

The impact of Indonesia's decentralized education on vocational skills and economic improvement of students

Ari Setiawan * ¹ , Dedek Andrian ² , Hanandyo Dardjito ¹ , Azim Abdurakhmanovich Yuldashev ³ , Sri Murlianti ⁴ , Eri Ester Khairas ⁵ , Lukman Handoko ⁶ , Ihwana As'ad ⁷ 

¹ Universitas Sarjanawiyata Tamansiswa, Indonesia.

² Universitas Negeri Riau, Indonesia.

³ Chirchik State Pedagogical University, Uzbekistan.

⁴ Univeritas Mulawarman, Indonesia.

⁵ Politeknik Negeri Jakarta, Indonesia.

⁶ Politeknik Perkapalan Negeri Surabaya, Indonesia.

⁷ Universitas Muslim Indonesia, Indonesia.

* Corresponding Author. Email: ari.setiawan@ustjogja.ac.id

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ABSTRACT

This research aims to evaluate the impact of education decentralization through the local curriculum in improving senior secondary school students' vocational and economic skills. This research uses a mixed methods approach with a sequential exploratory design. This design applied a qualitative approach followed by a quantitative approach. Data collection with the qualitative approach used in-depth interviews, while the quantitative approach used questionnaires and documentation of practical exam results. The participants in the qualitative approach were the vice principal and the traditional cookery subject teacher. The sample in the quantitative approach was students who took traditional cookery subjects. Qualitative data analysis used the Miles and Huberman formula, namely data display, data reduction, and conclusions, while quantitative data analysis used descriptive quantitative and MANOVA. The results showed that the impact of decentralization through the local content curriculum on improving students' vocational and economic skills was in the "good" category. The impact of decentralizing education through the local curriculum can reduce the dropout rate of poor students. MANOVA results showed no difference in the impact of the local curriculum on vocational skills across the six schools. However, there is a significant difference in the impact of the local curriculum on students' economic improvement in the six schools.



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INTRODUCTION

Changes in the education system through decentralized education policies have an impact on schools in general. This policy is part of the central government's attention to the province to improve the economy, culture, and tourism. The government hand over the education management to the provincial government to preserve the culture and grow the economy. The result of this policy is the creation of economic improvement through the development of regional culture whose subject and object are the school. Schools that run curriculum changes are required to innovate in implementing the curriculum developed provincial government (Macdonald, 2003; Mukminin et al., 2019). In addition, the transformation of the education system through a decentralized policy commissioned local governments to develop regional-level curricula. The objective of this policy is for local governments to improve their regions and the economy of the regional culture. The government conducts needs assessments as a basis for developing the curriculum. But so far, there has been no effort to evaluate the impact of decentralized education through local curricula on the development of vocational skills and student economics.

The curriculum development should recognize the concepts, fundamental principles, characteristics and approaches used to consider. This step requires defining the expected learning outcomes, learning strategies, and adequate facilities to achieve satisfactory student learning outcomes (Abate et al., 2003; Ruhyana & Aeni, 2019). Curriculum development begins with a needs assessment. The local government should consider the needs assessment importance to determine instructional material at schools (Grier, 2005; Raksanakorn et al., 2020). Needs assessment is essential to develop a contextual curriculum, and it is necessary to design the curriculum based on the needs (Bosher & Smalkoski, 2002). The evaluation will identify student needs, describe the resources of the target situation, and conduct a specific effort as the basis for curriculum development (Kaya, 2021). The needs assessment can be organized by conducting in-depth interviews on subjects who will implement the curriculum. The results of the needs analysis provide a contextual understanding of the curriculum (Rutakumwa et al., 2020).

Needs assessment is conducted in every region in Indonesia to develop a local curriculum. In particular, the Riau province government analyzed potential areas that could be improved through education and implemented in the classroom or the laboratory. This policy is challenging to be done by schools because schools need to be creative and innovative in implementing the local curriculum. Schools are assigned to prepare facilities and infrastructure to implement the curriculum. Curriculum development and changes impact increasing support levels to improve school quality (Hallinger & Heck, 2011). Implementing the curriculum requires the support of all elements (Ransford et al., 2009). Achieving efficiency in curriculum development and implementation needs maximum help (Austenfeld, 2009). Supporting the curriculum can provide convenience for the teachers in the curriculum implementation and make them responsible for learning success (Burstein et al., 2014). Identifying support for curriculum implementation significantly impacts success in education (Johnston et al., 2007; Spreen & Knapczyk, 2017).

The development of the local curriculum is designed in such a way that the region is able to maintain its culture and uniqueness of the region through education. The local curriculum is designed as a control curriculum that can assist the national curriculum in realizing the national vision of the region (Mølstad, 2015). The local curriculum can raise the awareness of parents, students, and teachers in maintaining existing cultural values (Dube & Tsotetsi, 2019). The local curriculum is the most effective way of managing or preserving the cultural values of a region. In addition, the most important objective is that local curricula help local governments realize the regional vision by strengthening students' knowledge of their own culture (Prastiwi, 2013) in the form of vocational and economic skills of students. Many studies have been conducted on vocational skills and local culture, such as Andrian et al. (2018), Hadi et al. (2019), Seaman and Cannella-Malone (2016), and many more. However, research has not yet measured the real impact of vocational skills on economic improvement.

In particular, the province of Riau utilizes the policy of decentralized education with the development of a local curriculum, which is designed with attention to the superiority of the area and implemented in the learning process. One of them is developing local content in the form of

traditional cuisine into the curriculum. Traditional cuisine is reinforced in schools to enhance vocational skills and knowledge of local culture and improve students' economics through entrepreneurial activities undertaken in schools. Based on this policy, evaluating the impact of implementing education decentralization through the local curriculum on vocational skills and students' economic development is necessary.

Related Work

Decentralisation of education through local curriculum development

Decentralization is the transfer of power from the center to the regions. Decentralization of education is usually a manifestation of political and administrative decentralization (Meemar, 2018). Decentralization in education profoundly affects social life and nation-building (du Plessis, 2020; Sri Rezeki et al., 2021). Schools act as isolated social and cultural institutions in a centralized or deconcentrated system. They only run everything the central government sets (Luengo et al., 2005). In addition, decentralization has shifted responsibility for carrying out adequate educational tasks without being matched by the provision of comparable labor resources (Geo-JaJa, 2006). Local government authorities have the independent power to make policy on their educational expertise and the development of local education (Jeong et al., 2017).

Cunningham (2002) suggests that the personnel assigned to manage education are the local government within the education authority. Meanwhile, according to Yazdi (2013), transforming centralized systems into decentralized ones does not necessarily mean that education and curriculum quality will automatically increase or that the curriculum planning system will be efficient due to decentralization. In addition, decentralization improves centralized management structures and practices often used in education, allowing teachers to increase their authority in curriculum and teaching (Rahman, 2019).

Implementing decentralization, indicating an increase in institutional autonomy, such as provisions that increase the percentage of institutional-controlled curricula from 40 to 70%, gives the flexibility to develop new curricula (Hartley et al., 2016). School autonomy does not only mean giving more school decision-making power, but it requires recognition of the primary role of parents and all social actors associated with the school through various forms of participation in the management of educational activities, whether in the form of direct management or parental involvement and stakeholders in management school. The reasons for the decentralization of education are very suitable for the condition of Indonesia, namely: (1) redistribution of political power, (2) improvement of education quality, and (3) improvement of innovation in order to satisfy the expectations of all citizens (Paletta, 2014).

The objectives of the decentralization education process are improving the efficiency and performance of educational institutions at the central and regional levels and the school level, democratization of the education system, ensuring transparency and access to education, improving the relevance of educational services to all children and students; stimulating innovation, professional responsibility, and accountability (Diem et al., 2018; Panagoret et al., 2014). Decentralized education provides more autonomy to schools for curricular drafting. It enables content-curricular diversity. Some schools may choose not to teach the required subjects. Other schools may choose to change the time allocations of the course or rearrange the syllabus and the content of school subjects by considering the students' abilities (Benavot & Resh, 2003).

The Role of Vocational Skills Development in Economic Improvement

Studies related to the role of education in economic development have been widely adopted, and it is agreed that education contributes more to economic growth than investment in other areas (Becker et al., 2017; Psacharopoulos, 1997). Also, training and development of vocational skills are some of the most critical components in improving the quality of human resources through education. In the context of technological capacity in society, economic development and technological progress are only achievable with the general status of technical and vocational competence embodied in its workforce. According to Becker et al. (2017) and Mincer (1974), vocational and skill development have been considered major human resource factors. An Individual requires lifetime earnings for

these factors and finds indirectly the positive benefits. Additionally, according to Booth et al. (1996), professional training and skills development enable humans to be more productive and increase their incomes, aiding economic expansion.

The study conducted by the Directorate of Vocational High School Development in Indonesia Joesoef et al. (2016) concluded that there is a definite relationship between the ratio of vocational high school students and gross regional domestic product (GRDP). A province with a low vocational-student ratio will likely have a small GRDP value. The findings, on the other hand, indicated a definite relationship between the vocational students ratio and the economic growth rate. If the province has a low vocational-student ratio, it tends to have a small proportion of economic growth. In other words, vocational skills have a significant direct impact on the labor market and then on regional economic growth.

In line with this, the The Asian Development Bank (ADB) (2009) reported that the higher the state income level, the higher the proportion of students enrolled in vocational education institutions (TVET). Conversely, according to Amjad et al. (2005), skills development and vocational training affect national products and competitiveness. He concluded that an educated and skilled workforce helps countries in the labor-intensive economy transform into intensive skills. Skills development and vocational training affect national products and competitiveness. He concluded that an educated and skilled workforce helps countries transform labor-intensive economies into intensive skills.

The higher the GDP per capita, the higher the Technical/Vocational Registration (PTVE) percentage. Where PTVE is "the number of students enrolled in technical/vocational programs at a certain level of education as a percentage of students enrolled in all (technical/vocational and general) programs at that level (UNESCO Institute for Statistics (UIS), 2006). Yana et al. (2021) states that education and training that are technical, vocational, and democratic can encourage socio-economic prosperity and progress in rural areas. He even noted that primary education should efficiently provide technical knowledge to rural youth. It concludes that vocational education development and training can be encouraged to improve the economy and labor productivity (Esmond & Atkins, 2020; Igberaharha, 2021; Kurosaki & Khan, 2006; Mankiw et al., 1992; Solow, 1956).

Evaluation

Several definitions of evaluation imply a systematic process to assess whether a program is working as expected. Evaluation is the determination of the value of an object that includes obtaining information used to assess the outcomes of a program (Adom et al., 2020; Worthen & Sanders, 1973). According to Miller et al. (2013), evaluation is a systematic process of collecting, analyzing, and interpreting data from measurement and assessment processes to determine the extent to which students have achieved learning objectives. Evaluation is a process for describing, obtaining, and providing information to assess decision alternatives (Mehrens & Lehmann, 1978). Evaluation is a process that requires support from all elements. In education, evaluation involves students, teachers, principals, communities, education offices, and even ministers of education (Hood & Hopson, 2008). These definitions of the evaluation indicate that evaluating a program in the educational, economic, social, political, and cultural spheres requires support from the parties involved. In other words, with the help of these parties, evaluation activities will be smooth and easy to complete.

The results of evaluation activities will illustrate the shortcomings and strengths of the implemented learning education program so that the existence of these shortcomings and strengths can help schools consider what to do next. Learning methods, student satisfaction in learning, and student learning outcomes need to be evaluated (Zedda et al., 2017). Evaluation activities can determine how successful an education program is and serve as a recommendation for program improvement and the success of program providers (Spaulding, 2013). Evaluation can be a component to criticize and improve the education process (Lindahl & Beach, 2013).

RESEARCH METHOD

This research is a mixed-methods evaluation study with an Exploratory Sequential Design (Creswell & Clark, 2011). The research first started with qualitative research with a Phenomenological approach and was further explored with quantitative analysis with survey and ex post facto methods. The evaluation research with a mixed research approach provided comprehensive research findings. This research combines quantitative and qualitative methods to obtain complete or comprehensive data to obtain correct conclusions about the effect of the local content curriculum in improving vocational skills and the economic improvement of students. To clarify the steps in this research, it is necessary to develop a hypothesis for quantitative research. Can the local curriculum improve vocational skills and improve students' economy?

Sample and Sampling Technique

Qualitative research with a phenomenological approach used four principals, eight deputy principals, and eight vocational skills teachers. The survey and ex post facto research used a sample of secondary school students in Riau Province. The qualitative research sample used a purposive technique where the research sought participants who thoroughly understood the implementation of vocational skills learning in the curriculum. The quantitative research sample technique also used purposive sampling, which took all eligible students in high schools to be respondents, namely students who implemented the local content curriculum directly in the area. In this research, six schools were used as respondents, namely SHS 1 = 156 students, SHS 2 = 68 students, SHS 3 = 66 students, SHS 4 = 127 students, SHS 5 = 38 students, SHS 6 = 110 students.

Instrument

A qualitative research instrument with a phenomenology approach is an interview guide. Researchers conducted in-depth interviews with participants who deeply understood the vocational skills in the local curriculum. Instruments tools used in quantitative research are questionnaires and checklists. The questionnaire consisted of 23 items, with 14 items for information about students' vocational skills and nine items for information about students' economic improvement after following the local curriculum. The checklist was used to observe the increase in students' vocational skills and economic improvement over two months. Ten items are for observing vocational abilities, and eight items are for economic improvement.

Research Procedure

This research was conducted in two stages. The first phase interviewed six principals, vice principals, and vocational teachers with 24 participants. This interview activity described in-depth information about implementing the local curriculum through vocational subjects. The second step was to conduct observations using a checklist to see how the local curriculum can improve vocational skills and economic improvement. Observations were conducted for two months to see if there was an increase in vocational skills and economic improvement from the beginning of the student's participation until they successfully mastered the local curriculum. The third step was distributing questionnaires to all students who followed the local curriculum through vocational subjects with 565 respondents. The third step distributed the questionnaires to obtain information on the evaluation categories and compare the best schools implementing the local curriculum.

Data Analysis

Qualitative data were analyzed using Miles and Huberman's (1994) phenomenological technique. Data analysis was conducted through three steps, namely display, data reduction, and conclusion drawing. Quantitative data results were analyzed using descriptive analysis and MANOVA. The quantitative research described the evaluation categories and compared the vocational skills and economic improvement of students from the six schools according to the location determined in this research.

Validity and Reliability of Instrument

Two evaluation experts, one measurement expert, and eight educational practitioners validated this study's 23 questionnaire items and 19 checklists. The results of expert validation of the questionnaires and checklists were analyzed using Aiken's Formula. Analysis of the questionnaire resulted in 21 valid items (twelve vocational skills improvement variables and nine student economic improvement items). The checklist analysis resulted in 8 valid vocational skills items and seven economic improvement items. It was concluded that the items were validated and appropriate for the study. One hundred eighty students were tested with the questionnaire for further validation to obtain empirical data. The empirical tests were analyzed using confirmatory factor analysis. The results showed that the questionnaires and checklists distributed had loading factor values > 0.5 or were considered valid. The reliability of quantitative instruments was analyzed using Cronbach's Alpha. From the analysis, the coefficient values were 0.958 and 0.873, so it was concluded that the instruments developed were reliable and could be used to collect data in the field.

FINDINGS AND DISCUSSION

Findings

Qualitative Descriptive

The in-depth interviews with the vice-principal of the curriculum section implied that SHS had implemented the local curriculum maximally. The local school curriculum had a maximum positive impact on students' vocational skills and economic improvement. Regarding vocational skills, the local curriculum positively affected the ability to obtain vocational qualifications. Students who learned to cook traditional cuisine could practice directly and could improve vocational skills facilitated there. The interview with one of the teachers is suggested as follows.

"The local curriculum that applies traditional cuisine learning can improve vocational skills. The local curriculum that prioritizes the practice activities of the theory can train students how to cook properly so that it can be useful when students have completed their study".

Vocational skills in the form of practical learning could create creative and efficient students. With the science of vocational skills acquired in schools, students could utilize them at home or a particular moment. Practical education could improve technical skills and contribute to students developing job skills. Students who took part in the weekly practice of learning could improve the students' vocational skills. Students could create tasty and varied dishes. One of the teachers stated:

"The students' ability is getting better from week to week. The traditional cuisine is good to eat. They are always looking for a new cuisine that can be practiced for the next lesson so that the types of cuisine cooked by students vary".

Regarding economic improvements, local curricula developed by local governments positively impacted students' financial development. The learning activities of vocational skills of traditional cuisine produced saleable products and became a source of student economy. The interview with the conventional cuisine teacher suggests the following:

"The students produced traditional cuisine, and they sold it to get much profit. Students were happy because they got much money from the sale. They shared the profits with other students and saved some money for further practice. "

The students directly marketed the traditional cuisine in three ways product marketing. They sold it in person, markets, and bazaars (see Table 1). The interviews with the teachers were suggested as follows.

"In-person sales are done by directly meeting students, teachers, and staff to offer products. Sales in the market put the products in the market or the school canteen. Schools work closely with the canteen to market student products from traditional cuisine practice learning. Selling in bazaars is done by making bazaars at schools, events created by schools, local governments, and celebrations. Schools make bazaars on specific occasions, such as national holidays, school

anniversaries, and religious holidays. The school asked the local government for a bazaar or exhibition schedule".

Table 1. Successful Opportunities in Product Marketing

How Marketing System	SHS1	SHS2	SHS3	SHS4	SHS5	SHS6	Ranking of Successful Marketing Opportunities
Face to Face	No	No	No	No	No	Yes	4
Canteen/Restaurant	Yes	Yes	Yes	Yes	No	No	3
Bazaar at School or Other Place	Yes	Yes	Yes	Yes	Yes	Yes	2
Government Expo	Yes	Yes	Yes	Yes	Yes	Yes	1

The best product marketing is through direct sales (face to face) to students, teachers, and school staff, as the vice principal story says:

"The products in traditional dishes are sold directly to students, teachers, and school staff with great benefits. Students directly offer sales products to students, teachers, and staff when breaking learning time. They are happy to buy traditional cuisine from students so that the product can be quickly sold".

Marketing of the second-ranked product is by selling or putting the product into the school canteen. The products sold through the school canteen cannot directly gain profit as it has to wait for the canteen to close in the afternoon like what the teachers say;

"Selling through the canteen takes a long time with a small profit because there is a lot of traditional and modern cuisine in the cafeteria. Also, the canteen will deduct 10% of the profit earned from the sale. The canteen cannot market student products like pace to pace sales, because they also sell other food products. Not all students come to the canteen to buy food because they have brought food from homemade by their parents".

The third marketing is through the bazaar. Marketing of products through the bazaar tends to be weaker than face-to-face and sales through the canteen. The monthly bazaar minimizes the frequency of purchases or sales. Traditional cuisine teachers stated:

"Marketing of products through bazaars by schools every month or at a particular moment is not as good as through face to face and through the canteen, because the time to market old products and when there is a bazaar can only sell the product for 3-5 hours".

Practical learning of traditional cuisine, marketing it, and managing it well can reduce the number of students who drop out of school. One teacher stated:

"Learning of traditional cuisine practices should be developed and managed well, as this learning contributes to students' achievement and money, especially with poor backgrounds. Poor students can use the money from product marketing to pay for tuition and other needs".

Based on the explanation above, the local curriculum significantly contributes to improving students' vocational skills and improving the economy of poor students. Students' vocational skills make students dare to be entrepreneurs to help the family economy. The skills possessed through the local curriculum provide enormous benefits for developing student character so that students can maximize the local curriculum by opening up entrepreneurial opportunities at local and national events. Through the local curriculum, students maximize their free time and entrepreneurial abilities by selling in markets and places where many people do activities.

Quantitative Descriptive

Descriptive quantitative describes the mean, standard deviation, and evaluation results of local curriculum impact on improving vocational skills and student economics based on data obtained in the field. The descriptive results are converted into the proposed conversion table in Table 2 (Mardapi, 2015).

Table 2. Conversion Table of Evaluation Results

Range Vocational Skill Evaluation	Range Economic Improvement Evaluation	Category
> 46	> 23	Very Good
34 - 46	18 - 23	Good
26 - 34	13 - 18	Not Good
> 25	> 13	Very Not Good

Table 3. The Result of Descriptive Statistics and evaluation of Skill Vocational and Economy Improvement

Variable	School	Mean	Std. Deviation	N	Evaluation Category
Skill	Senior High School 1	33.8397	8.42155	156	Good
	Senior High School 2	35.2941	9.40793	68	Good
	Senior High School 3	34.6364	8.42457	66	Good
	Senior High School 4	34.3465	8.06460	127	Good
	Senior High School 5	34.5263	8.55740	38	Good
	Senior High School 6	34.7364	8.32227	110	Good
	Total		34.4425	8.43303	565
Economy	Senior High School 1	20.8718	1.99262	156	Good
	Senior High School 2	17.5882	2.55819	68	Not Good
	Senior High School 3	14.1667	2.08720	66	Not Good
	Senior High School 4	17.8031	3.05515	127	Not Good
	Senior High School 5	13.5526	1.91293	38	Not Good
	Senior High School 6	24.4909	1.40605	110	Very Good
	Total		19.2159	4.14448	565

Table 3 describes the mean and standard deviations of the data obtained in the field. The average variable of vocational skills from 6 schools suggests no difference, i.e., the average difference in schools with maximum and minimum scores is only 1.4544. Besides that, the average variable economic improvement varies significantly between six schools, i.e., between the highest and the lowest of 10.9383.

In the evaluation, the category column implies the impact of decentralized education through the local curriculum on improving vocational skills and student economics. In general, the evaluation results indicate that variables of vocational skills are "good." All schools (SHS 1, SHS 2, SHS 3, SHS 4, SHS 5, and SHS 6) are in the "good" category. On student economic variables, the impact of decentralized education through the local curriculum on improving students' economics is in the "good" category. The results of the evaluation from each school show that SHS 1 is in the "good" category, SHS 2, SHS 3, SHS4, and SHS 5 are not in the "good" category, and SHS 6 is in the "very good" category. Multivariate Analysis of Variance Analysis (MANOVA) in Table 4, Table 5, and Table 6 indicates the significant differences in evaluations from six schools regarding improving vocational and student financial skills.

Results of Multivariate Analysis of Varian (MANOVA)

The MANOVA analysis demonstrates the impact of decentralized education through the local curriculum in improving students' vocational skills and the economy overall and partially. Table 4 and Table 5 show the results of the analysis. Table 4 shows that the local curriculum can improve students' economic and vocational skills, as evidenced by the significant value of 0.00 obtained from Pillai's Trace, Wilks' Lambda, Hotelling's Trace, and Roy's Big Root from the Multivariate Tests Table. Schools that implemented the local content curriculum indicated a positive impact on improving students' economic and vocational skills.

Table 4. Multivariate Analysis of the Impact of Local Curriculum on Vocational Skills and Economy

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.984	1.769E4 ^a	2.000	558.000	.000
	Wilks' Lambda	.016	1.769E4 ^a	2.000	558.000	.000
	Hotelling's Trace	63.392	1.769E4 ^a	2.000	558.000	.000
	Roy's Largest Root	63.392	1.769E4 ^a	2.000	558.000	.000
School	Pillai's Trace	.708	61.212	10.000	1.118E3	.000
	Wilks' Lambda	.294	94.069 ^a	10.000	1.116E3	.000
	Hotelling's Trace	2.389	133.089	10.000	1.114E3	.000
	Roy's Largest Root	2.386	2.668E2 ^b	5.000	559.000	.000

Partially Impact

Table 5 illustrates the impact of the local curriculum in improving students' vocational and economic skills. In the school row, the dependent variable and the significant columns are obtained partially on the impact of the local curriculum on students. The effect of decentralizing education through the local curriculum on students' vocational skills is the same. The local curriculum positively impacts students from the six schools studied. The significant column shows a value of Sig. > 0,05. In other words, the six schools that implemented the local curriculum are the same.

Table 5. Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	Skill	119.412 ^a	5	23.882	.334	.893
	Economic	6823.619 ^b	5	1364.724	266.365	.000
Intercept	Skill	540629.561	1	540629.561	7.557E3	.000
	Economic	147915.991	1	147915.991	2.887E4	.000
School	Skill	119.412	5	23.882	.334	.893
	Economic	6823.619	5	1364.724	266.365	.000
Error	Skill	39989.968	559	71.538		
	Economic	2864.038	559	5.124		
Total	Skill	710360.000	565			
	Economic	218315.000	565			
Corrected Total	Skill	40109.381	564			
	Economic	9687.657	564			

The impact of the local content curriculum on students' economic improvement is significant. There are differences in the impact of the local content curriculum on improving students' economy in each school that implemented the local content curriculum. In other words, not all schools can improve students' economies with the decentralization policy through the implementation of the local curriculum. Table 6 shows the difference in the impact of decentralization through the local curriculum in improving students' economies.

Post Hoc Impact of Decentralized Education through Local Curriculum

Table 6 illustrates the impact of decentralizing education through the local curriculum in six senior secondary schools (SHS 1, SHS 2, SHS 3, SHS 4, SHS 5, and SHS 6). Based on the post hoc table in Table 6, the local curriculum positively impacts students' economic growth. There are differences in economic growth obtained from the analysis results using MANOVA statistics. There

is a significant difference between SHS 1 and SHS 2, SHS 3, SHS 4, SHS 5, and SHS 6. There is a substantial difference between SHS 2 and SHS 3, SHS 5, and SHS 6, but no difference with SHS4. There is a substantial difference between SHS 3, SHS 4, and SHS 6, but no difference with SHS 5. There is a significant difference between SHS 4 and SHS 6. The order of students' economic improvement from the highest is SHS 6, SHS 1, SHS 4, SHS 2, SHS 3, and SHS 5.

Table 6. Multiple Comparisons

Dependent Variable	(I) School	(J) School	Mean Difference (I-J)	Std. Error	Sig.
Economic Improvement	SHS 1	SHS 2	3.2836*	.32892	.000
		SHS 3	6.7051*	.33237	.000
		SHS 4	3.0686*	.27053	.000
		SHS 5	7.3192*	.40948	.000
		SHS 6	-3.6191*	.28182	.000
	SHS 2	SHS 3	3.4216*	.39112	.000
		SHS 4	-.2149	.34013	.528
		SHS 5	4.0356*	.45845	.000
	SHS 3	SHS 6	-6.9027*	.34917	.000
		SHS 4	-3.6365*	.34347	.000
		SHS 5	.6140	.46093	.183
	SHS 4	SHS 6	-10.3242*	.35243	.000
		SHS 5	4.2505*	.41853	.000
		SHS 6	-6.6878*	.29482	.000
	SHS 5	SHS 6	-10.9383*	.42592	.000

Discussion

In general, the impact of decentralized education through the local curriculum on improving vocational skills and improving student economics in both categories. Implementing the regional curriculum by applying practical learning can develop students' vocational skills. Employable work or practical activities can increase vocational skills (Blundell et al., 1999; Hadi et al., 2019). This finding is in line with the findings of Wicht et al. (2019) that the interaction between education, skills, and job criteria is pivotal. This result ties well with previous studies wherein vocational education provides practical skills for the labor force (Hambali, 2019; Lavrijsen & Nicaise, 2017; S. Rezeki et al., 2020).

Vocational activities increase vocational skills and can improve poor students' economics. Vocational programs implemented through the local curriculum helped the poor students, as vocational programs of traditional cuisine can improve the economy and reduce the number of students dropping out of school. The results of student traditional cuisine products can be an effective means of economic improvement for students. This fact shows that education is not just about spending money but also about making money. According to Booth et al. (1996), professional training and skill development enable humans to be more productive and increase their incomes, which aids economic expansion.

The evaluation results generally indicate a "good" category in Table 3. These results illustrate the positive impact of decentralization of education through the local curriculum in improving students' vocational skills and economics. The local curriculum developed by providing traditional cuisine training can improve students' vocational skills and economics. These findings go beyond previous reports, showing that enhancing vocational skills such as self-development efforts is an effective way to improve the economy because it improves vocational skills and the economy (Joo, 2018; Khilji et al., 2012). A similar conclusion was reached by Loyalka et al. (2015), who found that a program embodied in training to enhance vocational skills is the best way to promote economic growth. This aligns with the finding that education training is the most significant argument to bring or achieve rapidly changing or desired development in a State's economic, political, sociological, and human resources (Lawal, 2014).

CONCLUSION

The findings conclude that decentralizing education through the local curriculum can improve vocational skills and student economics. Traditional cuisine learning implemented in the local curriculum can develop students' vocational skills, as this learning provides a large portion of traditional cuisine practice learning rather than theoretical learning. Many traditional cuisine practices enable students to improve their vocational skills and increase their economics because students sell products and earn big profits.

Students sold the product face to face, at the school's bazaar or elsewhere, and at the government's exhibitions. The economic success rate of SHS6 is categorized as very good because SHS 6 implements all product marketing systems from face-to-face activities, face-to-face canteen, school bazaar and elsewhere, and bazaars from the government. The profits gained are enormous and positively impact the student's economic improvement. The three marketing methods of SHS 1, SHS 2, SHS 3, and SHS 4 are the canteen, school bazaar, and the government bazaar. SHS 5 applied a two-way marketing method. They are the school bazaar or another one, and the government bazaar. The profits of SHS 2, SHS 3, SHS 4, SHS 5 are smaller than SHS 6.

Quantitatively, there is no significant difference in the impact of decentralized education through the local curriculum on vocational student skills based on the six schools sampled for this research. However, there is a significant difference in the impact of decentralized education through the local curriculum on improving student economics. Based on the results of descriptive statistics, SHS6 has the highest value. In other words, SHS 6 achieved the highest increase in student economics among other schools because they sold the product with four marketing systems. SHS 5 achieved the lowest economic growth because this school only sold products through two out of four marketing systems. It implied that SHS, which applied the utmost marketing, gained the most profits.

REFERENCES

- Abate, M. A., Stamatakis, M. K., & Hagggett, R. R. (2003). Excellence in curriculum development and assessment. *American Journal of Pharmaceutical Education*, 67(1/4), 478–500. <https://www.proquest.com/openview/27cee1169aebb168c6d328858dc80270/1?pq-origsite=gscholar&cbl=41120>
- Adom, D., Adu-Mensah, J., & Dake, D. A. (2020). Test, measurement, and evaluation: Understanding and use of the concepts in education. *International Journal of Evaluation and Research in Education (IJERE)*, 9(1), 109–119. <https://doi.org/10.11591/ijere.v9i1.20457>
- Amjad, R., Haque, N. ul, & Colclough, C. (2005). Skills and competitiveness: Can Pakistan break out of the low-level skills trap? *The Pakistan Development Review*, 44(4), 387–409. <https://www.jstor.org/stable/41260725>
- Andrian, D., Kartowagiran, B., & Hadi, S. (2018). The instrument development to evaluate local curriculum in Indonesia. *International Journal of Instruction*, 11(4), 921–934. <https://eric.ed.gov/?id=EJ1191699>
- Austenfeld, A. M. (2009). Building the college library collection to support curriculum growth. *Collection Management*, 34(3), 209–227. <https://doi.org/10.1080/01462670902975027>
- Becker, S. A., Pasquini, L. A., & Zentner, A. (2017). *2017 digital literacy impact study: An NMC Horizon Project Strategic Brief*. <https://www.learntechlib.org/p/182080/>
- Benavot, A., & Resh, N. (2003). Educational governance, school autonomy, and curriculum implementation: A comparative study of Arab and Jewish schools in Israel. *Journal of Curriculum Studies*, 35(2), 171–196. <https://doi.org/10.1080/0022027022000022856>
- Blundell, R., Dearden, L., Meghir, C., & Sianesi, B. (1999). Human capital investment: The returns from education and training to the individual, the firm and the economy. *Fiscal Studies*, 20(1), 1–23. <https://doi.org/10.1111/j.1475-5890.1999.tb00001.x>

- Booth, A. L., Snower, D. J., & Centre for Economic Policy Research (Great Britain). (1996). *Acquiring skills: Market failures, their symptoms and policy responses*. Cambridge University Press.
- Bosher, S., & Smalkoski, K. (2002). From needs analysis to curriculum development. *English for Specific Purposes*, 21(1), 59–79. [https://doi.org/10.1016/S0889-4906\(01\)00002-3](https://doi.org/10.1016/S0889-4906(01)00002-3)
- Burstein, J., Shore, J., Sabatini, J., Moulder, B., Lentini, J., Biggers, K., & Holtzman, S. (2014). From teacher professional development to the classroom: How NLP technology can enhance teachers' linguistic awareness to support curriculum development for English Language learners. *Journal of Educational Computing Research*, 51(1), 119–144. <https://doi.org/10.2190/EC.51.1.f>
- Creswell, J. W., & Clark, V. L. P. (2011). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications, Inc.
- Cunningham, P. (2002). Progressivism, decentralisation and recentralisation: Local education authorities and the primary curriculum, 1902-2002. *Oxford Review of Education*, 28(2–3), 217–233. <https://doi.org/10.1080/03054980220143388>
- Diem, S., Sampson, C., & Browning, L. G. (2018). Reorganizing a countywide school district: A critical analysis of politics and policy development toward decentralization. *Education Policy Analysis Archives*, 26, 1. <https://doi.org/10.14507/epaa.26.3253>
- du Plessis, A. (2020). Statutory curtailment of school autonomy: Recent movements on the centralization-decentralization continuum in South African education. *Bulgarian Comparative Education Society*, 18, 177–183. <https://files.eric.ed.gov/fulltext/ED608417.pdf>
- Dube, B., & Tsoetsi, C. (2019). State-based curriculum making in a post colonial Zimbabwe: Making sense of family, religious and moral education in a global context. *Journal of Social Studies Education Research*, 10(1), 241–258. <https://dergipark.org.tr/en/pub/jsser/issue/45447/570412>
- Esmond, B., & Atkins, L. (2020). VET realignment and the development of technical elites: Learning at work in England. *International Journal for Research in Vocational Education and Training*, 7(2). <https://doi.org/10.13152/IJRVET.7.2.4>
- Geo-JaJa, M. (2006). *Education and Social Justice* (J. Zajda, S. Majhanovich, & V. Rust (eds.)). Springer Netherlands. <https://doi.org/10.1007/1-4020-4722-3>
- Grier, A. S. (2005). Integrating needs assessment into career and technical curriculum development. *Journal of Industrial Teacher Education*, 42(1), 59–66. <https://files.eric.ed.gov/fulltext/EJ753120.pdf>
- Hadi, S., Andrian, D., & Kartowagiran, B. (2019). Evaluation model for evaluating vocational skills programs on local content curriculum in Indonesia: Impact of educational system in Indonesia. *Eurasian Journal of Educational Research*, 19(82), 1–18. <https://doi.org/10.14689/ejer.2019.82.3>
- Hallinger, P., & Heck, R. H. (2011). Collaborative leadership and school improvement: Understanding the impact on school capacity and student learning. In *International Handbook of Leadership for Learning* (pp. 469–485). Springer Netherlands. https://doi.org/10.1007/978-94-007-1350-5_27
- Hambali, I. M. (2019). Examining the relevance of Indonesian vocational high school career outcomes to the labor market. *Journal of Social Studies Education Research*, 10(1), 133–155. <https://dergipark.org.tr/en/download/article-file/724105>

- Hartley, M., Gopaul, B., Sagintayeva, A., & Apergenova, R. (2016). Learning autonomy: higher education reform in Kazakhstan. *Higher Education*, 72(3), 277–289. <https://doi.org/10.1007/s10734-015-9953-z>
- Hood, S., & Hopson, R. K. (2008). Evaluation roots reconsidered: Asa Hilliard, a fallen hero in the “Nobody Knows My Name” project, and African Educational Excellence. *Review of Educational Research*, 78(3), 410–426. <https://doi.org/10.3102/0034654308321211>
- Igberaharha, C. O. (2021). Improving the quality of Technical Vocational Education and Training (TVET) for sustainable growth and development of Nigeria. *Journal of Education and E-Learning Research*, 8(1), 109–115. <https://doi.org/10.20448/journal.509.2021.81.109.115>
- Jeong, D. W., Lee, H. J., & Cho, S. K. (2017). Education decentralization, school resources, and student outcomes in Korea. *International Journal of Educational Development*, 53, 12–27. <https://doi.org/10.1016/j.ijedudev.2016.12.003>
- Joesoef, J. R., Muawanah, U., Poernamawatie, F., Mulyono, S., & Mukhlis, I. (2016). *Peran SMK dalam menunjang pertumbuhan ekonomi daerah: Sebuah analisis markoekonomika*. Direktorat Pembinaan Sekolah Menengah Kejuruan, Direktorat Jenderal Manajemen Pendidikan Dasar dan Menengah, Departemen Pendidikan Nasional. <http://www.ejournal.unigamalang.ac.id/index.php/RDOS/article/view/50>
- Johnston, K., Murchan, D., Loxley, A., Fitzgerald, H., & Quinn, M. (2007). The role and impact of the regional curriculum support service in Irish primary education. *Irish Educational Studies*, 26(3), 219–238. <https://doi.org/10.1080/03323310701491455>
- Joo, L. (2018). Education and labor market outcomes in Korea. *International Education Studies*, 11(6), 145. <https://doi.org/10.5539/ies.v11n6p145>
- Kaya, S. (2021). From needs analysis to development of a vocational English language curriculum: A practical guide for practitioners. *Journal of Pedagogical Research*, 5(1), 154–171. <https://doi.org/10.33902/JPR.2021167471>
- Khilji, B. A., Kakar, Z. K., & Subhan, S. (2012). Impact of vocational training and skill development on economic growth in Pakistan. *World Applied Sciences Journal*, 17(10), 1298–1302. https://www.researchgate.net/profile/Muhammad-Zaheer-Khan/publication/286990735_Impact_of_vocational_training_and_skill_development_on_economic_growth_in_Pakistan/links/601ad92245851589397d5eb3/Impact-of-vocational-training-and-skill-development-on-econom
- Kurosaki, T., & Khan, H. (2006). Human capital, productivity, and stratification in rural Pakistan. *Review of Development Economics*, 10(1), 116–134. <https://doi.org/10.1111/j.1467-9361.2005.00305.x>
- Lavrijsen, J., & Nicaise, I. (2017). Returns on vocational education over the life cycle: Between immediate labour market preparation and lifelong employability. *International Review of Education*, 63(2), 257–280. <https://doi.org/10.1007/s11159-017-9630-9>
- Lawal, A. W. (2014). Technical and vocational education, a tool for national development in Nigeria. *International Letters of Social and Humanistic Sciences*, 3, 53–59. <https://www.ceeol.com/search/article-detail?id=168568>
- Lindahl, R. A., & Beach, R. H. (2013). The role of evaluation in the school improvement process. *Planning and Changing*, 44(1–2), 56–72. <https://eric.ed.gov/?id=EJ1145866>
- Loyalka, P., Huang, X., Zhang, L., Wei, J., Yi, H., Song, Y., Shi, Y., & Chu, J. (2015). The impact of vocational schooling on human capital development in developing countries: Evidence from China. *The World Bank Economic Review*, lhv050. <https://doi.org/10.1093/wber/lhv050>

- Luengo, J., Sevilla, D., & Torres, M. (2005). From centralism to decentralization : The recent transformation of the Spanish education system. *European Education*, 37(1), 46–61. <https://doi.org/10.1080/10564934.2005.11042377>
- Macdonald, D. (2003). Curriculum change and the post-modern world: Is the school curriculum-reform movement an anachronism? *Journal of Curriculum Studies*, 35(2), 139–149. <https://doi.org/10.1080/00220270210157605>
- Mankiw, N. G., Romer, D., & Weil, D. N. (1992). A contribution to the empirics of economic growth. *The Quarterly Journal of Economics*, 107(2), 407–437. <https://doi.org/10.2307/2118477>
- Mardapi, D. (2015). Pengukuran, penilaian, dan evaluasi pendidikan. Nuha Litera.
- Meemar, S. S. (2018). Educational decentralization efforts in a centralized country: Saudi tatweer principals' perceptions of their new authorities. *International Journal of Education Policy and Leadership*, 13(2). <https://doi.org/10.22230/ijepl.2018v13n1a730>
- Mehrens, W. A., & Lehmann, I. J. (1978). *Measurement and evaluation in education and psychology* (4th ed.). Holt, Rinehart and Winston. <https://cir.nii.ac.jp/crid/1130282273220714624>
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis* (2nd ed.). SAGE Publication. <https://vivauniversity.files.wordpress.com/2013/11/milesandhuberman1994.pdf>
- Miller, M. D., Linn, R. L., & Gronlund, N. E. (2013). *Measurement and assessment in teaching*. Pearson.
- Mincer, J. (1974). *Schooling, experience, and earnings* (Human behavior and social institutions No. 2) (1st ed.). National Bureau of Economic Research.
- Mølstad, C. E. (2015). State-based curriculum-making: approaches to local curriculum work in Norway and Finland. *Journal of Curriculum Studies*, 47(4), 441–461. <https://doi.org/10.1080/00220272.2015.1039067>
- Mukminin, A., Habibi, A., Prasojo, L. D., Idi, A., & Hamidah, A. (2019). Curriculum reform in Indonesia: Moving from an exclusive to inclusive curriculum. *Center for Educational Policy Studies Journal*, 9(2), 53–72. <https://doi.org/10.26529/cepsj.543>
- Paletta, A. (2014). Improving students' learning through school autonomy: Evidence from the international civic and citizenship survey. *Journal of School Choice*, 8(3), 381–409. <https://doi.org/10.1080/15582159.2014.942173>
- Panagoret, D. M., Panagoret, A. A., & Coporan, C. (2014). The impact of the educational management on the educational process quality in the context of school education decentralization. *Valahian Journal of Economic Studies*, 5(19), 45–50. <https://lib.manaraa.com/books/The Impact of the Educational Management on the Educational Process Quality in the Context of School Education Decentralization.pdf>
- Prastiwi, Y. (2013). Transmitting local cultural knowledge through English as Foreign Language (EFL) learning as a means of fostering “Unity in Diversity.” *Academic Journal of Interdisciplinary Studies*. <https://doi.org/10.5901/ajis.2013.v2n3p507>
- Psacharopoulos, G. (1997). Vocational education and training today: Challenges and responses 1. *Journal of Vocational Education & Training*, 49(3), 385–393. <https://doi.org/10.1080/13636829700200022>
- Rahman, A. A. (2019). Decentralised education policy in Indonesia. *Exchanges: The Interdisciplinary Research Journal*, 6(2), 30–47. <https://doi.org/10.31273/eirj.v6i2.240>
- Raksanakorn, K., Chusorn, P., Khemma, P. H., & Chusorn, P. (2020). Needs assessment for development of primary school administrators' attributes in 21st Century. *World Journal of Education*, 10(2), 158–162. <https://doi.org/10.5430/wje.v10n2p158>

- Ransford, C. R., Greenberg, M. T., Domitrovich, C. E., Small, M., & Jacobson, L. (2009). The role of teachers' psychological experiences and perceptions of curriculum supports on the implementation of a social and emotional learning curriculum. *School Psychology Review*, 38(4), 510–532. <https://mentalhealthlead.com/wp-content/uploads/Role-Teachers-Psychological-Experiences.pdf>
- Rezeki, S., Andrian, D., Wahyuni, A., & Nurkholisah, H. (2020). The sustainability concept of Riau cultures through development of mathematics learning devices based on Riau folklore at elementary schools. *Journal of Physics: Conference Series*, 1538(1), 012066. <https://doi.org/10.1088/1742-6596/1538/1/012066>
- Rezeki, Sri, Andrian, D., & Safitri, Y. (2021). Mathematics and cultures: A new concept in maintaining cultures through the development of learning devices. *International Journal of Instruction*, 14(3), 375–392. <https://doi.org/10.29333/iji.2021.14322a>
- Ruhyana, N. F., & Aeni, A. N. (2019). Effect of educational facilities and infrastructure in primary schools on students' learning outcomes. *Mimbar Sekolah Dasar*, 6(1), 43. <https://doi.org/10.17509/mimbar-sd.v6i1.15225>
- Rutakumwa, R., Mugisha, J. O., Bernays, S., Kabunga, E., Tumwekwase, G., Mbonye, M., & Seeley, J. (2020). Conducting in-depth interviews with and without voice recorders: A comparative analysis. *Qualitative Research*, 20(5), 565–581. <https://doi.org/10.1177/1468794119884806>
- Seaman, R. L., & Cannella-Malone, H. I. (2016). Vocational skills interventions for adults with autism spectrum disorder: A review of the literature. *Journal of Developmental and Physical Disabilities*, 28(3), 479–494. <https://doi.org/10.1007/s10882-016-9479-z>
- Solow, R. M. (1956). A contribution to the theory of economic growth. *The Quarterly Journal of Economics*, 70(1), 65–94. <https://doi.org/10.2307/1884513>
- Spaulding, D. T. (2013). *Program evaluation in practice: Core concepts and examples for discussion and analysis* (2nd ed.). Jossey-Bass.
- Spreen, C. A., & Knapczyk, J. J. (2017). Measuring quality beyond the scores: The impact of regional context on curriculum implementation (in Northern Uganda). *FIRE: Forum for International Research in Education*, 4(1), 1–31. http://preserve.lehigh.edu/fire/vol4/iss1/1?utm_source=preserve.lehigh.edu%2Ffire%2Fvol4%2Fiss1%2F1&utm_medium=PDF&utm_campaign=PDFCoverPages
- The Asian Development Bank (ADB). (2009). *ADB Annual Report 2009*. The Asian Development Bank (ADB). <https://www.adb.org/sites/default/files/institutional-document/31322/adb-ar2009-v1.pdf>
- UNESCO Institute for Statistics (UIS). (2006). *Participation in formal technical and vocational education and training programmes worldwide: An initial statistical study*. UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training. <https://uis.unesco.org/sites/default/files/documents/participation-in-formal-technical-and-vocational-education-and-training-programmes-worldwide-an-initial-statistical-study-2006-en.pdf>
- Wicht, A., Müller, N., Haasler, S., & Nonnenmacher, A. (2019). The interplay between education, skills, and job quality. *Social Inclusion*, 7(3), 254–269. <https://doi.org/10.17645/si.v7i3.2052>
- Worthen, B. R., & Sanders, J. R. (1973). *Educational evaluation: Theory and practice*. Jones Pub. Co. <https://eduq.info/xmlui/handle/11515/11545>
- Yana, S., Yulisma, A., & Zulfikar, T. M. (2021). Manfaat sosial ekonomi energi terbarukan: Kasus negara-negara ASEAN. *Jurnal Serambi Engineering*, 7(1). <https://doi.org/10.32672/jse.v7i1.3820>

- Yazdi, S. V. (2013). Review of centralization and decentralization approaches to curriculum development in Iran. *International Journal of Academic Research in Business and Social Sciences*, 3(4), 97–115. https://hrmars.com/papers_submitted/9538/review-of-centralization-and-decentralization-approaches-to-curriculum-development-in-iran.pdf
- Zedda, M., Bernardelli, S., & Maran, D. A. (2017). Students' satisfaction with the group work method and its performance evaluation: A survey in an Italian University. *International Journal of Instruction*, 10(3), 1–14. <https://doi.org/10.12973/iji.2017.1031a>