

Column - Teaching, Research, and Media in Kinesiology

The Sports Media's online peer-reviewed international research and practice in Kinesiology journal

23 March 2013



"Flipping" in P.E. ... turn P.E. upside down!

Indexed as an entry from our Journal's "Practitioner's Notes" subsection

Guy Van Damme – retired P.E. teacher and mentor – co-Editor-in-Chief, The Column - Teaching, Research, and Media in Kinesiology – Sports Media

Daniel Frankl, Ph.D., Professor - School of Kinesiology and Nutritional Science - California State University, Los Angeles - Editor-in-Chief, The Column - Teaching, Research, and Media in Kinesiology – Sports Media

Flipped instruction or "Flipping the classroom"?

The premise of a flipped classroom is simple. Instead of lecturing in class and giving homework at home, flip it; give the lectures at home, and do the homework in class. In a typical classroom, teachers provide information on the basics and then send students home with homework assignments. For example, in a classroom with one teacher and 30 students, there is little time for reinforcement, inquiry, and depth. Flipped learning, on the other hand, has the individual student learn the basics at home via the use of instructional technology. Upon her or his return to class, each student is then better prepared to further explore the topic at hand and the teacher can use precious class time more effectively by providing specific feedback, clarifications, and reinforcement. Thus, the conventional rote memorization for a test gives way to critical thinking.

A useful - pedagogical - model?

"Flipping" certainly has *value*, but it all depends on *how*, *why*, and *for what* it is implemented.

For additional information, watch the following [Youtube video](#)

1. How is flipping implemented?

- To properly implement the model, a teacher must possess the following instructional savvy: *pedagogical knowledge*, *professional knowledge* and *ICT knowledge*.
- How does one go about the selection process of the most *appropriate technology* to support / stimulate and motivate the learner?



*Flipped teaching is a great example of using technology **with intention***

Examples of technology may be used effectively to generate flipped content includes but is not limited to *software* such as: wikis, blogs, podcasts, content management systems ([WebCT](#), Joomla, Moodle), online video instruction, DVDs of lessons, cloud computing, interactive whiteboards, the Internet, PowerPoint slides, etc ... And, *hardware*, such as: Desktops, laptops, tablets, smart phones, etc.

- Two important prerequisites are: the *pedagogical approach* and the *educational context*.
- Note that flipping the classroom is not all about technology and videos; it is about what one *really "learns."*

Still, in its current developmental phase, the use of videos is the most common technology for the application of *flip teaching* in Physical Education settings.

As is the case with movement, moving images (videos) are inherent to physical education!

2. *Benefits to apply this model in P.E.:*

- better use of teaching time: more class time can be used for more P.E. activities (topics can be covered in more depth)
- allow students to work at their own space, time, and pace
 - Thus, students may pause, fast forward, or replay the information as often as they wish in order to understand it.
 - The ability to experience the process of trial and error with privacy could promote student comfort by decreasing levels of classroom anxiety and increasing intrinsic motivation
- A flipped classroom places *responsibility on the learner*.

3. *Some possible applications of "flipping" modules in Physical Education settings:*

- mastery of game rules
- familiarization and practice with heart rate monitors, handheld GPS (geocaching), etc ...
- Familiarization with discipline related terms, such as, VO2max, muscular endurance, BMI, Heart-Rate Reserve, etc.,
- demonstrations of correct movements and skills
- demonstrations of teaching progressions, and spotting techniques (e.g., the hand spring)
- review and prepare for tests
- personal fitness tests
- etc... etc...

Useful videos for "Flip" Education modules are available at the [Sport-Media Site](#)



A Concrete example for "Flip" Education in volleyball:

Proposed technology to be used:

- Wikipedia (free access),
- Youtube (free access),
- Content Management System (Joomla or Moodle) - (free access)

The students: Thirty middle school 7th graders

Students will be instructed to get acquainted with:

- volleyball game rules
- get familiar with the different volleyball techniques:
 - underhand serve,
 - bumping,
 - setting

The following sources will be used:

- Game Rules
 - Source: [Wikipedia](#)
- Volleyball Techniques/Skills:
 - [The Underhand Serve](#)
 - [Bumping/digging](#)
 - [Setting](#)

Where will students find the above sources?

For this purpose, a CMS was constructed (eg [Joomla](#) - [Moodle](#)) with the following root directories:

Class structure (1 folder per class) and each class folder is sub-divided by activity (athletics, basketball, handball, gymnastics, volleyball, swimming, etc ...), testing, class appointments, etc ...

For example: **Class 1A**

- Class Appointments
- Testing
- Athletics
- Basketball
- Volleyball:
 - Rules
 - Techniques

The source of the *game rules* is posted in the folder *volleyball / rules*

Videos demonstrating *techniques* are posted in the folder *volleyball / techniques*

The "Flipped Classroom" starts with one question: what is the best use of my face-to-face class time? ([Jonathan Bergmann](#))

