

# SAINT LOUIS **BALLET**

## FROM CLASSROOM TO STUDIO - ACADEMICS & DANCE

Ballet helps students to do well at school! As you've seen earlier in this booklet, ballet relates to literature, history, and geography, but also math and science. These students at Saint Louis Ballet School show you how.



### **Structure and Syllabus:**

Beginners like Arelle and advanced students like Ruth begin every class with *plie* at the *barre*. The repetitive structure of class allows the dancer's brain to develop other skills, such as coordination, memorization and focus.



**Mathematics:** Even five-year old students (in pink) can learn to count their steps through music and rhythm. In this way, students start to understand division, fractions, and more.



Geometry is also relevant in ballet. Notice how they practice standing in a formation – a straight line – as they prepare for their upcoming performance. Isabel (in red) uses her sense of shapes to create the illusion of length. She makes a long line from her fingers to her toes.



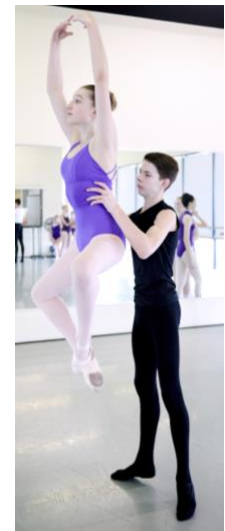
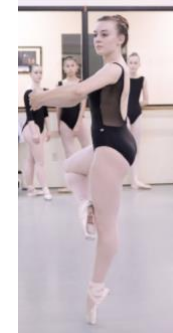
### **Physics and Ballet:**

Did you know? Lifts are not only about strong muscles. It requires balance, coordination, and momentum. See Rebecca & Owen (far right).

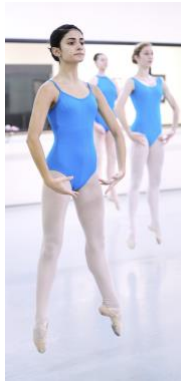
Is this lift easier if she leans forward, or back? Why?



Leena (far left) learns about opposing forces – heel pushing forward, knee pulling back – while Kendell (right) uses this to practice a *pirouette* (to spin). Does she feel centripetal force, centrifugal force, or both?



Olivia (right) defies gravity in a *sauté*, or jump, not by lifting up, but by pushing the floor away with her legs & feet.



Sydney must stand only on her back foot to launch herself forward. If she stood on two feet, she would feel stuck in place!