**Flex IT Academy Curriculum and Strategies**

Flex It Academy uses Project Based Learning (PBL) to engage students in learning. A project is meaningful if it fulfills two criteria. First, students must perceive the work as personally meaningful, as a task that matters and that they want to do well. Second, a meaningful project fulfills an educational purpose. Well-designed and well-implemented project-based learning is meaningful in both ways. Students work on a project over an extended period of time – from a week up to a semester – that engages them in solving a real-world problem or answering a complex question. They demonstrate their knowledge and skills by developing a public product or presentation for a real audience.

The PBL model:

* Is organized around an open-ended driving question or challenge
* Integrates essential abstract academic content and skills into the project development
* Requires inquiry to learn or create something new
* Requires critical thinking, problem-solving, collaboration, and communication (a group often called "21st-century skills")
* Allows student voice and choice
* Incorporates feedback and revision
* Results in a presentation of the problem definition, process, and final project

Benefits of PBL is that school can, at times, seem boring to many learners; PBL counters this reaction by actively engaging students and encouraging their creativity. The experience of questioning, making mistakes, and pursuing inquiries in an organized, guided process makes PBL different from traditional teaching methods. Students become more receptive to challenges and are more open to looking at mistakes as positive things as opposed to negative ones.

PBL is an effective teaching method. An [analysis](http://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1046&context=ijpbl) conducted by [Purdue University](https://www.noodle.com/colleges/coN4/purdue-university-main-campus) found that PBL can increase long-term retention of [learning material](https://www.noodle.com/learn) and improve teachers' and students' attitudes toward learning. One explanation that researchers suggest is that both educators and learners are more actively engaged with the subject material.

**STEM Education**

The acronym STEM stands for Science, Technology, Engineering, and Mathematics. This program was started by [Judith A. Ramaley](http://en.wikipedia.org/wiki/Judith_A._Ramaley), the former director of the National Science Foundation’s education and human-resources division. This approach to education is designed to revolutionize the teaching of subject areas such as mathematics and science by incorporating technology and engineering into regular curriculum that is driven by problem-solving, discovery, exploratory learning, and require students to actively engage a situation in order to find its solution.

The four parts of STEM have been taught separately and most of the time independent from each other for years. By adopting the STEM philosophy Science, Technology, Engineering, and Mathematics all play an integral part in the teaching of the whole. The science, engineering, and mathematics fields are made complete by the technology component that provides a creative and innovative way to problem solve and apply what has been learned. All students benefit from the STEM program because it teaches independent innovation and allows students to explore greater depths of all of the subjects by utilizing the skills learned; these skills are going to be required in order for today’s students to be tomorrow’s global leaders. All jobs are requiring workers to have a greater ability to think critically, work as a member of a team and independently, and close the performance gap between our American students and those being produced in other countries.

## Curriculum

Flex It Academy uses individualized curriculums that are intuitive and meets the student’s academic level and needs. The programs find and fix learning gaps with the power of personalized learning. The adaptive curriculum creates an individualized education plan for each student, allowing gifted students to progress as quickly as they like while simultaneously ensuring that students get the extra instruction they need.

## Formative assessment drives good instruction; Flex IT Academy uses continuous progress monitoring that allows us to monitor student progress in real time so that we know exactly how each student is doing.

## Learning Ally

Learning Ally is the world’s largest provider of audio textbooks and literature that empowers students who read and learn differently, so that they may thrive. It helps them to overcome obstacles and discover strengths, as Flex It Academy guides them along a path that ensures success.  [Learning Ally results](http://www.learningally.org/Portals/6/Research_CaseStudy_4.pdf) show improvements in vocabulary skills, reading fluency, comprehension of grade-level reading materials, and more student engagement in the classroom.

\*From Learning Ally’s 2016 Survey of Educators:

* 90% of teachers agree that Learning Ally helps students develop or reinforce skills needed for reading.
* 83% agree students that use Learning Ally are able to comprehend assigned grade-level reading materials.
* 77% agree students that use Learning Ally show improvement in vocabulary skills.
* 79% agree that Learning Ally is a critical part of an overall solution that helps students stay engaged in school

Learning Ally generates lasting impact that helps students stay engaged!