Analysis Report

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**Instructional Design Project Topic**

Training of purchasing vehicles’ skills and knowledge for fresh international students from China.

**Literature Review on the Topic**

According to Macedo, Ney, Charfes and Lallich-Boidin state, “Most students in our study said they would prefer to print the lecture notes instead of consulting them online” (2009). In other words, the authors describe a result that most of students believe that paper notes are practical for their learning. Therefore, the research designer of this project think about supplying handout that is printed storyboard for trainees. By this way, the trainees could read and absorb the knowledge of this project conveniently as Macedo, Ney, Charfes and Lallich-Boidin (2009) mention, “Printing has been characterized as a pragmatic behavior adopted by students to cope with study constraints. Students print online documents because they have limited time to study and they consider printed documents faster to read, easier to carry (e.g., on the bus), better suited for group work, easier to annotate and to highlight”. However, the test and survey will be provided to the trainees in this project as computer-based format because this way could be easy to collect the test result and trainees’ feedback.

As Hammond, Cherrett and Walerson (2015) mention, “Previous research indicates that interactive video tools have the potential to develop procedural skills”. In other words, the authors make a conclusion that video products are effective in skills training field. By this way, the research designer of this project will add video content in the identifying vehicles’ painting and mechanical situation part.

The research designer got some criteria about purchasing a used car after reading “Purchasing a used car using multiple criteria decision making” (Edwards & Chelst, 2007). This article illustrates the criterion of purchasing a used car from introducing the concept of Multiple Criteria Decision Making (MCDM), the criterion is a structured method for identifying a best alternative in such situations. This article will help me build my own criteria about purchasing cars. Moreover, Edwars and Chelst (2007) state 12-steps method to identify cars’ mechanical situation. By this way, the research designer could integrate the 12-steps method and provide the method to the trainees in the project’s storyboard.

After reading “Teaching Students to Dig Deeper: The Common Core in Action” (Johnson, 2013). The research designer learnt how to train learners to promote their deeply thinking in their daily life. This article states the way to teach learners to be a critical thinker, this article also supplies many techniques to make learners bring the skill to life in the classroom--across the curriculum and for different grade levels. Therefore, the research designer plan to design an assessable test via Google Form for the trainees to make the trainees could combine the knowledge from this project with daily life, by this way, the trainees who could pass the test can use the knowledge from the project appropriately.

According to Sakurai, Dohi, Tsuruta and Knauf (2012), “To cope with this problem, a new storyboard concept for academic education, called "dynamic storyboarding" is proposed to assist university students. Dynamic storyboarding is based on the idea of semi-formally representing, processing, evaluating, and refining didactic knowledge. This storyboarding is more appropriate in managing high-level education than is general artificial intelligence knowledge representations such as frames”. In other words, the authors describe a special model of storyboard, which is dynamic storyboard, this kind of storyboard model focuses on process and order a lot, and this model also concentrates on reflection system. By this way, this kind of storyboard is effective for face to face training, the designer of this project consider about using this kind of storyboard model in the project.

After reading the article, “Chinese Students Major in Luxury Cars” (Tim, 2013). The designer of this project realized that how to give trainees a proper and right consumption concept is important in purchasing vehicles training class. For example, the author mentions, “Chinese students at the University of Iowa began coming into Carousel Motors in Iowa City about three years ago to get their Mercedes and Audi luxury cars serviced. Finally, general manager Pat Lind started asking if they'd ever considered his dealership when they made their original purchase. No, the students told him. Back in China, they'd been told to buy their wheels in Chicago before heading to college” (2013). This instance indicates a normal situation in Chinese international students’ social society. Moreover, this project’s whole audience will be Chinese students. By this way, this project will teach students what the proper consumption concept in purchasing vehicle’s field.

**Analysis**

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| Analysis |  |
| Needs Analysis(What) | 1. Method  * People item: Mengzhe Wang is the trainer and he will be content expert. * Document discovery: * Dynamic Storyboard * KBB car’s value calculator * 9 steps method of identifying vehicle’s mechanical condition * 3 steps method of identifying vehicle’s painting  1. Findings  * Based on interview of 20 international students from China, the main problem of purchasing vehicles in the US is language obstacle. Normally, the fresh international students don’t know how to explain their meaning in correct words, especially in some special field, such as purchasing vehicles. * Based on interview of 20 international students from China, most of fresh international students realized that live hardly if they don’t have a vehicle after they came to the US. * Based on interview of 20 international students from China, most of students from China don’t have knowledge of identifying vehicle’s mechanical situation. * Based on interview of 20 international students from China, students found vehicle’s price in China is 2 or 3 times than vehicle’s price in the US, by this way, correcting the students’ consumption concept to make them purchasing a proper vehicle is the goal of this project.  1. Implication  * Dynamic Storyboard can be built prior to the lesson. * Visual aid will be used in the lesson, such as video products about how to purchasing cars. * 9 steps method of identifying vehicle’s mechanical condition will be provided to the trainees. * 3 steps method of identifying vehicle’s painting will be provided to the trainees. * KBB car’s value calculator will be provided to the trainees. |
| Learner Analysis(Who) | 1. Method  * The method that will use to gather information about the project’s target audience will be people item. The information came from interviews of 20 international students from China.  1. Finding  * The target audience are fresh international students from China and studying in the CSUSB. * They are undergraduate and graduate students in CSUSB. * The course is a face to face class. * They are 18-31 years old. * They didn’t have living experience in the US before. * They eager to purchase a proper vehicle to go to school and continue their daily life, such as shopping and travel, by this way, most of them have positive attitude to study this course. * Most of target audience already knew most of vehicles’ brand. * Most of target audience can distinguish different countries’ brand. * Prior knowledge: Every target audience have some English fundament because they have to pass ITELS or TOEFL test before they study aboard. * Every single student can use computer and access on the Internet expertly. * Every single student don’t know the specific words in purchasing cars’ field. * Most of students prefer face to face class to online training because of language obstacle. * Most of students want to the trainer of this project can speak both Chinese and English because they can have good communication with the trainer by this way. * The price range of vehicle that the target audience wanted is $15000-$55000. * Most of target audience prefer Germany made and Japan made vehicles to USA made vehicles because of Chinese culture.  1. Implication  * Since every single student has good skill of using computer, the end of course test will be a online test via Google Form. * The storyboard content will be provided in Mengzhe Wang’s own website and students could download it. * In the face to face class, every student is required to take his/her own computer to the class. * In the face to face class, basic words list of purchasing vehicles will be provided. |
| Instructional Analysis(How) | 1. Method  * Survey on user satisfaction * End of lesson assessment: Final test of the knowledge about the course’s content given.  1. Findings  * The course will take about 1 hour. * The test will be given at the end of the course to assess student mastery of the standard and learning objectives. Problems on the test will come from Mengzhe Wang’s experience of purchasing vehicles.  1. Implications  * The learners will be able to recite the steps to identify whether vehicles’ painting is original or not once the 1-hour training completed. * The learners will be able to classify the 5 price ranges of used vehicles and the 5 price ranges of brand new vehicles when they finish learning the 1-hour training. * The learners will be able to list the processes of distinguishing vehicle’s mechanical condition at the end of 1-hour training. * The learners will be able to use the KBB vehicle value calculator to calculate 3 used cars’ values and 3 brand new cars’ values assigned by the trainer and recite the 4 URLs of purchasing vehicles at the end of 1-hour training. |

# Flow Chart of Goals and SubGoals

Attracting the trainee’s interests of getting knowledge of purchasing proper vehicles in the US

Making the trainees absorb the basic words of purchasing vehicles in the US in English

Making the trainees achieve the knowledge of vehicles to judge reasonable price of the vehicles they want to buy and identify the vehicles’ painting condition and mechanical condition they wanted.

The trainees can be able to reach the learning objectives of this course, and they can pass the final test of this course.

The trainees could purchase proper(reasonable price, less mechanical problem and external problem) vehicles for their daily life and studying .

**Flowchart of Dynamic Storyboard sequence**

Introduction of the trainer’s background information

Introduction of the goal of this lesson and identify the need for audience

Phase 1:

Content of the knowledge that how to select and purchase proper vehicles

Vehicles value calculator

Useful websites of purchasing vehicles

The example that purchasing brand new cars with cheap price

The example that purchasing excellent condition used cars

How to select cars that are most suitable for students

Phase 3:

Supply Technologies of purchasing cars

Phase 2:

Examples of purchasing cars that are suitable for students

How to check cars’ mechanical condition

How to identify whether vehicles’ painting is original or not

Evaluation, reflection and revision

**Conclusion**

The focus of this project will be over a 1-hour lesson on using definite integral to find the volume of a solid. There will be final test and visual aids available for trainees to use and see. The trainer could get clear understanding of trainees’ learning and effectiveness of the course through the test score and survey. Based on the test and survey, the trainer could revise the lesson if it’s needed.

**References**

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