Community-Based Learning as a Student Portfolio in Culinary Courses with Conjoint Analysis

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Abstract

This study aims to describe a practice approach to building a learning community based on portfolio assessment carried out in the culinary community. The method used in this study is a qualitative method using direct observation, interviews, and documentation. The results showed that the student's portfolio resulted from cooking practice, where the cooking practice started from choosing a recipe, choosing the right ingredients, doing the cooking process, validating, and getting feedback. The whole learning process is carried out properly and accompanied by teachers and chefs to produce a student portfolio consisting of 5 components, namely student identity, activities followed, rating results, competencies, and certification types of student competencies through the portfolio. The results of the practice can be seen in the student portfolios in the learning community system. It can be seen the experience of students in participating in cooking practices and the number of scores on the like button and the number of reviews on the view comments in each student's portfolio. The most important factor in a learning community in the culinary field is a portfolio of 15,252, followed by a login factor of 13,112 and a collaboration of 11,132, so the author conducts research focusing on student portfolios. This study only discusses the results of cooking practice as a student portfolio in the learning community and does not discuss what features are used in practice and portfolios.

Keyword: Analysis Conjoint, Community, Culinary, Learning, Student Portfolio

1. INTRODUCTION

The new paradigm is learning to cook without having to spend a lot of money with the existence of digital technology. Various kinds of cooking programs appear almost every day on television, YouTube, Facebook links and Instagram link. Learning to cook can be done by anyone regardless of gender, age, and education level. To learn to cook today is not difficult, content can be easily obtained online on the internet, starting with the types of recipes and ingredients and how to process these ingredients into a delicious, interesting and nutritious meal [1].

Through YouTube Video, someone can watch learn, and practice live at home. Smartphone digital technology makes it easy for someone to choose a recipe, determine the appropriate ingredients and good equipment can be done easily. Purchase recipes, ingredients and tools can be done online without having to leave the house [2].

Cooking practice is easily and quickly carried out by direct coaching, online coaching, and storytelling. Direct coaching is that students can practice cooking face to face with the coach [3], while online coaching is learning to cook which is done through online coaching [4]. Learning to cook can also be done by storytelling, namely exploring knowledge by listening to inspirational stories of someone's personal experience which can now be packaged digitally [5]. Through the story telling method students can understand stories easily, interestingly and fun, so this method is often used to inspire students through stories of personal experiences [6]. Listening to stories of personal experiences can be done with videos and podcasts with media such as YouTube, Instagram, Facebook, Flipgrid, and talk shows.
The number of people who are enthusiastic about developing culinary and learning culinary skills is due to individual needs including (1) The existence of individual needs, namely food being a basic need [7], health determinant [8], reflects a person’s lifestyle and becomes an important component in the development of public health [9]. (2) Business opportunities, namely culinary business into a promising business [10], and become the business that is most in demand and engaged in by the community, as many as 67% of creative economy businesses are culinary businesses [11], culinary business is the pillar of the national economy. (3) The need for cooking skills, namely learning to cook to produce skills to process cooking ingredients properly and appropriately [12].

![Number of Creative Economy Enterprises in Indonesia](image)

Figure 1 above shows that the creative economy business in the culinary sector is the largest among other creative economy businesses, which is 5,550,960 or about 67.66% of the total 16 creative economy businesses in Indonesia.

Learning to cook is currently a trend since the COVID-19 pandemic where people are more likely to work and do cooking activities. In addition, the consumption of healthy food during a pandemic is something that is really a special concern for everyone. These changes bad habits in consuming food into a culture of consuming healthy and natural foods. The awareness to process food properly makes people flock to look for reference sources for cooking practices. It's no wonder that cooking teachers and chefs are promising professions [14]. In fact, several developing countries have prepared food safety maps for students, both verbally and visually, at lower prices than face-to-face cooking classes [15].

This study aims to find out how to approach the practice to build a portfolio-based student learning community in the culinary community. The results of this study are part of the process of building a learning community model in the culinary community, which is still in prototype form.

2. METHOD

The method used in this study is a qualitative analysis method using direct observation, interviews, and documentation. The results of the study are expected to produce student portfolios. The steps taken in this study include: (1) Determining the identification of the problem, (2) Searching for literature reviews from relevant reference sources. (3) Mapping the process of learning to cook. (4) Confirming the mapping of the cooking process to the culinary community, in this case the author confirms the teachers, chefs and students majoring in culinary arts. (5) Creating a business process for learning to cook by producing a portfolio.

Reference sources used are those from journals, proceedings, websites, and books/e-books that are relevant to the topic both from research results, reports, and direct opinions from learning community experts in the culinary field. Reference sources are also obtained through Google Scholar, Scopus, and Science Direct links.
From the references obtained and used, the next step the author develops existing research by adding the results of the research carried out by the author while still referring to previous research.

![Figure 2 Student Portfolio Components](image)

**Figure 2 Student Portfolio Components**

The components of the student portfolio from the cooking results are shown in Figure 2, namely:

1. **Student identity** consisting of name, place date of birth, address, contact and email of students.
2. **Activity name** where the activities that have been followed by students are cooking, serving dishes, and making food creations.
3. **Rating result** from the total likes and total comments obtained from the teacher/chef or from other students.
4. **Competence** consists of competencies in the fields of traditional food, international food, imported food, beverage, and snacks.
5. **Certificate type** consists of basic, intermediate, and proficient as a benchmark for the achievement of students' abilities and competencies.

### 3. RESULTS AND DISCUSSION

The data used is primary data where the authors directly ask the domain experts in this case are the culinary arts teachers, chefs and students majoring in culinary arts. While secondary data is obtained from the results of previous research and other theories that have been poured into the form of scientific publications. Based on the conjoint analysis test, the portfolio factor is the most important factor for the learning of culinary community.

<table>
<thead>
<tr>
<th>Features</th>
<th>Importance Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion</td>
<td>3.084</td>
</tr>
<tr>
<td>Cooking_Result</td>
<td>3.894</td>
</tr>
<tr>
<td>Exam</td>
<td>6.069</td>
</tr>
<tr>
<td>Certification</td>
<td>7.598</td>
</tr>
<tr>
<td>Enrollment</td>
<td>9.573</td>
</tr>
<tr>
<td>Registration</td>
<td>9.702</td>
</tr>
<tr>
<td>Preparation</td>
<td>10.045</td>
</tr>
<tr>
<td>Practice</td>
<td>10.540</td>
</tr>
<tr>
<td>Collaboration</td>
<td>11.132</td>
</tr>
<tr>
<td>Login</td>
<td>13.112</td>
</tr>
<tr>
<td>Portofolio</td>
<td>15.252</td>
</tr>
</tbody>
</table>

Table 1 shows the importance value for features in culinary learning where the student portfolio feature becomes a very important feature, which has an importance value of 15,252. This shows that
Community-based learning in the culinary field is the most important thing. Student portfolios show the success of learning and as a measuring tool to evaluate student learning outcomes. With the portfolio, students' abilities and competencies can be seen after participating in the learning process.

![Graph 1 Importance Value](image)

The graph above shows that the most important factor in a learning community in the culinary field is a portfolio of 15,252, followed by a login factor of 13,112 and a collaboration of 11,132, so the author conducts research focusing on student portfolios.

The learning community system that displays student portfolios through the results of cooking practices carried out in the culinary community, four important actors are involved, namely students, teacher chefs and admins. The four actors show that the practice of cooking requires assistance from teachers and chefs who have obtained competency certificates as teachers and chefs. Admin ensures that teachers and chefs have time, competence, and high dedication in the culinary field through checking and approving registration documents sent and uploaded by teachers and chefs.

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson's R</td>
<td>.789</td>
<td>.000</td>
</tr>
<tr>
<td>Kendall's tau</td>
<td>.575</td>
<td>.000</td>
</tr>
</tbody>
</table>

Based on the results of the conjoint analysis in table 2 above, the Pearson's R value is 0.789 and Kendall's tau is 0.575 with a significance level of 0.000 respectively. This shows that there is a correlation between the respondent's opinion pattern and the actual preferences of each respondent on the portfolio factor. The significance value is less than 0.05, i.e. 0.000, so H0 is rejected and H1 is accepted and shows that the estimated part-worth of respondents' opinion patterns (estimates part-worth) are not much different from the opinions of 152 respondents who are actual (actual) on the stimuli process in the conjoint analysis.

3. LIMITATION & FUTURE RESEARCH

This study only discusses student portfolios resulting from cooking practice, where cooking practice starts from choosing recipes, choosing appropriate ingredients, carrying out the cooking process,
validating and getting feedback on cooking results. The student portfolio consists of 5 important components, namely student identity, activity name, rating result, competency, and certification type. Portfolios are not only seen from the aspect of the number of scores on the like button and the number of reviews in the comment view, but also from the 5 components. This study does not discuss the features used in the learning community application in the culinary community.

Furthermore, this research will be developed in the form of an android-based application with features that suit the needs of the user, so that the feature selection is carried out by testing conjoint analysis, where the user can determine the priority of the appropriate features.

ACKNOWLEDGEMENTS (10 PT)
This research is part of the Dissertation research which is fully funded by the Development People Education Foundation. Thank you to the University of Insan Pembangunan Indonesia campus which has provided support to the author for further study of the computer science doctoral program at Bina Nusantara University.

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