent and communicate processes, solutions, ideas, and conclusions; use appropriate mathematical technologies, terminology, symbols, and notation. Represent and solve problems with two- and three-dimensional geometric models; measure directly and indirectly using geometry and right-angle trigonometry.
Modeling and Analyzing Data	Create and interpret visual displays of quantitative information such as bar graphs, line graphs, pie charts, pictographs, and tables. Use appropriate models to make predictions, analyze relationships and draw inferences from data. Understand and apply concepts of probability; collect, organize, and display data using charts, tables and graphs, and also use these to draw inferences, make predictions, and solve problems; develop and evaluate inferences and predictions based on data; design, conduct, and critique statistical experiments, simulations, or surveys.

Empirical Reasoning (ER)

"How do I prove it?"
This goal is to think like a scientist: to use empirical evidence and a logical process to make decisions and to evaluate hypotheses. It does not reflect specific science content material, but instead can incorporate ideas from physics to sociology to art theory.

Questions to develop your project:

- What idea do I want to test (essential question)?
- What has other research shown?
- What is my hypothesis?
- How can I test it?
- What information (data) do I need to collect?
- How will I collect the information?
- What will I use as a control in my research?
- How good is my information?
- What are the results of my research?
- What conclusions can I draw from my research?
- How will I present my results?

Fluency and Research Fundamentals	Develop fluency with the scientific method and principles of research, such as logic, precision, open-mindedness, objectivity, skepticism, replicability, and honesty. Critically evaluate and cite scientific sources.
Design and conduct scientific inquiry	Determine scope and focus of inquiry; form questions and hypotheses involving scientific relationships; design investigations using appropriate methodology and tools to address questions and test hypotheses; collect and present data; analyze data, reflect on results, and develop reasoned conclusions.
Understand, use, and investigate a field of science	Understand and correctly apply essential concepts of a particular field of science; investigate, through research and inquiry, important principles, theories, and relationships from a field of science.
Analyze scientific knowledge, theories, and research	Analyze scientific theories and arguments to understand the nature of scientific knowledge and the context in which it develops; evaluate the scientific, social, and ethical implications of scientific research and writings.

Social Reasoning (SR)

"What are other people's perspectives on this?"
This goal is to think like a sociologist, historian, or anthropologist and to apply an understanding of historical patterns to thinking about current political, social, ethical, economic, and cultural issues.

Questions to develop your project:

- How do diverse communities view this?
- How does this issue affect different communities?
- Who cares about this? To whom is it important?
- What is the history of this? How has this issue changed over time?
- Who benefits and who is harmed through this issue?
- What do people believe about this?
- What social systems are in place around this?
- What are the ethical questions behind this?
- What do I think should be done about this?
- What can I do?

Critical Analysis	Reflect on past and current events; analyze cause and effect; understand implications of policy and change over time; distinguish fact from opinion. Define and analyze past and current events of social significance; analyze causes and effects of local and international events and issues; interpret and propose solutions using supportable data and defensible criteria.
Diverse Perspectives	Use primary and secondary sources; develop empathy and understand bias. Examine social influences, beliefs, and behavior across diverse communities and contexts.
People, Places, and Environment	Understand processes of cultural interaction such as migration, assimilation, conflict and cooperation within the context of environment, resources, and climate. Use and apply geographic information to interpret events and relationships in history; analyze interrelationships among the characteristics of places and the various forces (e.g. social, cultural, etc.) that shape them; understand processes of cultural distribution, migration, assimilation, conflict, etc.; reflect on the interaction and interdependence of physical and human systems.
Human Behavior and Expression	Examine social and cultural dynamics and their effects on individuals. Examine creative expression through the lens of art, literature, music, architecture, etc. Analyze issues of ethics and social responsibility. Examine social influences, beliefs, and behavior; examine and reflect on cultural and group dynamics and effects on individuals.
Institutions and Systems	Understand major political and social systems and structures and their effects on individuals and society. Think critically about individual rights and responsibilities within these systems. Understand the principles, structures, and functions of government in the United States and the rights and responsibilities of citizens.