Directed Studies or (LEAP—Learning through Authentic Pathways) is an innovative high school class that rethinks the traditional classroom providing students the opportunity to create courses based on their interests and aptitudes.

We selected students who we thought were organized and self-motivated, yet not necessarily the best students (in the traditional sense). Students were asked to create classes based on their interests and passions. From there they chose the logical elective credits that either best matched their area of study or were credits they wished to receive in general.

The two co-teachers, Kami Kronbauer and Jennifer Koth, created the frameworks and “skeleton” for each group or individual course. From there the students complete weekly goal sheets and reflections on their learning, master the standards for the courses they chose and can apply their learning to those standards in a deeply meaningful way.

Students have three interim content checks where they have to align all their research and coursework under the standards and show their progress toward their credit goal. At the end of the trimester, students complete an exhibition in front of a panel of educators and guests to demonstrate their learning and show they have met the attempted standards to receive credit.

To illustrate, we have two students (a sophomore and senior) who wanted to build a siege engine for a .5 engineering credit and research medieval history for a .5 social studies credit and present their findings in a written and oral form to earn a .5 language arts credit. Students began by engineering a small scale catapult using pencils, rubber bands and paper clips. They took measurements on the distance of projectile motion then made adjustments to improve their distance. Once satisfied, they used the video game, Mine Craft to scale their catapult then began creating a scale catapult in shop. In the meantime, they researched where such a catapult would have been used in Medieval Times, found a castle that matched and began their in-depth research into the history, civics and economics surrounding that time frame and that castle, specifically. Their next task was to engineer the castle out of cardboard bricks and test the trajectory of their siege engine, redesigning and readjusting as necessary. Their final exhibition defended and explained their engineering, the history behind castles, the feudal system and siege engines of the time as well as the language arts research to the level of standard deemed applicable by the panel.