Improving Attainment and Progress through Flipped learning in Physical Education

Kerry Shoebridge, Shireland Collegiate Academy

Overview

Project Aims

- To improve students’ attainment within PE GCSE theory lessons
- To improve the quality of independent learning
- To create some exciting and engaging flipped resources that can be embedded into the GCSE theory planning for the department.

Rationale

- The project came about after the PE department highlighted an aspect of the GCSE course that could be enhanced further for our students when it came to the exam. After performing incredibly well practically, the theory side and in particular the examination preparation was not allowing our students to reach their full potential
- We are trying to challenge this issue in a variety of ways and believe that flipped learning enhances students’ attainment and ability to gain the higher order thinking through innovative and independent flipped activities.

Project Outline

- Develop the pedagogy for Physical Education theory lessons by incorporating flipped learning, delivered through the class site. The class site is the learning platform that our students have access to on any device
- Create innovative resources.
Impact

The following information outlines some of the benefits gained from adding flipped activities to the GCSE physical education group.

- Improvement in end of topic test results. The students took part in an end of topic test before flipped activities were introduced and another when they had been using them for a few weeks. The results for the second test were considerably better than the ones before. This could be due to the content of topic itself however I strongly believe the use of flipped activities had a positive role within the lesson.

<table>
<thead>
<tr>
<th>Target Grade</th>
<th>First Topic</th>
<th>Second Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. 1. 4 ALS</td>
<td>1. 1. 3 KSE</td>
</tr>
<tr>
<td>Progress 8 + 1</td>
<td>Mark 48</td>
<td>%</td>
</tr>
<tr>
<td>Student 1</td>
<td>A</td>
<td>31</td>
</tr>
<tr>
<td>Student 2</td>
<td>A</td>
<td>34</td>
</tr>
<tr>
<td>Student 3</td>
<td>A</td>
<td>21</td>
</tr>
<tr>
<td>Student 4</td>
<td>A</td>
<td>29</td>
</tr>
<tr>
<td>Student 5</td>
<td>A</td>
<td>18</td>
</tr>
<tr>
<td>Student 6</td>
<td>A</td>
<td>35</td>
</tr>
<tr>
<td>Student 7</td>
<td>A</td>
<td>21</td>
</tr>
<tr>
<td>Student 8</td>
<td>A</td>
<td>25</td>
</tr>
<tr>
<td>Student 9</td>
<td>A</td>
<td>22</td>
</tr>
<tr>
<td>Student 10</td>
<td>A</td>
<td>25</td>
</tr>
<tr>
<td>Student 11</td>
<td>A</td>
<td>21</td>
</tr>
<tr>
<td>Student 12</td>
<td>A</td>
<td>29</td>
</tr>
<tr>
<td>Student 13</td>
<td>A</td>
<td>34</td>
</tr>
<tr>
<td>Student 14</td>
<td>A*</td>
<td>32</td>
</tr>
<tr>
<td>Student 15</td>
<td>A*</td>
<td>20</td>
</tr>
<tr>
<td>Student 16</td>
<td>A*</td>
<td>32</td>
</tr>
<tr>
<td>Student 17</td>
<td>A*</td>
<td>28</td>
</tr>
<tr>
<td>Student 18</td>
<td>A*</td>
<td>32</td>
</tr>
<tr>
<td>Student 19</td>
<td>A*</td>
<td>31</td>
</tr>
</tbody>
</table>

- There was a clear difference between the engagement of the female members of the group to the male members of the group. The female students really engaged in the flipped activities which was evident from the results.

- Increased levels in engagement in class. Activities within the lessons were designed around the work completed away from class and examination questions and techniques.
• Enhanced and effective use of the class site. Students can see a value to the use of the class site, not only for the flipped activities but for information regarding the practical lessons, assessments and focus days.

• A greater understanding of examination techniques. Students have more time within lessons to complete exam questions, look at the mark scheme for each question and gain an understanding of various exam techniques.

• Improved differentiation activities within the lessons.

Students Comments

“I like the different activities that miss plans for us. They are very personal to what I need to learn.” Year 10 Student.

“I like being able to find all the information for our lessons and homework on the class site.” Year 10 Student.

“I always look forward to my PE lesson.” Year 10 Student.

Teacher Comments

“Flipped learning has changed the way I plan my lessons entirely. I can spend more time creating differentiated tasks that are focused on examination techniques and embedding a deeper understanding on the subject.”

“Students engagement within the activities has been a dream. They really see a value in the activity that has been set and feel I care more about their learning by creating individualised activities.”

“It’s great to find or create different resources for each learning type.”
How to Flip

1. Understand what flipped learning is and how it is going to benefit you and the students. The students need to understand that they will be required to complete work prior to the start of a topic and that there will be no time to catch up with this information. There are many ways you can ‘flip’ a lesson, many of which can be found online.

   An example of this can be found at the following link.

2. Select a topic that you would like to try the flipped method with.

3. Produce a resource that you could use as a flipped activity. This can be completed with or without a learning platform.

### With Learning Platform

- Create a class site that all the students can access on a device of their choice.
- Use Pinterest, Twitter or another site to gain ideas of what you can flip.
- Use the class site to share the flipped activity with the class, giving a deadline for before your lesson.
- Watch for the responses and plan the next lesson around what you see.

### Without Learning Platform

- Create a worksheet for the students to take home. This will involve a new topic that you have not covered before.
- The students will complete the work away from the classroom.
- Within the planning of the next lesson, create differentiated tasks depending on the different levels of engagement.

4. Try the flip!

5. Adjust and plan your lesson to the observations you made from the flipped activity. What the students know, what they need to develop, how you can differentiate the tasks, etc.

6. Evaluate. See how the students feel.

7. Repeat stages with another activity. You will develop an understanding of what flipped activities work best for different groups. For example, you may find that what works for one group may not necessarily work for another.
Possible Resources required

- Laptop or workbook
- Access to a learning platform (class site) with adequate drop box facilities
- Access to the resources students will need to complete the work (textbooks, internet, podcast etc.)
- Access to resources or examples of flipped activities to help you on your way!

Benefits of Flipped Learning

- More efficient use of teacher’s time in the long run
- Students own their learning
- More time to concentrate on deeper understanding and examination questions
- Versatile and engaging way of learning
- Inexpensive for schools.

Challenges of Flipped Learning

- Can take time to adjust to the pedagogy. The students may take two or three lessons to understand what they are required to do with the flipped activity
- Students can take time to develop ownership of their own learning.

Additional resource

There is another toolkit on flipped learning in general, available at:

Appendix 1  An example

**Context:** Teaching year 10 GCSE physical education students the difference between aerobic and anaerobic fitness.

1. Use the announcement feature on the class site to post flipped activity

2. Create a discussion regarding the subject on the class site.
3. Students to respond to the task and make sure they do not repeat the same example for each type of fitness.

```
the difference between aerobic and anaerobic fitness is that aerobic fitness strengthens the heart and lungs, increasing the utilization of oxygen and anaerobic fitness is short duration at a high intensity. can last merely seconds tp up to 2 minutes.
examples of aerobic fitness sport are jogging, rowing, swimming and cycling.
examples of anaerobic fitness are sprinting 100m to 400m.
```

4. Teachers plan a differentiated task that students will use within the lesson that requires the students to understand what aerobic and anaerobic fitness is. This enables the teacher to spend more time on deeper understanding.