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Development of Cold Brew Extraction Tutorial Video for Junior Baristas

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ABSTRACT

This study aims to determine: the results of the development of grind size and cold brew extraction video tutorials; the feasibility of grind size and cold brew extraction video tutorial materials. The feasibility of grind size and cold brew extraction video tutorial media; and user responses to grind size and cold brew extraction video tutorials. This research method is development-type research. Namely adapted using the 4D development model with only three stages due to the limited time and costs required for research. Validation of this video tutorial involves two material experts and two media experts; the object of research is a video tutorial. Questionnaires were used in data collection consisting of material validation, media, and video tutorial user responses. The data analysis technique was carried out descriptively and quantitatively. The results of the video tutorial that have been made in the form of online links cover the material of coffee brewing techniques with grind size and cold brew extraction; The video tutorial material is considered feasible with an average of 80%. The video tutorial media is very feasible with an average score of 84%, and the junior barista response obtained an average score of 83% with a very good interpretation. This implies that the video tutorial of the research results can be used in training activities on coffee blending techniques with grind size and cold brew extraction.

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Introduction

Coffee is a very famous beverage derived from coffee beans that have been produced in more than 70 countries and widely consumed due to its taste, aroma as well as well as due to health benefits (Abduh et al., 2023). The flavor, representing the convergence of the aroma and taste, is a unique organoleptic characteristic of this beverage (Pereira et al., 2023) global coffee production reached 170 million bags per 60kg of coffee in the 2022/2023 period. This number increased by 2.8% from the previous period, which recorded 165.37 million bags of coffee production in 2021/2022 (Databox 2023). In fact, it was mentioned that in the course of human civilization only produced three important non- alcoholic drinks, namely tea leaf extract, cocoa bean extract, and coffee bean extract (Alfian et al., 2020) Coffee is a commodity with high economic returns given the increasing demand for coffee. Coffee has many methods of serving such as direct brewing methods on coffee beans and there are also direct packaged servings that are ready to drink. Coffee consumption in Indonesia in 2019/2020 alone increased to 286 million kilograms and is predicted to increase every year. Consuming coffee has many positive benefits such as physical performance, burning fat, reducing the risk of stroke, liver and prostate cancer by as much as 20%. Generally, coffee drinks are brewed using high-temperature water; at a water temperature of 90.5-96°C (195-205°F). However, there is now a method of brewing coffee drinks that is done at room temperature (20°C to 25°C), namely brewing coffee drinks with the cold brew method (Haryono et al., 2021). In the coffee brewing method, there are several kinds of methods (e.g., espresso, Vietnamese drip, v60, moka-pot, and cold brew) applied to the desires of consumers (Ryandono et al., 2022).

One of the coffee brewing methods that people rarely know is the cold brew method. Cold brewing is a brewing technique where the coffee extraction process uses cold water or room temperature. Cold brew coffee can be made by dripping, direct or indirect immersion, or by the French press method. Low temperatures and long contact times result in final coffee beverages with different physicochemical and sensory characteristics. According to research by (Angeloni et al., 2019), the sensory characteristics of coffee by extraction method (drip, cold brewing, and French press) are different, and these different sensory characteristics are thought to be the result of the extraction process or temperature.

However, research conducted by (Amri, 2021) has considered cold brewed coffee in terms of both instrumental and sensory aspects. The coffee brewing technique with the cold brew method has the advantage that it can last about 5-7 days after it is made, then the coffee flavor is soft and not so sour due to the long extraction or soaking process and because of the lower acidity level, cold brew coffee is generally easier to digest the digestive system. Recently Cold Brew serving of coffee by brewing is widely done in contemporary coffee shops in big cities, one of which is in the city of Sidoarjo.

The number of coffee enthusiasts and the establishment of coffee shops has increased the number of workers needed, usually called baristas at each coffee shop. However, many of the junior baristas lack knowledge about coffee (Ryandono et al., 2019). Junior baristas are people who have just started their careers in the coffee world. Junior baristas are still in the learning and training stage and work under the supervision of senior baristas or head baristas. In this case, to overcome these problems, a solution in the form of knowledge and skills is needed, with more and more knowledge gained, it will become a skill for each barista and become its specialty (Zakik et al., 2022).

The number of competitions held from every café, district, inter-city, and so on that's where a lot of people, especially baristas want to learn about coffee (Loestefani et al., 2022). Not only in theory but also from the direct learning experience. However, due to the lack of clear modules and only practical materials,

many junior baristas received little understanding from the training. As research has been conducted by Pramita and Parma (2020), on the results of observations they made at the Four Points by Sheraton Bali Seminyak Hotel, it is known that if the constraints of baristas who are not too experienced or can be said to be junior coffee brewers, there is an obstacle, namely regarding complaints from regular guests related to the process of preparing and serving inconsistent coffee drinks. Guests feel the taste of the drink changes every time they come. Therefore, a junior barista must receive adequate training on good coffee blending techniques.

The preference to optimize cold brew learning outcomes is by applying contextual learning with the help of learning media that is suitable for those who are interested in becoming baristas. In contextual learning, learning is not memorization, but a process of reconstructing insights and knowledge according to the learner's experience. One can easily learn through observation and imitating the behavior of others (modeling).

Based on this problem, the media or learning tool that is deemed most suitable for implementation is video tutorial media. Video tutorial media is media that displays audio and visual material containing educational messages that include principles, procedures, theories, and concepts of insight implementation to support the deepening of the subject matter. Based on this explanation, it can be interpreted that video is a type of audio-visual media that can project a moving object accompanied by sound. Videos display information, explain processes, convey complex concepts, develop skills, and influence behavior.

The theoretical benefits obtained from the results of this study are that it can add skills in making development efforts, especially in video tutorials on grind size and cold brew extraction, and increase the skills of junior baristas in the ability to mix coffee with grind size and cold brew extraction techniques. Then the practical benefits obtained are Adding insight and knowledge to the education system, especially in the field of coffee brewing, which will be useful for opening new business opportunities. Based on the above background, in making it easier for junior baristas to learn cold brew, the author raises it in the form of research with the title "DEVELOPMENT OF BREW COLD EXTRACTION TUTORIAL VIDEO FOR JUNIOR BARISTA".

Literature Review

Research Development

According to (Borg, 2003) educational research and development (R&D) is a process used to develop and validate educational products. The steps of this process are usually referred to as the R&D cycle, which consists of studying research findings related to the product to be developed later. In this study, it is not the product that will be developed, but rather the grind size and extraction coffee brewing techniques, which use renewable techniques, and are assisted by video tutorial development media. In line with this, research and development is a research approach to produce new products or improve existing products. The resulting product can be software, or hardware such as books, modules, learning program packages, or learning aids. Research and development can produce products that can be used directly, and this study will produce techniques or how to brew coffee with grind size and extraction techniques that can be directly practiced, especially for junior baristas who want to learn coffee brewing techniques in this way.

Video Tutorial

According to (Ajeng, 2014) Video tutorials are linguistically composed of the words "video" and "tutorial", this is an explanation by a tutor about something available in video form. Video tutorials are also often called how-to, step, guide, or instructional videos. It refers to active learning, in addition to making learning time more effective which can add value to passive pedagogy. This type of how-to, step, guide, or instructional video tutorial is often more student or group-centered. Another definition according to Pramundto (2013:4) Instructional video or instructional video is any video that demonstrates a process, transfers knowledge, and skills, explains a concept, or shows a person/group how to do something.

Audiovisual media, following the opinion of (Riyana, 2007) Learning media is an audiovisual presentation that conveys concepts, principles, methods, theories, and applications to assist in understanding of a learning subject. application to assist in obtaining an understanding of information. Interactive video lessons assist learners i.e. junior baristas in visualizing a subject to make it easier to understand. Practical exercises in instructional video tutorials can be followed interactively by the learners i.e. junior coffee brewers. video instruction. Therefore, video is essentially one of the alternatives to reverse the erosion of courses and education.

Cold Brew

According to history, cold brew coffee was first introduced by the Dutch, who brewed coffee using cold water/at room temperature. Then in the 1600s, cold brew coffee was modified by the Japanese. Precisely in the Kyoto area, this method was then named Kyoto-style cold brew. This cold brew method was practiced by the Dutch on their sea voyages. The cold brew brewing technique was developed at that time, functioning so that the coffee produced does not spoil quickly, which is unlike when brewing hot coffee which should be enjoyed immediately. Coffee brewing techniques with cold brew, can last a long time at room temperature for up to two weeks. This is useful for those who are traveling far, no need to be complicated and practical in enjoying a serving of coffee (Wardhana & Ratnasari, 2022).

Cold brew brewing is also done to produce a large volume of brew. Cold brew is made using the "soaking" method for at least 8 hours. For brewing, ordinary water at room temperature or cold water is generally used. This is also what distinguishes cold brew from regular coffee, cold brew coffee is never exposed to heat (temperature) so it does not help extract the acidity character of coffee. In addition, cold brew results tend to feel lighter and special.

Barista/ Coffee Brewers

According to (Masdakaty, 2015) in Fakhri Ramadhan's research, the word "barista" is an Italian term for a bartender who provides a variety of drinks other than coffee. Not just coffee. The author's findings in this study show that a barista is not only a barista who is an expert more than just a coffee brewer. In addition to learning how to make coffee, baristas must also develop friendly relationships with their clients. Courtesy by showing friendship to their clients. In theory, a barista is referred to as the person who brews the coffee behind the coffee maker. has a different interpretation of the coffee brewer.

Workers as baristas have a career path, namely, there are junior baristas and senior head baristas. Junior baristas are people who have just started their careers in the coffee world. They are usually still in the learning and training stage and work under the supervision of a senior barista or head barista. A junior barista is someone who already understands how to use an espresso machine and operate it to make a cup of coffee. He also understands the technique of measuring the right temperature and pressure to process coffee blends. A senior barista is a barista who is already at a professional level.

Methodology

The research design used in this research is a type of development research. The research conducted falls into the category of educational research and development (R&D). This research was conducted at Coffee Shop X in Sidoarjo, East Java. The instrument in this development research is a validation questionnaire which will be checked for validity by media experts and material experts by looking at the results of video tutorials that have been made by researchers. and questionnaires for user response. From the questionnaire results, this analysis is carried out on each criterion contained in the validation sheet, using a Likert scale. the percentage results will be sought and finally After obtaining the percentage results of the feasibility of video tutorials in the form of numbers. The procedure in this study was adapted using the 4D Model development. The 4D model consists of a defining process (define), a design stage, a development stage, and a trial stage. but in this study, it only reaches the development stage.

Research Procedure

This video tutorial development research procedure uses the 4D model. The 4D model consists of defining (define), designing (design), developing (develop), and testing (disseminate) stages. This research is only limited to stage 3, namely development (development) in the form of video tutorials, due to the limited cost and time of the limited research subjects. Development procedure with 4D model.

Research Subjects

The subjects in the development of video tutorial media for grind-size coffee brewing techniques and cold brew extraction are several junior baristas and senior baristas who are the directors in the trials of video tutorials made by researchers. In this development research, the test subjects for the development of video tutorial media for grind-size coffee brewing techniques and cold brew extraction are:

- 1. Material experts as competent parties in grind-size coffee brewing techniques and cold brew extraction.
- 2. Media experts, as competent parties in their fields, and supervisors.
- 3. Junior baristas who are spread across several coffee shops in Sidoarjo City as respondents. This respondent data collection is to find out the response of potential users to the video tutorial media made.

Research Data

The data obtained is validation data from material experts, media experts on grind-size coffee brewing techniques and cold brew extraction, and junior Baristas at several coffee shops in Sidoarjo.

Data Collection Instruments

Validation Sheet

This instrument is used to determine the assessment of video tutorial material for coffee blending techniques with grind size and cold brew extraction. This instrument includes a validation sheet filled in by material and media experts (two validators each). Questionnaires or questionnaires to determine the feasibility of this study were given directly to material experts and media experts. The questionnaire questions contained the respondent's data and questions related to the video tutorial media for the technique of making coffee with grind size and cold brew extraction under study.

Media User Response Questionnaire

Media user response questionnaire in the form of questions to find out the responses of junior baristas related to video tutorials with material on coffee blending techniques with grind size and cold brew extraction that has been made.

Object of Research

The object of research is something that becomes a concern in a study because the object of research is the target to be achieved to get answers and solutions to problems that occur. The object of research in this research is that junior baristas can understand and later practice grind-size coffee brewing techniques and cold brew extraction. In this study, researchers took 5 respondents. The reason for taking 5 respondents is that researchers consider the type of barista who is still a junior at a coffee shop in Sidoarjo who wants to learn. This data collection is carried out to determine the response of potential users to the learning media in the form of video tutorials that are made.

Results and Discussion

1. The Results of The Development of Video Tutorials on Grind Size Coffee Brewing Techniques and Cold Brew Extraction for Junior Baristas at Sidoarjo Coffee Shops, East Java.

a. Defining stage

The results of direct observations and interviews conducted by researchers at one of the X coffee shops in Sidoarjo, show that the coffee shop has already included its baristas, ranging from junior baristas to senior baristas to attend training related to coffee brewing techniques with grind size and cold brew extraction in 2020, the seminar was held where practical demonstrations and power point layers were in front of the stage where the reach of the seminar participants was quite far. Therefore, the researcher decided to create training media that could make it easier for trainees to be able to relearn easily and can be used anytime and anywhere. In this case, researchers used media in the form of video tutorials as a means of conveying information.

b. Design Stage

No.	Tutorial Video Section Design	Video Tutorial Clip	Information
1	Sin 1	TUTORIAL PENGOLAHAN KOPI DENGAN TEKNIK OCUBREW DAN PENGACUH EKSTRASI & GRINDSIZE	Introducing the identity of the researcher, and a brief explanation of what video tutorials will be made.
			(Name: Rhania from Bachelor of Culinary Education UNESA.

Table 1. Design Stage

RIMA Artenation by barn barn standing word of the books wing a cond of the books barn	
TENTANG SEJARAH KOPI COLDBREW	
Timkat kasaman lehih sedikir	

Thus, I will explain a cold brew drink starting with the ingredients, how to make, and serve, and the diversity of cold brew.

A brief explanation of the history associated with cold brew coffee

3 Sin 3

Sin 2

2



4 Sin 4

ANALYSIC STATE



Brief explanation of cold brew factors and characteristics.

(In general, cold brew is the extraction of coarsely ground coffee powder and soaking it in room temperature water with a coffee extraction time (8 to 24 hours

A detailed explanation of the tools and materials for the process of making a video tutorial on coffee brewing techniques with grind size and cold-brew extraction.

A. (Tools and materials Tools:

- 1. Glass jar
- 2. Glass bottle
- 3. Dripper v60
- 4. Filter v60
- 5. Plastic wrap
- 6. Gramation
- 7. Coffee grinder
- 8. Spoon
- Ingredient:

Robusta arabica coffee beans Deminaral water. (Prepare water in a ratio of 1:8 with gramation. coffee 100 grams: 800 ml water. The water used is room temperature water)

5

Sin 5







6 Sin 6







Explanation by researchers regarding the process of coffee brewing techniques with grind size, and cold brew extraction.

- Preparing tools and materials

- Weighing the coffee beans to be used

Performing the grinding process
 Preparing glass jars and demineralized water

- Put coffee and water in a glass jar, cover with plastic.

- Store in refrigerator for 8-24 hours

- Prepare v60 dripper and v60 filter

- If within 8-24 hours the desired flavor has been obtained, filter the extracted coffee using a v60 dripper that has been given a v60 filter 2 times.

- If it has been filtered, put the cold-brew in a bottle, and can be served with a glass filled with ice cubes.

A brief explanation of how to serve coffee and the taste of coffee flavors produced with grind size brewing techniques and cold brew extraction. (How to serve cold brew by using a small glass filled with ice cubes to make it more enjoyable when drunk. The cold brew itself can last about 5-7 days. If the cold brew flavor has changed significantly such as a higher acidity level, the cold brew cannot be consumed).

Explanation of the purpose of the video tutorial and closing. (The purpose of making this video is to make it easier for barista trainers to explain about the material to be used such as coldbrew material, to be used as a learning process especially for junior baristas)

7

Sin 7

c. Develop Stage

At this stage, the production of video tutorial training media is supported by several software including: 1) Capcut video editing whose function is to combine several pieces of video recorded, which provides various types of template features to increase attractiveness 2) cam recorder HP application, to record the sound that will later be included in the video tutorial 3) MS word for typing the script to be recorded. 4) HP camera to record the video tutorial. Researchers will also design ease of video tutorials on coffee brewing techniques with grind size and cold brew extraction for many people to access in the form of links.

https://drive.google.com/drive/folders/1-elpGBw7zAcovI9yawcupHg-vanf5DFn?usp=sharing

d. Test, Evaluate and Revise Phase

Validation of video tutorials on coffee brewing techniques with grind size techniques and cold brew extraction that have been made and developed, tested by one material expert lecturer, one senior certified barista, and two media expert lecturers. The feasibility of video tutorials is obtained from the results of material and media validation. Material validation has been carried out by two material experts, consisting of one UNESA lecturer and one practitioner who is an expert in the field of coffee-making techniques (BSNP certified). The first material expert validator is Nurul Farikhatir Rizkiyah as a lecturer of S1 Catering Education, then a senior barista who already has certification, namely Tio Ardian Doko Hutomo. Media validation has been carried out by two media experts. The media expert validators in question are I.F Romadhoni, S.Pd., M.Pd and Dra. Niken Purwidini, M.Pd, the validation process is carried out by filling out the media validation sheet instrument that has gone through the validation process.

Device validation data was analyzed using descriptive quantitative. This analysis is carried out on each criterion contained in the validation sheet, using a Likert scale. then based on the results of the assessment of the validation sheet that has been carried out by material and media experts, the percentage results will be sought finally After obtaining the percentage results of the feasibility of video tutorials in the form of numbers, conclusions will be obtained regarding the feasibility of video tutorial media with the previous Likert scale criteria. the results are as follows:

Indicator		Validation	Interpretation
Average	Score of	4	Worthy
Material Feasi	ibility	(80%)	
Average	Media	4,2	Very Worthy
Feasibility Sco	ore	(84%)	
Average Scor		4,1	Very Worthy
of user respon	se	(83%)	- •

 Table 2 Recapitulation Table of Material Assessment

Source: data processed by researchers in 2023

Discussion

1. Results of the development of video tutorials on grind size and cold brew extraction

Based on the stages of making video tutorials on coffee brewing techniques with grind size and cold brew extraction, it can be seen that:

- a. Development of video tutorials on coffee brewing techniques with grind size and cold brew extraction with the 4D development method.
- b. Video tutorials can be opened on smartphones and laptops

- c. The video tutorial has material about coffee brewing techniques by grind size and cold brew extraction.
- d. Video tutorials can be accessed online
- e. Video tutorials can be accessed through the link <u>https://drive.google.com/drive/folders/1-elpGBw7zAcovI9yawcupHg-vanf5DFn?usp=sharing</u>

2. Media and Material Feasibility of Grind Size and Cold Brew Extraction Video Tutorials a. Material Feasibility

The feasibility of the material can be obtained from the results of validation conducted by the validator. Material experts assess the four aspects contained in the video tutorial material feasibility instrument, namely aspects of relevance, organization of material, language, and aspects of effects for learning strategies. Based on the assessment of the feasibility of video tutorial material from the two validators, an overall average of 84% was obtained.

Material related to coffee brewing techniques with grind size and cold brew extraction, if it is widely developed and the resulting product can be easily found, will be very beneficial for coffee lovers who often travel far, more practical and easier to consume, because this cold brew coffee brewing technique is without preservatives and can last 5-7 days after being made. The results of the assessment on the relevance aspect reached a score of 82% with a very feasible interpretation. This feasible criterion is because the content qualifications of this video tutorial material are following the indicators and clarity in the delivery of learning formulations. Of the five indicators in the relevance aspect, the clarity of the formulation of learning objectives and the suitability of the material with indicators and learning objectives has a score of 90%, based on the results of this validation, it is known that the delivery of material in the video tutorial in this study, has contained the information needed, such as history, factors and characteristics of cold brew, material tools, how to make, serve, and cold brew diversity. This follows the opinion of Wahyu et al, (2020), that teaching materials must follow learning outcomes.

The appointment of material regarding coffee brewing techniques with grind size and cold brew extraction is due to a large number of cold coffee enthusiasts. It is supported by previous research that examines cold coffee brewing techniques, namely research from Kwok et al (2020), in their research discussing cold coffee brewing techniques by extraction, the results of their research found that cold coffee is needed because the level of durability is cleaner and less contaminated so that it can last longer than regular coffee.

b. Media Feasibility

Media feasibility is obtained from the results of validation conducted by media expert validators. Media experts assess from three aspects, namely audio and visual aspects, media, and benefits (Pratiwi et al., 2022). Based on the media assessment from the validator, the overall average of the aspects is 84% with the interpretation of very feasible criteria. The results of the media feasibility validation in this study can function properly as a learning resource and can help students' understanding which comes from the explanation of the sound and images produced and the video produced by the video tutorial media, so that the existence of this video tutorial can motivate its users, especially junior barista in learning to mix coffee with grind size and cold brew extraction. The resulting function of the video tutorial learning media also follows the function of learning media according to (Munadi, 2013), namely the function of media as a learning resource, as well as a psychological function in the form of learning motivation.

The assessment on the audio and visual aspects received an average of 76% with a decent interpretation because this video tutorial uses language that is easily understood by the learners and also the language used has been adjusted to the level of thinking of the learners. Although it received a decent interpretation category, several indicators had a low average value of 70%, on the material flow indicator, and the selection of fonts on the video tutorial captions. Of the seven indicators in the audio and visual aspect, the indicator of the suitability of language selection with the content has the highest score of 90%, this is because, in this video tutorial, the language used is not too standardized, concise enough, not boring

and can attract the listeners, which is adjusted to the content of the video tutorial on coffee blending techniques.

The results of this study also support the results of previous research conducted by Rais et al (2020), the results of his research related to the effectiveness of using learning video media in coffee knowledge courses (barista) are known if the learning outcomes and student activities in the experimental class are very good, with the existence of learning video media that makes it more effective than conventional learning for coffee knowledge courses (Barista). Another opinion was also expressed by (Yaqin & Mucharomah, 2013) and (Adiar Akmal., 2017) whose research results found that video tutorial media has characteristics that can stimulate learners to be more enthusiastic about learning and to show interest during the learning process. One of the advantages of video tutorial media is that it is practical compared to printed pocketbooks and power points.

3. User response, namely junior baristas in Sidoarjo city, on the feasibility of video tutorials on coffee blending techniques with grind size and cold brew extraction.

The junior barista's response to the video tutorial was collected through a questionnaire with a 5-level Likert scale. Three aspects are assessed as the response of junior baristas in this study, namely, media, material, and benefits. In the trial, the average score on all aspects was 83% with the interpretation that the video tutorial media for coffee brewing techniques with grind size and cold brew extraction is very feasible/good.

Aspects Assessed	Junior Barista Response Score	Average	Interpretation
Media			
Average Feasibility	4,3	(86%)	Good interpretation
Material			-
Average Feasibility	3,9	(78%)	Good
Benefits			
Average Feasibility	4,2	(84%)	Good Interpretation
Average Score of	4,1	(83%)	Good Interpretation
Feasibility of Material			*

Table 3. Media User Response

The assessment of junior barista responses on the media aspect obtained an average score of 86% with a very decent/good interpretation. This score can be achieved because the use of video tutorials can help learners understand the concept of material regarding coffee blending techniques with grind size and cold brew extraction. Starting from the ease of accessing the video tutorial which can be accessed with all types of Android phones. Moreover, it was also supported by the resolution display on the video tutorial, a blend of colors that is not so striking, clear sound, animation, and images that support the material discussed. Judging from the visual and audio presentation, besides that, the video tutorial media is presented using language that is easily understood by learners, it is also delivered with attractive intonation to attract video tutorial media users. This is following the opinion (Zaki et al., 2024) that the electronic media output is in the form of HTML so that to access it, it is enough to use the link shared by the researcher so that it will directly enter the video tutorial.

The results of this study also support the results of previous research conducted by (Rais, 2020), the results of his research related to the effectiveness of using learning video media in coffee knowledge courses (barista) are known if the research subjects show that learning with video media produces good learning outcomes, while conventional learning produces sufficient learning outcomes. Videos that contain elements of text, images, and illustrations allow instructors or lecturers to teach in a more practical way that facilitates understanding of the material, unlike conventional learning which rarely uses media.

Conclusion

Based on the results, it can be concluded that the feasibility of training materials in the form of video tutorials with a percentage of 80% obtained the predicate "Feasible", The feasibility of training media in the form of video tutorials with a percentage of 84% obtained the predicate "Very Feasible", at last Assessment of the response of junior baristas to the development of video tutorials with material on coffee blending techniques with grind size and cold brew extraction can be categorized as "Very Good" with a percentage of 83% to be used and applied as a learning medium on the material of coffee blending techniques with grind size coffee blending techniques and cold brew extraction.

Data Availability

The video for the tutorial can be accessed on the link below: https://drive.google.com/drive/folders/1-elpGBw7zAcovI9yawcupHg-vanf5DFn?usp=sharing

Author Contributed

All author have contribute to the final manuscript. the contribution of each author are as follow; Rhania Safira, collecting data, and drafting drawing, drafting key conceptual ideas. Karina Pramudita Collecting data and Haris, editing video. all authors discuss the result and contributed to the final manuscript.

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Declaration of competing interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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