

Implementing Project-Based Learning (PBL) in Final Collection to Improve the Quality of Fashion Design Student

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ABSTRACT

Fashion design education is one of education that prepares students to work in fashion design field. Students research future fashion trends, sketch designs, select colors, fabrics and patterns, and give instructions on how to make the products they designed. Fashion design education not only nurture and develop student's creative skills, it also teaches essential practical skills such as production techniques and material properties, to create a final product. According to this, new educational methods and strategies are needed in order engage students in the learning process and guarantee higher quality. Project-based learning (PBL) is example of educational approach that takes in account student-center learning. Project based learning (PBL) provides opportunities for students to build these qualities, as well as more deeply learn traditional academic content and understand how it applies to the real world. The methods of Literature review will apply in this research. Literature searches process through journal, proceeding and book. Literature searches are also undertaken most using computer and electronic databases. PBL methodology enhances students learning and improves students' confident, technical skill, soft skill and prepare graduate for professional practice. The benefit of implementing PBL are increase team work skill and student motivations, articulation between theory and practice, inquiry and problem solving.

1. Introduction

The center of global economic gravity is shifting toward Asia. The Association of Southeast Asian Nations (ASEAN) is in the process of creating a single market and production base, called the ASEAN Economic Community (AEC), which will allow the free flow of goods, services, investments, and skilled labor, and the freer movement of capital across the region. AEC is prepared starting in late 2015 by all

members of ASEAN which aims to improve the economic stability in the ASEAN region and form the economic area among ASEAN countries is strong. With the enactment of MEA at the end of 2015, ASEAN member countries will experience a free flow of goods, services, investment, and an educated workforce of each country. Indonesia is part of the ASEAN community trying to prepare oneself and take advantage of opportunities AEC, and should increase the capability to be able to compete with other ASEAN member countries. In the implementation of the ASEAN single market, the readiness of human resources is an important concern. Qualified, skilled and high competitiveness human resources is a necessity in the face of this global competition. Education is the key to producing quality human resources.

Fashion design education is one of education that prepares students to work in fashion design field such as fashion journalist, fashion illustrator, fashion stylist, pattern maker and fashion educator. Fashion designers are the people who create the clothing and accessories. They research future fashion trends, sketch designs, select colors, fabrics and patterns, and give instructions on how to make the products they designed. Fashion designers use their creative and technical skills to create varieties of clothing and accessories. Along with sketching and constructing original products, designers constantly study the industry to stay informed of current trends and to be able to forecast future styles. Fashion designers often have a bachelor's degree in fashion design and gain hands-on experience through internships and assistant positions. Some fashion designers are self-employed. They generally work for individual clients on a contract. Other designers are employed by manufacturing establishments, wholesalers, or design firms, creating designs for the mass market.

Fashion design education not only nurture and develop student's creative skills, they also teach essential practical skills such as production techniques and material properties, to create a final product. Final collection is one of kinds of course in fashion design education. This course prepares students to learn to become a fashion designer, how to develop collections and how to show collections. This course needs theory and practice how to realize 2D sketching become 3D in real garment and fit on the human body. To show the collection, students need collaboration with another organization such as model, choreographer, lighting, photographer, beautician, hair do and others. Students need social skill and good communication to build good network cooperation. The project of the final collection is intentionally very similar to that of designing a commercial collection. The difference of them is final collection in university requirement of curriculum while a commercial collection can only be validated by the market. The final collection could help students to confirm this – think of it as a dress rehearsal. This practice also enables to complete the skill set necessary to succeed in fashion design field (Atkinson, 2012:10).

Teachers must prepare a teaching method in accordance with the purpose of learning. The need for more student-center in fashion design education, which provide design experience to students, foster the development of soft skills and the link between theory and practice are some of the recommendation. According to this, new educational methods and strategies are needed in order engage students in the learning process and guarantee higher quality. Project-based learning (PBL) is example of educational approach that takes in account student-center learning. Project based learning (PBL) provides opportunities for students to build these qualities, as well as more deeply learn traditional academic content and understand how it applies to the real world (Larmer, 2015:2). Project-based learning not only positive learning outcome but also helped the students to improve their cognition, work ethics, and interpersonal skills (Kettanun, 2015).

2. Project-Based Learning

“Project-based learning (PBL) is a model that organizes learning around projects” (Thomas, 2000: 1). Even though assigning projects to students in traditional classroom is not a new phenomenon, project-based learning is quite different from the usual application. Thomas listed five major criteria for a method of learning to be called project based-learning: (1) PBL projects are central, not peripheral to the curriculum, (2) PBL projects are focused on questions or problems that "drive" students to encounter (and struggle with) the central concepts and principles of a discipline, (3) Projects involve students in a constructive investigation, (4) Projects are student-driven to some significant degree, (5) Projects are realistic, not school-like (2012: 3-4). In PBL, the project is the central teaching strategy; students encounter and learn the central concepts of the discipline via the project. PBL projects may be built around thematic units or the

intersection of topics from two or more disciplines, but that is not sufficient to define a project. An investigation is a goal directed process that involves inquiry, knowledge building, and resolution. Investigations may be design, decision-making, problem-finding, problem-solving, discovery, or model-building processes. PBL projects incorporate a good deal more student autonomy, choice, unsupervised work time, and responsibility than traditional instruction and traditional projects. PBL incorporates real-life challenges where the focus is on authentic (not simulated) problems or questions and where solutions have the potential to be implemented.

“Project based learning (PBL) provides opportunities for students to build these qualities, as well as more deeply learn traditional academic content and understand how it applies to the real world” (Larmer, 2015: 2). PBL as “a systematic teaching method that engages students in learning knowledge and skills through an extended inquiry process structured around complex, authentic questions and carefully designed products and tasks” (____, 2009:12). “Project-based learning involves students in an extended process of inquiry in response to a real-world problem”(Jackson, 2012). Inquiry is keys for PBL, students seek for information and knowledge, starts by posing questions, problems or scenarios. Students will identify and research issue and questions to develop their knowledge or solutions. PBL provides a way to learn deeply and responds real world. Students can think, solve problem, and interact with friends or others. This method can apply to find new way for real learning systematically with teacher as facilitator.

Klein mentions characteristics of PBL such as (1) Leads students to investigate important ideas and questions, (2) Is framed around an inquiry process, (3) Is differentiated according to student needs and interests, (4) Is driven by student independent production and presentation rather than teacher delivery of information, (5) Requires the use of creative thinking, critical thinking, and information skills to investigate, draw, (6) conclusions about, and create content, and (7) Connects to real world and authentic problems and issues (p.8). With those characteristics in mind, teachers can plan learning experiences that result in in-depth understanding of important ideas in the content. Because students are driving the learning, they can draw upon their strengths and create projects that incorporate their own interests, native language, cultural background, abilities and preference for using different types of media. Larmer (2015) says that project based learning is a powerful teaching method that does the following: (1) Motivates students, (2) Prepares students for college, careers, and citizenship, (3) Helps students meet standards and do well on tests that ask students to demonstrate in-depth knowledge and thinking skills, (4) Allows teachers to teach in a more satisfying way, and (5) Provides schools and districts with new ways to communicate and to connect with parents, communities, and the wider world (p.2).

3. Steps in PBL

In National Academy Foundation (2009: 16-17), there are 5 steps for PBL: (1) begin with the end in mind, (2) craft the driving question, (3) plan the assessment, (4) map the project, and (5) manage the process. Jackson (2012) says, it has five key characteristics: (1) outcomes are tied to curriculum and learning goals, (2) essential questions and problems lead students to the central concepts of the subject, (3) investigations and research involve inquiry and knowledge building, (4) students are responsible for designing and managing much of their own learning, and (5) projects are based on authentic, real-world problems and questions that students care about. Klein (2009: 11) suggest that there are five planning process (steps) in PBL; (1) establish content and skill goals, (2) develop formats for final product, (3) plan of the scope of the project, (4) design instructional activities, and (5) assess the project. Projects should be directed toward essential ideas or themes in the curriculum that are rigorous enough to support in-depth study and student construction of meaning.

Step (1); establish content and skill goals include big idea/theme, big ideas or theme provide an overall goal for a project-based unit and offer possibilities for interdisciplinary collaboration. Once the big ideas or themes have been determined, the teacher provides a framework for students to pursue those essential ideas or themes by crafting essential questions. The integration of content and learning skills is an essential component of project-based learning and should be identified in the project outcomes. Students need to learn, practice, apply, and extend these skills as part of the project design. Step (2); develop format for final product includes authentic products and presentation/performance formats and portfolio. Authentic

products have a real-life context and involve thinking and learning as the product is created, they cannot be simply copied from somewhere else. To document their learning process, student should create a print or electronic portfolio in which all draft of work is maintained. Complete portfolio for all projects can become part of students overall academic portfolios. Step (3); plan of the scope of the project include developing a timeline and scope for the project. A well-constructed project plan includes more than a sequence of activities; it is a design for supporting and directing students as they create products to complete the project. Step (4); design instructional activities include instructional strategies, possible mini lessons; decide how to launch the project, planned assessment, rubrics for project-based learning. Step (5); assess the project design, once all the instructional activities have been designed, teachers may pause to reflect on the design, looking for alignment with curriculum priorities, clarity and feasibility of organization, availability of resources, and the differentiation that is planned for meeting the needs of all learners.

The project of the final collection is intentionally very similar to that of designing a commercial collection. The difference of them is final collection in university requirement of curriculum while a commercial collection can only be validated by the market. The final collection could help students to confirm this – think of it as a dress rehearsal. This practice also enables to complete the skill set necessary to succeed in fashion design field (Atkinson, 2012:10).

4. Final Collection

Final collection is project of fashion design student. The project is part of learning for aspiring designers. Students prepare everything to make the final works/collection and show it off. Activities start from research inspiration, developing design to realize the complete garment then exhibit in fashion show event. The process and format of presenting a collection is an important time for any design student and is charged with a heightened sense of expectation. Essentially, fashion shows are promotional events aimed at encouraging buyer or private clients to place orders and for the press or other media to provide favorable coverage. For fashion design students the prospect of being offered employment is enticing, but it is important to remember that an exciting fashion show does not necessarily equate to a job offer or commercial success. Moreover, fashion shows are expensive events to host, with the ever-present risk of going over budget.

Fashion shows are essentially promotional events. In the fashion industry they are mainly used to present and sell merchandise to an invited audience and to promote the image and standing of a company. This is also true for many fashion students who view inclusion in a fashion show as a validation of their work. All fashion shows required detailed planning, including budgetary considerations and level of pre-publicity. This includes confirming a venue and agreeing a date, casting and booking models, arranging fittings and preparing a seating plan as well as considering music and lighting requirements (Hopkins, 2012: 164). Faerm (2011:24-25) says the key stages of fashion design development is (1) inspiration and research, (2) using color for effect, (3) selecting appropriate fabrics, (4) using the croquis process, (5) editing down to a six-figure narrative, (6) using prototypes and final samples, (7) finalizing collection. Hopkins says how to developing the design includes: (1) research process, (2) working with sketchbook, (3) line planning and range building, (4) costing and pricing, (5) presenting a collection. Whereas Atkinson (2012) in his book, there are five ways to developing the final collection: (1) finding inspiration, (2) your sketchbook, (3) finding material, (4) manipulating material, (5) development and sampling.

5. Implementing Pbl In Final Collection Of Fashion Design Education

In PBL, the project is the central teaching strategy; students encounter and learn the central concepts of the discipline via the project (Thomas, 2000: 3). A project is a complex effort that necessitates an analysis of the target (problem analysis) and that must be planned and managed, because of desired changes that are to be carried out in people's surroundings, organization, knowledge, and attitude to life; it involves a new, complex task or problem; it extends beyond traditional organizations and knowledge; it

must be completed at a point in time determined in advance (Barge, 2010). In final Collection, the purpose of learning is students can create final collection through developing design collection to realize this garment collection and to show this work to public. PBL is applied in this learning approach. I offer five planning process for project-based learning by Klein (2009: 11) such as: (1) establish content and skill goals, (2) develop formats for final product, (3) plan of the scope of the project, (4) design instructional activities, and (5) assess the project. The implementation for fashion design education as follows:

5.1 Establish Content and Skill Goals

Projects should be directed toward essential ideas or themes in the curriculum that are rigorous enough to support in-depth study and student construction of meaning. Final collection is one of course in fashion design education. In Indonesia, this course is for final-year students. The content and skill goals of this final collection course are student can develop a collection, manage event organizer, and show their collection. The big idea or theme is developing collection and showing to the public. And the question is how to create the best collection and how to make succeed this big event.



Figure 1: Elements of Establish Content and Skill Goals

5.2 Develop Formats for Final Product

Klein demonstrates two kinds in this plan as authentic Products and Presentation/Performance Formats and portfolio. To develop final product in fashion final collection needs long process. Students prepare for their collection. This collection need research process. Collections are usually presented to buyer or the press. Collection must be shown to the public. How to show to public we need event organizer. So this course very complicated and need well preparation and also took a long time. The authentic products are portfolio and 2 best collections. Portfolio contains start from inspiration, sketches, to prototype. It is essential to have a professional display portfolio from the very start as a way of keeping designs and artwork flat, orderly and portable (Jones: 194). The portfolio should look like the work of one person and show up your strengths. Portfolio should be organized to maximize your appeal and fit the advertised role.

5.3 Plan of the Scope of the Project

Students are more likely to be engaged in their learning if they see a connection to their own world. That connection can be made through the subject matter itself (e.g., science experiments or research on current issues), or through the product the student is expected to create or the presentation or performance the student is expected to give (e.g., a television talk show segment, a dance performance, or a podcast).

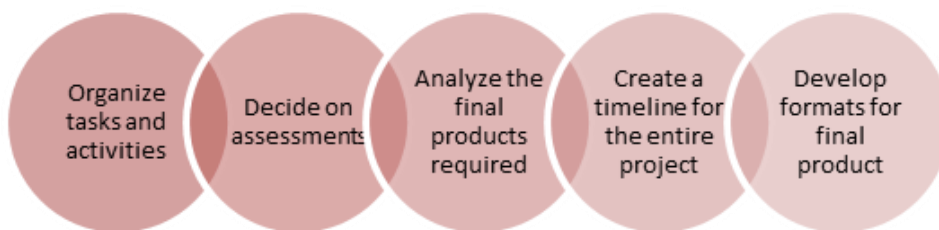


Figure 2. Plan of the Scope of the Project

Every student has project what to do. They must develop collection in one theme and collect in fashion portfolio. Every student has responsibilities for committee in event organizer. Every student creates two to three fashion works and shows in fashion show event.

Table 1. Project based Learning Activity

Developing collection	<i>Research inspiration</i> First decide what for collection to say to audience, as well as what it should elicit visually. The research spent time for combing books, internet, museum, libraries and any other sources to unexpected ideas.	2 weeks
	<i>Using color for effect</i> Color, its scale and context of the surrounding colors must be evaluated closely to create the desire emotions.	1 weeks
	<i>Selecting fabric</i> Selecting fabric to consider silhouette and garment details, so select the fabric fiber, weaves and weight that will be required as well.	1 weeks
	<i>Working drawing</i> Working drawings are important aspects of developing collection. These drawings are more practical than illustrations or aesthetic drawing and are motivated by the need to problem solve a garment design or a detail.	3 weeks
	<i>Designing fabric idea</i> The close examination of the surface detail of inspiration can stimulate exciting ideas about texture and colors. The fabric can design by own textile, using methods as embroidery, dyeing, knitting or printing.	2 weeks
	<i>Using prototype and final sample</i> Like blueprint sketches are flats and need to realize the collection in 3D. The draping or pattern making process will enable to discover better solutions of fit, drape, proportion and overall construction.	3 weeks
	<i>Finalizing collection</i> After muslin and pattern corrections through the fitting process on live model, final samples in the selected fabrics are ready to be made. At this stage all design decisions, fabric choices and treatment; finishes should have been decided on.	6 weeks

Managing event organizer	<i>Leader, secretary, finance</i>	During study
	They are very important to make the event runs smoothly	
	<i>Event division</i>	
	Responsibility for the success of the event, make schedule, find the place of event	
	<i>Runway</i>	
	Responsible for model, choreographer and music	
	<i>Sponsor</i>	
	Responsible to find sponsor to support the event	
	<i>Documentation</i>	
	Responsible for photos and videos	
Showing the collection	Showing the final collection, every student show the best creation.	1 day
	Collaboration with make-up expert and hair do to perfect performance.	
	Every division cooperate to succeed the event.	

5.4 Design Instructional Activities

A well-constructed project plan includes more than a sequence of activities; it is a design for supporting and directing students as they create products to complete the project. A plan helps you develop the timeline for the project with interim deadlines, decide the balance between teacher instruction and student investigation, incorporate both group and individual activities, and identify the skills that your students need to successfully complete the project. In this course has three domain, first developing collection, second managing event organizer, third showing the collections.

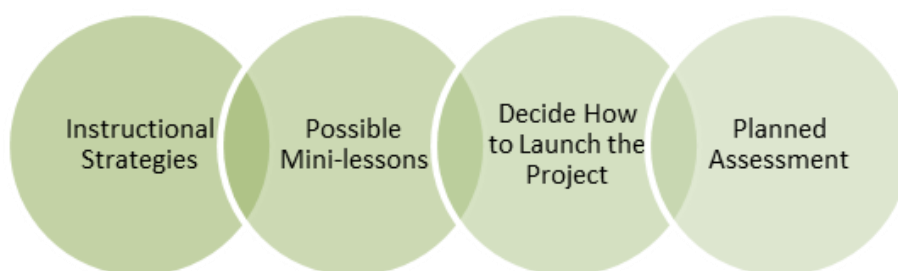


Figure 3. Design Instructional Activities

5.5 Assess the Project

One of assessment form in PBL is rubrics. Teachers should develop their own rubrics, or have the class develop rubrics for project-based learning. According to Klein rubrics break down the tasks in an assignment into separate categories for assessment. For example, a rubric for a research paper might contain criteria for five categories: (1) content; (2) organization; (3) depth of research; (4) use of primary resources; and (5) writing mechanics (p. 17). Rubrics will help teachers create an assessment plan that is fair and accurate, targets specific content and skills, and provides timely, useful feedback to students.

In final collection, students learn about three kinds of knowledge and skill, first about developing collection, second managing event organizer, and showing the collection. In PBL students not just study about making project but students engaged in the inquiry process, problem-solving and decision making. In developing collection, students research about inspiration, selecting color and fabric, manipulating fabric, sketching/drawing, making prototype, and finalizing the project. All of this process, students make decision and all of the process involves the inquiry process. This is according to Jackson (2012) that "Project-based learning involves students in an extended process of inquiry in response to a real-world problem".

This course also engaged about social skill, students must collaboration with another organization such as model, choreographer, lighting, photographer, beautician, hair do and others. Students need social skill and good communication to build good network cooperation. Sometimes students have to face many hurdles in event organizing. This learning process require for students to solve the problem. Showing final collection is the moment awaited students to show the best of them. Dreaming of being a designer has been in front of the eye. They show their work on the stage. They will work hard and have high motivation. As a young designer only once they have a chance of performing in public. PBL is very suitable for implementing in this subject. This method gives high motivation for students, prepare students for real life, according to Rodriguez (2015) that PBL encourage students' motivation and improves their results. They not only acquire better technical training, but also improve their transversal skill. Both students and teachers identify a set of benefits of PBL, such as team work skills, increased student motivation, articulation between theory and practice, problem solving, amongst others (Fernandes, 2014). In the project-based learning, by solving different problems it is possible to develop creative ideas while improving highly developed skills (Sart, 2014).

6. Conclusion

To conclude, it is possible to implementing PBL in final collection of fashion design education. PBL methodology enhances students learning and improves students' confident, technical skill, soft skill and prepare graduate for professional practice. Several evidences from students and teacher support this idea. Teachers and students identify a set of benefit of PBL, such as team work skill, increase student motivations, articulation between theory and practice, inquiry and problem solving.

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