

## What Do You Want Your Students To Be Doing 20 Years From Now?

<http://tomprofblog.mit.edu/?p=342>

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What does it mean to be literate? Different disciplines appear to require their own definition of literacy. Scientific literacy, mathematical literacy, computer literacy, cultural literacy, and music literacy are just a few of its many forms. Literacy certainly varies from one discipline to another, or does it?

### **Is literacy an understanding of skills and knowledge required to function in the adult world?**

Long ago, young children played beside their parents. They watched adults tending crops, making arrows, governing the community, or completing other tasks. Through play and daily observations, children learned about adult roles. Adults who learned to fill these roles were probably considered literate in their societies. The roles they had to fill were those of lifelong learners, productive workers, active citizens, and able mentors, parents, and role models for the next generation.

Today, children amass large quantities of isolated skills and knowledge with the hope they will be able apply these when they become adults. They learn to a large extent in the absence of viewing adults participating in more than one or two roles.

Are today's children any more literate and prepared to face the challenges of adult roles than the children of the past? Do we equip the children of today with the skills and knowledge to be literate citizens of the 21st century?

### **What do you want your students to be doing 20 years from now?**

Over the course of more than thirty years, I have asked a wide variety of educators in the United States this question: What do you want the students you are teaching today to be doing 20 years from now? As I reviewed the answers, I began to see a pattern. The roles educators envision for their students are similar to those of the past; that is, lifelong learners, productive workers, active citizens, and able mentors.

People who fill these roles need the basic skills of reading, writing, mathematics, understanding scientific proof, and working with people. In addition, they must know how to learn, solve problems, make informed decisions, and support the learning of others. Appendix A includes a summary of adult roles, and the products adults produce.

### **What types of products do adults produce?**

The products adults can produce seem endless. However, the products can be loosely grouped by adult roles.

#### Products of Lifelong Learners

- \* Reasonable, clear, and accurate explanations
- \* Strong models of natural and social worlds
- \* Scientific tests of hypotheses or claims of truth
- \* Reflections on personal learning methods

Products requiring explanations might take the form of a multimedia presentation, a poster, a song, a newspaper, a physical or mathematical model, an advertisement, or any of the hundreds of ways people explain who, what, when, why, and how to others. The products may include speaking a different language, or diaries or photo journals of places visited. Products of scientifically conducted tests of hypotheses or claims of truth typically include reports or demonstrations of the tests. The products of reflection are series of steps students have used in order to learn. Reflections on how one learns allow improvement and modification of the steps to learn new and ever more complex information.

#### Products of Effective Workers

- \* Solutions to problems based on a solid understanding of factual information
- \* Positive interactions with others
- \* Reflections on personal problem-solving methods

Products of effective workers are solutions to problems. These might be mathematical solutions, scale models or drawings of solutions, and process solutions. The problems may be solved by individuals or more likely, by interactions with others. No matter how students arrive at solutions, they should provide accurate factual information as proof of the efficacy of the solution. As with all reflective products, students must identify the steps they use to solve problems. Personal reflections allow students to internalize the steps they use to solve problems and to improve their skills, as they are challenged by new problems.

#### Products of Active Citizens

- \* Logical informed decisions based on valid and reliable information
- \* Appropriate actions based on informed decisions considering the beliefs and values of others
- \* Reflections on personal decision-making and citizenship methods

Products of decision-making are decisions with supporting facts and logical reasoning. Active community citizens and productive workers produce logical informed decisions. The decision-making products might be a debate, a letter to the editor, a position paper, a multimedia presentation, or an informed vote. Like problem-solving products, decision-making products should be supported by factual information acquired by scientific testing, researching primary source documents, and reviewing the positions of others. Reflections on the steps used to make decisions are the most important products for internalizing decision-making processes.

#### Products of a Good Mentor/Parent

- \* A literate populace within one's sphere of influence
- \* A self-confident populace within one's sphere of influence
- \* Reflections on interpersonal relationships, personal teaching and mentoring methods

The person affected in some way by the mentor/parent becomes the product. That person comes away with knowledge, skills, and attitudes supplied by the mentor. Students and adults, who teach others, take leadership roles, and share in responsibilities for completing tasks are mentors. The people they influence are the product of this mentorship. Reflections on the steps involving mentoring, like all reflective products, are important for the continuing development of the mentor.

#### **How much class time should be spent producing products?**

The time spent in class producing these products should vary with the sophistication of the students. Novice students should be able to produce a complete product within one class period or even less. If an activity extends over long periods of time, the novice fails to internalize the steps they use to complete a particular type of task. As students become more proficient they should be able to produce products over longer time frames, with some of the more proficient students working for a year or more on a particular product.

### **How does high-stakes testing affect an educator's choice of activities?**

An educator must find activities or projects that are linked to the knowledge-based standards, as well as skill-based standards. A teacher ignoring this vital link may produce highly motivated students, with a great depth of knowledge in an area that is not tested. A teacher focusing entirely on test preparation activities may produce students who pass the test, but carry nothing with them for the future. See Appendix B for a method of reviewing classroom emphasis by product.

### **In Conclusion**

Literacy beyond reading, writing, and basic mathematics requires the acquisition of knowledge and skills that support lifelong learning, problem solving, decision making, and mentoring. While teachers are compelled to teach the wide variety of knowledge and skills required by state standards, they cannot forget that their students will need to function in the adult world. Classroom activities matching state standards must reflect the major roles of adults, which are, the roles of lifelong learners, productive workers, active citizens and able mentors. The skills required to fill adult roles create the type of literacy that prepares students for the adult world.

### **Appendix A**

Literacy: The Goal of Education

What are literate people? What do literate people do? What products do literate people produce?

Lifelong Learners

- \* Explore subjects in depth
- \* Consolidate learning
- \* Inquire scientifically
- \* Develop insights about the nature of learning
- \* Reasonable, clear, and accurate explanations
- \* Models of the natural and social, and abstract and concrete world
- \* Rigorous tests of hypotheses and claims
- \* Reflections on personal learning methods

Effective Workers

- \* Design solutions to problems
- \* Work with a wide diversity of people
- \* Develop insights about the nature of problem solving
- \* Workable solutions to problems based on a solid understanding of factual information

- \* Positive interactions with others
- \* Reflections on personal problem-solving methods

#### Active Citizens

- \* Make decisions
- \* Take positive action
- \* Develop insights about decision making and active citizenship
- \* Logical informed decisions based on reliable information
- \* Appropriate actions based on informed decisions considering the beliefs and values of others
- \* Reflections on personal decision- making and citizenship methods

#### Able Mentors and Parents

- \* Work with others
- \* Support the learning of others
- \* Support the use of habits of mind in others
- \* Develop insights about the nature of teaching
- \* A literate populace within ones sphere of influence
- \* A self-confident populace within ones sphere of influence
- \* Reflections on interpersonal relationships, personal teaching and mentoring methods