



Steps to Develop a Flipped Apparel Construction Course

Introduction

Apparel construction can be a challenging course to teach due to the various skill and learning levels of students, lengthy course goals and objectives, and the time allotted for college-level courses. The instructor must be highly prepared, skilled and extremely patient to teach several novice “seamstresses” the skills needed for success in the apparel construction course and required in future upper-level apparel design courses. The instructor must design a course that is well organized, efficient and focused on student learning and skill building.

Redesigning a traditional apparel construction course into a flipped classroom initially requires significant effort; however, the results are extremely beneficial to students and professors. Students currently enrolled in a college-level apparel construction and evaluation course are required to complete readings, review selected technique videos, and complete computer-graded learning activities or quizzes as homework. Graded activities and quizzes are included in final grades. This approach requires students to review assigned information more critically and once in class, the instructor can answer any questions and provide demonstrations of the construction technique(s) introduced in the previous homework. The flipped pedagogic approach incorporates active learning with technology while allowing critical class time for skill development and problem solving. While this does not eliminate the need for direct instructor to student instruction, it does increase the number of students that can more confidently move forward.

Procedure

The steps involved in developing a flipped apparel construction course are as follows:

1. **Organization of Course Content.** The instructor must design a course that is well organized. Creating and sharing a course schedule with students that list the daily learning objectives, related readings and videos, learning activities and homework to complete BEFORE attending class is invaluable. The course website or learning management system used such as Blackboard should mirror the course schedule.
2. **Set daily construction goals for learning specific techniques.** List 1-3 daily learning objectives on the course schedule for the students’ benefit. This alerts students of daily expectations and learning objectives.
3. **Develop or identify teaching videos.** Videos are great teaching tools because they demonstrate procedures/steps of construction to assist in mastery learning (Cavanagh and Peté, 2017). Assigned video(s) for review prior to class as an overview or preview of what they will learn and do during the next class period. Videos can be reviewed multiple times by students as needed.

If the instructor plans to develop his/her own videos, it is an advantage because they can be customized for students’ learning goals. With enough self-developed videos, a YouTube channel can be created for the class and made available for anyone to review, if desired. Many currently available apparel construction YouTube videos are great resources. Additionally, craft-related organizations such as Good House Keeping and Made to Sew offer access to free video tutorials.

4. **Identify or develop related learning resources.** Identify related and supportive videos, website links, and images. Teachers may choose to assign the included resources for review as

supplemental information or have students review the resources and then complete an assignment that will be graded.

5. **Organize the course site.** If using a required learning management system (LMS) or class blog, it is important to have it organized. Develop lesson folders for each daily goal or topic. Conveniently place all related resources students will need in the folder, such as videos, website links, images, handouts, learning activities, quizzes, and related homework assignments. Placing all learning resources in one folder minimizes confusion. The title of the folder should correspond with the topic or learning goal of the day. For example, if the learning goal is “Understanding Fabric” then the lesson folder should be titled “Understanding Fabric”.
6. **Assign Daily Homework.** Create assignments based on the daily topic/technique to be completed prior to weekly class meetings. This will make students more responsible for their own learning, encourage class preparation and reduce anxiety. Allowing the LMS to grade homework assignments provide immediate feedback to students regarding comprehension of material. It also alleviates manual grading by the instructor.
7. **Use Class Time for Apparel Construction.** The regular teaching and/or demonstrating the technique at the beginning of class can be reduced to a 10-minute review and/or demonstration. Students can use most of the class to construct allowing more time for skill development. The instructor can address specific student questions and/or needs.

Assessment

This method is an in-class time saver for apparel construction instructors, appeals to millennials because it incorporates technology and allows for more active learning,

Outcomes observed:

- Students repeatedly viewed assigned technique videos, pausing and/or rewinding when necessary.
- Homework assignments based on specific readings and/or video(s) were completed and graded by Blackboard BEFORE class. Students desiring high homework scores read and thought critically about the content for comprehension. Students instantly become responsible for their own learning. Video resources bridged reading and application.
- Students acquired sufficient knowledge from completed homework and increased confidence in assessing and resolving construction issues more independently.
- Online access to homework assignments and learning resources allowed students to keep up with in-class activity, even when absent.

In conclusion, the flipped classroom has been found to engage students, improve the learning experience, and focus on skill development. The instructor must be organized, embrace technology and willing to invest the initial time to develop the course. Construction students will exhibit greater confidence and abilities needed for apparel construction success.

Literature Cited

Cavanagh, M., and M. Peté. 2017. Fashion students choose how to learn by constructing videos of pattern making. *British Journal of Educational Technology* 48(6): 1502-1511.

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