

**Blended learning (BL) definition:** BL is defined as the thoughtful integration of face-to-face and online learning experiences (Garrison & Kanuka, 2004).

The **Lab Rotation** model allows students to rotate through stations on a fixed schedule. This model allows for flexible scheduling arrangements with teachers and other paraprofessionals, and enables schools to make use of existing computer labs (Christensen Institute, 2021).

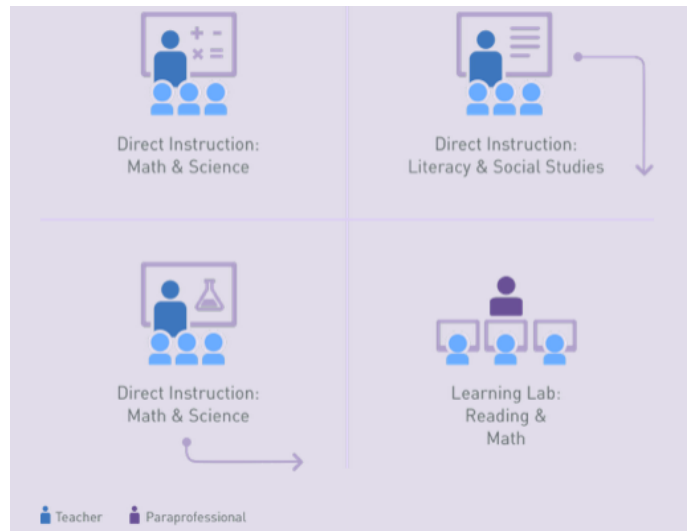


Figure 1: The lab rotation model. Reprinted from Blended learning universe, by Christensen Institute. Retrieved from <https://www.blendedlearning.org/models/#lab>

The **Flipped Classroom** model flips the traditional relationship between class time and homework. Students learn at home via online coursework and lectures, and teachers use class time for teacher-guided practice or projects. This model enables professors to use the class time for more than delivering traditional lectures (Christensen Institute, 2021).

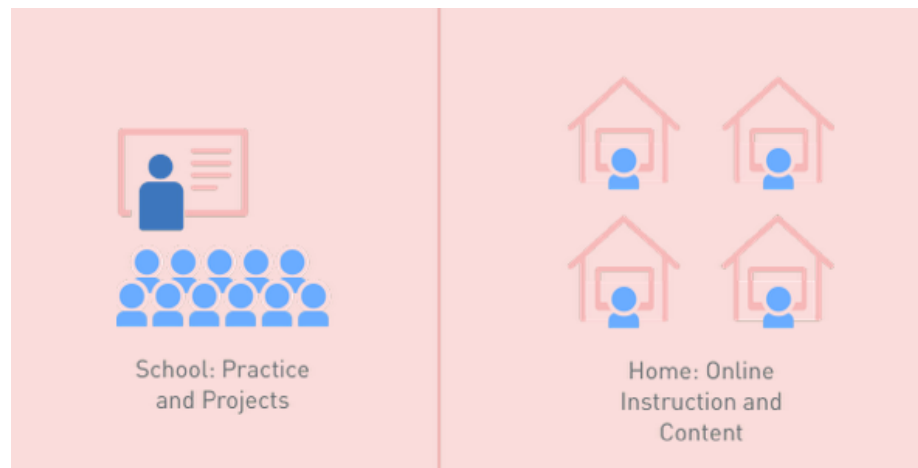


Figure 2: The flipped model. Reprinted from Blended learning universe, by Christensen Institute. Retrieved from <https://www.blendedlearning.org/models/#flip>

The **Flex model** lets students move on fluid schedules among learning activities according to their needs. Online learning is the backbone of student learning in a Flex model. Teachers provide support and instruction on a flexible, as-needed basis while students work through course curriculum and content. Students spend their in-class time engaged in collaborative projects like a writer’s workshop or Socratic discussions. This model can give students a high degree of control over their learning (Christensen Institute, 2021).

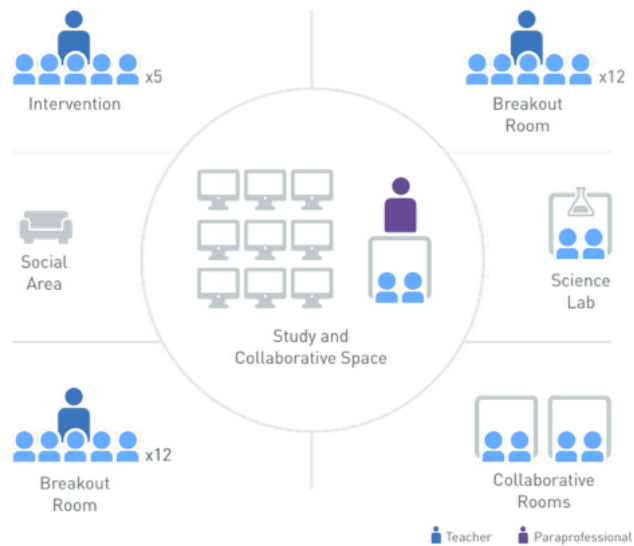


Figure 3: The flex model. Reprinted from Blended learning universe, by Christensen Institute. Retrieved from <https://www.blendedlearning.org/models/#ind>

The **Enriched Virtual** model is an alternative to full-time online school that allows students to complete the majority of coursework online at home or outside of school, but attend school for required face-to-face learning sessions with a professor. Unlike the Flipped Classroom, Enriched Virtual programs usually don’t require daily school attendance; some programs may only require twice-weekly attendance, for

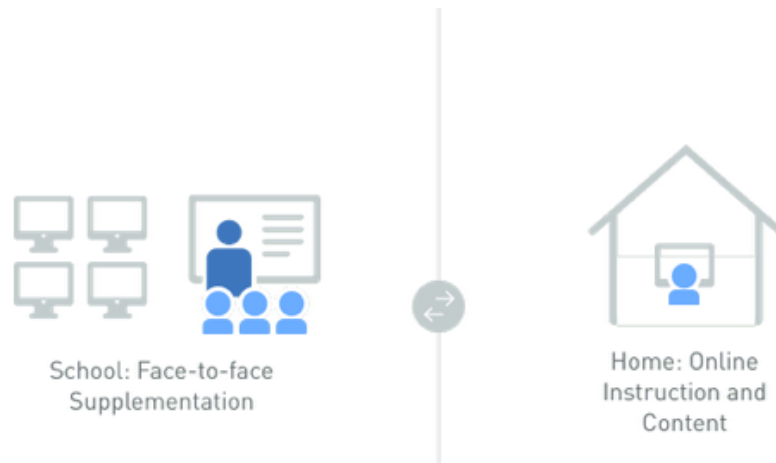


Figure 4: The enriched virtual model. Reprinted from Blended learning universe, by Christensen Institute. Retrieved from <https://www.blendedlearning.org/models/#enrich>

example. **Note:**  
The Master of  
Health Services  
Management  
program uses this  
model. This model  
is good for larger  
classes in which  
smaller groups of  
the class meet  
face-to-face rather  
than the entire  
class at any given  
time.

### **Blended Learning Types**

**Low-impact blend** - adding extra online activities.

**Medium-impact blend** – replacing face-to-face activities with online activities.

**High-impact blend** – building from scratch.

### **Examples of Blended Learning Courses**

#### [University of Lethbridge](#)

##### **Undergraduate mathematics course (Flipped Classroom)**

Pre-recorded lectures have replaced traditional face-to-face lectures. Homework assignments and homework practice are completed online. Discussion and problem-solving are completed in the classroom. Instructor: Sean Fitzpatrick, Teaching Associate Mathematics & Computer Science Arts & Science

#### [University of Waterloo](#)

##### **Preparing to work in the lab: OPTOM 245L (Diseases of the Eye 1 Laboratory)**

Pre-lab lectures have been replaced by online presentations of ocular examination procedures that students perform in the lab. Students prepare for the lab by completing online modules and are assessed on their level of preparedness through online quizzes. Many science courses are now using instructional presentations and videos to prepare students for lab experiences. Instructor: [Michelle Steenbakkers-Woolley](#)

##### **Enabling group work in class: PSYCH 340 (Training and Development)**

Class time is used for hands-on, authentic group learning activities while foundational course concepts are presented online through recorded lectures (slides with narration). The in-class learning activities help students practice the actual development of training materials and teaching methods, and reinforce the foundational course concepts that students encounter in the online presentations. Students' understanding of course concepts is assessed through weekly online quizzes. Instructor: [John Michela](#)  
\*See an example of John Michela's narrated slides on the topic of "[Development and Implementation of Training.](#)"

##### **Incorporating hands-on activities into class: GENE 121 (Digital Computation)**

In this first-year programming course given to Mechatronics and Mechanical engineering students, four hours of traditional lectures have been replaced with a series of short, online, mini-lectures that deliver the basic information needed to code programs. The students' comprehension of the mini-lectures is assessed in LEARN by online quizzes and class time is used for hands-on coding problems. Instructor: Carol Hulls

\*See also this YouTube video in which Carol Hulls explains how blended learning is achieved in this course.

To see more blended learning course examples visit: [University of Waterloo](#)

## References

### References

Alammary, A., Sheard, J., Carbone, A. (2014). Blended learning in higher education: Three different design approaches. *Australasian Journal of Educational Technology*, 30(4).  
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Some examples of blended courses (n.d.). <https://uwaterloo.ca/centre-for-teaching-excellence/resources/blended-learning/some-examples-blended-courses>