



Competition-Based Window-Shopping Method to Improving Students' Critical Thinking Skills in Culinary Basic Learning

Rita Patriasih* Ade Juwaedah, M.Asyrof Syaifudien

Culinary Education Study Program FPTK. Universitas Pendidikan Indonesia, Bandung, Indonesia

*Email: ritapatriasih@upi.edu

ABSTRACT

The 21st century learning requires students to have broader critical thinking skills. Students are expected to be able to express, produce and create an idea. Thus, appropriate learning methods are needed so that students' critical thinking skills are getting sharper. The research was conducted to determine students' critical thinking skills in Basic Culinary learning using the competition-based window-shopping method. The research was conducted in the form of action research with a queasy experimental design. The subjects were 58 students from class X SMK Yapari Aktripa Bandung. The results of the reliability test on the test equipment obtained $r = 0.86 \geq 0.73$ thus it can be ascertained that the test measuring instrument is reliable with very high criteria. The average score of students' critical thinking is 80.5 which is in the high criteria. There is an influence of the application of the Competition-based Window-Shopping method on students' critical thinking skills, especially in Basic Culinary subjects ($0.199 > 0.05$). Based on the results of the effectiveness test, it shows that the competition-based window-shopping method is effective in increasing students' critical thinking skills.

Keywords: *window-shopping, competition, critical thinking*

1. BACKGROUND

Learning in the 21st century does not only require student-centered learning but also sharpens critical thinking skills. Important 21st century skills include (1) Learning and Innovation Skills which cover communication and collaboration, creativity and innovation, critical thinking and problem solving, (2) Information and Communication of Technology, literacy, media literacy, and information literacy, and (3) Career Skills which cover leadership and responsibility, adaptability and flexibility, initiative and self-regulation, productivity and accountability as well as social and cultural interaction. The main principles of 21st century learning include being contextual, student-centered, collaborative, and integrated with society.

Critical thinking skills are needed because they will lead someone to think logically, answer various problems well and be able to make rational decisions about what to do or what to believe. Critical thinking is a high order thinking skill that has the potential to

increase critical analytical power. Critical thinking skills are very important for a student which can be used as a basis for solving problems at any time [1].

Developing critical thinking skills in learning is an effort to improve student learning outcomes. With the changing dynamics of education, teachers are required to always design sustainable learning innovations, one of which is through learning methods. Teachers should be able to design learning activities that can maximize students' critical thinking abilities in every aspect [2].

The learning method is a way of presenting learning material to achieve learning objectives [3]. Teachers should be able to master it in the learning process because it will make it easier for students to receive and understand lessons. Based on the results of preliminary observations conducted at Yapari Aktripa Vocational School Bandung in 2021, problems were found related to students' critical thinking abilities that had not yet emerged. Students are still hesitant in expressing arguments on the problems presented by the teacher. The ability to identify problems and find actions is still

doubtful. In this case it is suspected that the lack of students' critical thinking skills is closely related to the involvement of students in the learning process. Thus, it is necessary to develop learning methods to improve students' critical thinking skills.

One of the efforts that can be made by teachers to encourage critical thinking skills is by applying the Competition-based window-shopping learning method. The window-shopping method is a discussion activity with shopping, there is verbal interaction and face to face exchanging material information in each group's store [4]. Basically, the application of window-shopping aims to create an interesting, fun and interactive learning atmosphere, however the effectiveness of learning remains conducive, effective and efficient. The window-shopping method can improve students' communication skills [5]. To increase active participation and stimulate critical thinking skills, this method is designed by conducting competition between groups in solving problems presented by the teacher.

Competition is a feeling where individuals or groups do not want to lose to other individuals or groups. The competition referred to in this study is the effort that arises in students due to the urge to show their respective abilities and advantages in the learning process. With competition students are stimulated to be stronger in showing their efforts with the aim of being the best compared to other groups. The purpose of this competition is to invite students to think critically, logically and systematically in accordance with a predetermined time.

2. RESEARCH METHODS

The method used in this study was a quasi-experimental design with a non-equivalent control group consisting of one experimental group and one control group.

O1 x O2

O1 O2

Note: O1 = Pretest experimental and control groups

O2 = Posttest experimental and control groups

x = Treatment with the Competition-Based Window-shopping (WSBK) learning method in the experimental class.

The subjects in this study were Culinary Phase E students who were studying Basic Culinary subjects. The population is class X students of SMK Yapari with a sample of 1 experimental class and 1 control class,

totaling 58 students. Observed indicators of critical thinking skills include the ability to identify questions, put forward hypotheses, determine an action, consider the use of appropriate procedures, record observations, interpret questions, identify, and deal with irrelevance and provide definitions. After obtaining the results of the research, student scores are converted into criteria in the results. The scores are then converted with the following criteria on table 1.

Table 1. Score Conversion.

Score Range	Category
$X > M + 1.50 s$	Very high
$M + 0.50 s < X \leq M + 1.50 s$	High
$M - 0.50 s < X \leq M + 0.50 s$	Moderate
$M - 1.50 s < X \leq M - 0.50 s$	Low
$X \leq M - 1.50 s$	Very Low

M = Average ideal score

s = standard deviation

X = Total score obtained by students

3. RESULT AND DISCUSSION

3.1 Design of the Competition-Based Window-shopping (CBWS) Learning Method

Preliminary observations were carried out with a homogeneity test to ensure that the class to be observed was homogeneous in both quantitative and qualitative aspects. The quantitative aspect is carried out by conducting a homogeneity test. The results are declared homogeneous if the significance value is ≥ 0.05 . The results of the data distribution show that it is normally distributed. More clearly can be seen in table 2.

Table 2. Homogeneity Test Results.

Data Based	Levene statistic	df1	df2	Sig.
Mean	0.748	1	27	.189
Median	1.210	1	27	.279
Median and with adjust df	1.189	1	27	.280
Trimmed mean	1.733	1	27	.211

The results of the reliability test on the test equipment obtained $r = 0.86 \geq 0.73$ thus it can be ascertained that the test measuring instrument is reliable with very high criteria. The qualitative aspects observed in the homogeneity test include ensuring that the learning time is carried out at the same time. In addition, it is ensured that there are no differences in class facilities and conditions so that the comfort in learning activities can be stated to be no different.

The learning plan is prepared in the form of a lesson plan that has been validated in advance by a team of competent validators. The need for learning planning is intended so that learning improvements can be achieved. Improving the quality of learning must begin with improving learning planning [6]. The learning plan aims to prepare directed learning to get the expected learning outcomes. The steps of the CBWS learning method that have been developed are as follows in figure 1.

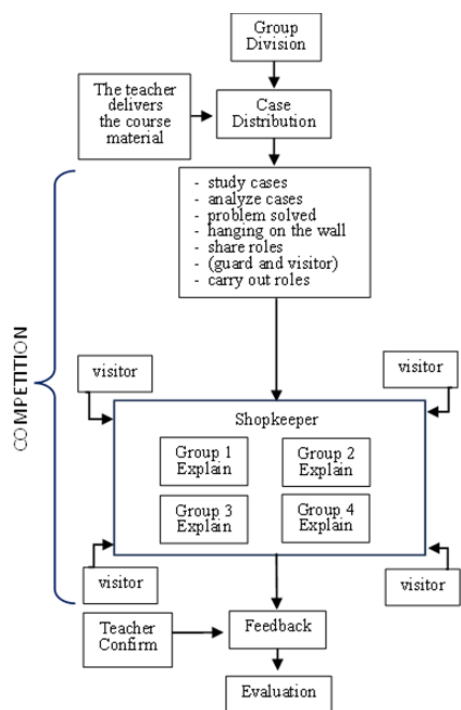


Figure 1 The syntax of the Competency-Based Window-shopping Method

The difference between the CBWS method and the window-shopping method in general is that open competition is carried out by the teacher from the start. Students prepare the material as well as possible to get the best assessment. At the explaining stage, the assessment process is not only carried out by the teacher but involves the active role of students to provide an assessment of the work of their group of friends. The assessment was carried out at the final stage by giving each student a sticky note with a star attached to the worksheet of their group of friends.

3.2 The implementation of the CBWS Learning Method

The results of the analysis of students' critical thinking skills on problems in the Basic Culinary subject presented by the teacher are as informed in table 3.

Table 3. Students' Critical Thinking Skills in Basic Culinary Subjects.

Aspect of Critical Thinking	Student Critical Thinking
Interpretation	82.3
Analysis	78.1
Inference	79.4
Evaluation	81.7
Expansion	80
Average	80.5

This critical thinking ability is very important for every student to have because it is used in mental activities in terms of solving problems, making decisions, analyzing assumptions, and for conducting scientific research [7]. Scientific literacy is also a supporting element in the ability to think critically. Students' scientific literacy skills are carried out so that students are accustomed to carrying out scientific activities, solving scientific problems, providing scientific explanations of phenomena, and using scientific evidence to explain facts [8].

The interpretation aspect has three sub-skills including categorization, decoding meaning, and clarifying meaning [9]. The aspect of analytical skills is known from the students' ability to analyze the topics presented during the lesson with an average score of 78.1. Aspects of analysis can be categorized as good if students are able to identify, analyze a relationship regarding questions, concepts, descriptions, or others that are intended to express beliefs, judgments, experiences, reasons, information, or opinions [10]. The average student's ability to conclude the results of the analysis supported by discussion activities reached 79.4, which was included in the good category. The ability to conclude is still general in nature based on the topics raised in small group learning. The window-shopping method raises critical thinking skills in students in the conclusion aspect [11]. The evaluation referred to in critical thinking skills is the ability to examine and understand the information obtained, both the results of small group discussions and the results of visits to groups of friends. The average score for this aspect is 81.7. Students' cognitive learning outcomes increase in learning using the window-shopping method [12].

The results of data analysis in applying the Competition-based Window-shopping model to the experimental class and control class can be seen in table 4 below.

Table 4. Analysis of the Application of the CBWS Method to the Control and Treatment Groups.

Classes	Kolmogorov Smirnov			Shapiro – Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Control	.169	17	.200*	.879	17	.442
WSBK	.173	16	.200*	.899	16	.121
Lilliefors Significance Correction						
*This is a lower bound of the true significance						

The data is said to be normally distributed if the significant value is greater than $\alpha=0.05$. The results of the data analysis obtained a significant value of $a = 0.200$ for the experimental class using the competition-based window-shopping method. Compared to the α value, $0.201 > 0.05$, thus it can be concluded that the data is normally distributed.

The results of the analysis using SPSS obtained that the significance value was 0.199. Thus, it can be decided that the estimated significance is $0.199 > 0.05$ so that it can be stated that there is an effect of the application of the Competition-based Window-shopping method on students' critical thinking skills, especially in Basic Culinary subjects.

From the results of hypothesis testing, it was found that $t \text{ count} >$ compared to $t \text{ table}$, namely $3.02 > 2.108$. Thus, it can be concluded that there is a positive significant influence of the application of the competition-based window-shopping method on the critical thinking skills of Yapari Bandung Vocational High School students.

The application of the window-shopping method makes students play an active role in learning. The existence of a form of competition in the application of this method was able to increase competition in students to compete in appearance and present as well as possible. One characteristic of competition in learning is giving rewards to students. Giving rewards to students will create a sense of pride and satisfaction in the results they achieve. In the world of education, rewards can be used as a motivational tool [13]. If a community is given stimulation and training to excel, the results will be better compared to groups of people who do not grow a culture of competition and achievement. A good response from students, this can be seen from the enthusiasm and activeness of students

during the windows shopping model learning activity [14]. Window-shopping learning model in the learning process to improve student learning achievement [15].

4. CONCLUSION

There is an effect of applying the Competition-based Window-shopping method to students' critical thinking skills, especially in Basic Culinary subjects. This is in accordance with the results of research in Mataram namely there is a positive and significant influence on the application of the windows shopping cooperative learning model on students' critical thinking at PGMI UIN Mataram [13].

REFERENCES

- [1] Syawaludin, Gunarhadi & Rintayati, Pengembangan Multimedia Interaktif Berbasis Augmented Reality untuk Meningkatkan Keterampilan Berpikir Kritis dalam Pembelajaran IPA, *International Journal of Teaching*, 12(4), 2019, pp. 331-344. DOI: <https://doi.org/10.29333/iji.2019.12421a>
- [2] Y.P. Purwanto, M. Masykuri, Soeparmi, & E. Elisanti, *J. Phys.: Conf. Ser.*, 1233, pp. 012086. DOI: 10.1088/1742-6596/1233/1/012086
- [3] S. Sutikno, *Belajar dan Pembelajaran*, Bandung: Prospect, 2009.
- [4] A. Lestari, *Efektivitas Outdoor Learning dalam Meningkatkan Kreativitas Anak Usia Dini*, Skripsi, Jurusan Psikologi: Universitas Negeri Malang, 2018.
- [5] R.K. Jannah, H. Auliya, D. Setiawan, & E. Waluyo, The Implementation of Problem Based Learning and Window-shopping Model for Improving Students' Communication Skills, *International Journal of Active Learning*, 8(2), 2023, pp. 103-108.
- [6] H.B. Uno, *Learning Planing*, Jakarta: Bumi Aksara, 2011.
- [7] I.J. Eka, I.M. Awanita, I.K.A. Irawan, *Pola Program Berpikir Kritis (Critical Thinking) Dalam Ruang Belajar Mengajar Era Abad 21 - Studi Pada Pasraman Kota Tangerang*, *Jurnal Pasupati*, 7(1), 2020, pp. 59-71. DOI: <http://dx.doi.org/10.37428/pspt.v7i1>
- [8] F. Zuhra, Nurhayati, & F. Arifiyanti, The Analysis of Students' Critical Thinking and Scientific Literacy Skills, *Indonesian Review of Physics (IRiP)*, 4(1), 2021, pp. 32-38. DOI: <https://doi.org/10.12928/irip.v4i1.3980>
- [9] A.C. Saputri, Sajidan, Y. Rinanto, *Identifikasi Keterampilan Berpikir Kritis Siswa Dalam Pembelajaran Biologi Menggunakan Window-*

- shopping, Prosiding Seminar Nasional Pendidikan Sains, 2017, pp. 131-135.
- [10] P.A. Facione, *Critical Thinking What It Is and Why It Counts*, 2015.
- [11] N. Petta Solong, Implementasi Budaya Kompetisi Melalui Pemberian Reward and Punishment dalam Pembelajaran, *Jurnal Manajemen Pendidikan Islam*, 5(2), 2017, pp. 38-52.
- [12] R.V. Indriyani, A.N. Prafitasari, M.A. Somad, & A. Usman, Implementasi Model Problem Based Learning Didukung Window-shopping untuk Meningkatkan Hasil Belajar Kognitif, *Jurnal Ilmiah Multidisiplin*, 1(5), 2023, pp. 597-603.
- [13] M.A. Rasidi & Nuruddin, Pengaruh Model Pembelajaran Kooperatif Tipe Windows Shopping Terhadap Keterampilan Berpikir Kritis Mahasiswa PGMI UIN Mataram, *Jurnal Elementary*, 2(2), 2019, pp. 31-33. DOI: <https://doi.org/10.31764/elementary.v2i2.1297>
- [14] K.D. Cahyani, Motivasi Belajar Siswa Kelas V dalam Pembelajaran Model Windows Shopping di SD Negeri Nirmala, *Jurnal Pemikiran Pendidikan dan Pembelajaran*, 1(1), 2021, pp. 23-29. DOI: <https://doi.org/10.56393/mindset.v1i1.83>
- [15] M.Z. Mustopa, Peningkatan Prestasi Belajar Peserta Didik Melalui Pendekatan Saintifik Model Pembelajaran Window-shopping (Kunjungan Galeri) Pada Materi Sistem Pencernaan Manusia Kelas VIII.8 SMPN I Praya Tahun Pelajaran 2019 – 2020, *Jurnal Ilmu Sosial dan Pendidikan*, 4, 2020, pp. 146-154. DOI: <http://dx.doi.org/10.58258/jisip.v4i2.1075>

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

