Positive Technological Development (PTD) Rubric

What is the PTD Rubric?

The Positive Technological Development (PTD) Rubric is based on the theoretical foundation of Positive Technological Development (PTD). The PTD framework guides the development, implementation and evaluation of educational programs that use new technologies to promote learning as an aspect of positive youth development. The PTD framework is a natural extension of the computer literacy and the technological fluency movements that have influenced the world of education but adds psychosocial and ethical components to the cognitive ones. From a theoretical perspective, PTD is an interdisciplinary approach that integrates ideas from the fields of computer-mediated communication, computer-supported collaborative learning, and the Constructionist theory of learning developed by Seymour Papert (1993),and views them in light of research in applied development science and positive youth development.

As a theoretical framework, PTD proposes six positive behaviors (six C's) that should be supported by educational programs that use new technologies and innovations, such as the Eliot- Pearson Maker Space. These behaviors are: communication, collaboration, community building, content creation, creativity, and choice of conduct.

This is a rubric to evaluate a child's expression of behaviors of Positive Technological Development (PTD). This rubric reflects child's behaviors over the course of a single lesson period and is designed to be completed by either the teacher or an observer for multiple children at one time. More information about PTD can be found in Marina Umaschi Bers' book.

Designing Digital Experiences for Positive Youth Development: From Playpen to Playground (Bers, 2012) and *Coding as a Playground: Programming and Computational Thinking in the Early Childhood Classroom* (Bers, 2018).

Instructions:

Complete one rubric per child per session. Select the option that reflects the child's behavior over the course of the session. If a question is not applicable, mark the behavior as absent.

Citations:

This rubric is a revised version of the PTD Checklist. When citing this rubric, please cite the following:

Bers, M., Doyle-Lynch, A., & Chau, C. (2012). Positive technological development: The multifaceted nature of youth technology use toward improving self and society. In C. C. Ching & B. J. Foley (Eds.), *Constructing the self in a digital world* (pp. 110–136). Cambridge University Press. https://doi.org/10.1017/CBO9781139027656.007

Levinson, T. (2022). Quantifying the Coding Playground: A Pilot Study Creating and Attempting to Validate a Rubric for Positive Technological Development. (Masters Theses)

Strawhacker, A., & Bers, M. U. (2018). Promoting Positive Technological Development in a Kindergarten Makerspace: A Qualitative Case Study. *European Journal of STEM Education*, *3*(3). https://doi.org/10.20897/ejsteme/3869

Positive Technological Development (PTD) Rubric

Child _____ Date _____ Lesson _____

Classroom _____ Observer _____ Study _____

	Definition	0	1	2	3	4
 **Collaboration**	The act of working together towards a shared goal during technology-related activities	Always works on individual projects and alone	Works on individual projects but works alongside other children.	Works on individual project while asking, giving, and receiving technical help.	Works on individual project while asking, giving, and receiving help regarding ideas.	Works with another student on shared project.
 **Communication**	the act of initiating and participating in conversations during technology-related activities	Never participates in conversations with others and is not engaged	Listens to conversations without active engagement	Participates in conversations when directly prompted (i.e. answering yes/no questions)	Sometimes actively engages in group conversations.	Always actively engages in group conversations, including speaking and listening.
 **Content Creation**	the act of making purposeful and original technology-related projects	Does not create projects	Creates projects by directly copying examples or other projects	Creates projects that are modified copies of examples or other projects	Creates original projects using copied elemtents from other projects	Creates original and purposeful projects
 **Community Building**	the act of taking actions to strengthen and promote group cohesion and comradery during technology-related activities	Always works alone without talking to others.	Takes part in some group activities when prompted, less than half the time.	When invited, takes part in group activities more than half the time, but takes part in group activities unprompted less than half the time.	Always engages in group activities including taking some steps to engage others, but will suggest ideas for group activities only when prompted	Always actively engages in group activities, and and suggests ideas for group activities without prompting.
Creativity	the act of participating in technology-related activities in new and original ways	Does not create projects and/or only creates replicas of existing or example projects	Creates new projects that directly follow prompts	Creates new projects by combining existing projects.	Sometimes uses tools, elements, or materials in new or unprescribed ways	Consistently uses tools, elements, or materials in new or unprescribed ways
 **Choices of Conduct**	the act of behaving during technology-related activities in ways that promote a respectful, fair, and positive environment	Acts in unsafe, disrespectful, unkind ways. Never follows class rules.	Follows class rules less than half the time.	Generally follows class rules more than half the time, but if facing conflict, follows class rules less than half the time.	Even when facing conflict, follows class rules more than half the time.	Always makes safe, kind, and respectful choices without adult prompting