

SOCIAL AND ECONOMIC DEVELOPMENT: STATE UNIVERSITIES AND COLLEGES' (SUC's) CONTRIBUTION CREATIVITY SKILLS OF THE STUDENTS IN RECYCLING

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Abstract

State Universities and Colleges (SUC's) are among the state institutions that serve as change agents in the Philippines. These institutions help develop students' critical thinking. In carrying out their mandated four functions as outlined in law, SUC's have faced challenges. In order to measure the success of its functions, graduates are measured for the improvement in their social and economic circumstances. The study utilized descriptive-correlation research and the settings of the study were in the Northern, Southern, and Central Areas of Region XII, Philippines. The 196 respondents of the study were SUC's alumni who were employed or graduates, and they were chosen regardless of social and economic status. It was concluded that instruction is a great factor in the social and economic development of graduates, which can be attributed to teachers' teaching in the classroom, such as well-prepared lessons, verbal interaction, library utilization, and coursework assignments. Furthermore, the research functions greatly help the social and economic development of graduates, which can be attributed to teachers' research expertise, students' research involvement, and administrative support. The SUC's functions of instruction and research that are well-designed and well implemented can greatly enhance the positive social values and economic well-being of the graduates. The success of graduates is contingent on the SUC's curriculum, supervision of classes, research expertise, and administrative support. Overall, the SUC's-mandated functions are effective mechanisms for instilling desirable social attitudes, values, and strong confidence in students for their well-being and the communities to which they belong.

Keywords: Instruction, Research Social Development, Economic Development, Contribution.

Introduction

In today's global environment, knowledge is increasingly recognized as the main driver of socio-economic development. Education plays an important role in promoting economic growth with a particular focus on educational quality [1]. State universities and colleges (SUCs) are among the state institutions that serve as change agents in the Philippines. These institutions help develop students' critical thinking. In carrying out their mandated four functions as outlined in law, SUCs have faced challenges. In order to measure the success of its functions, graduates are measured for the improvement in their social and economic circumstances. This concept presumes that each institution is engaged in a continuing quest for quality and excellence in programs relevant to the needs of the service area and can demonstrate how well it fulfills its stated purpose. Currently, there are more than one thousand three hundred (1,300) higher educational institutions all over the country that cater to millions of students. There are some one hundred eight (108) State Universities and Colleges (SUC's) and, out of them, there are five (5) SUCs in Region XII. These are the University of Southern Mindanao (USM) Kabacan, North Cotabato, Sultan Kudarat State Polytechnic College (SKSPC) Tacurong City, Cotabato City State Polytechnic College (CCSPC) Cotabato City, Cotabato Foundation College of Science and Technology (CFCST) Doroloman, North Cotabato and Mindanao State University (MSU) General Santos City. This study therefore would determine the contribution of the SUCS' two mandated functions to the social and economic development of the agriculture graduates.

Theoretical and Literature Review

This study is based on the Human Capital Theory, which was introduced by Adam Smith. This theory stresses the importance of education and training as the keys to participation in the new global economy [2]. In line with human capital theory, it has been argued that "the global economic performance of countries increases directly based upon their knowledge stock and their learning. Applying the theory to this study, SUCS is a major source of ideas through its instruction and research functions. New knowledge, skills, and technical know-how are transferred to its students. These will be transferred

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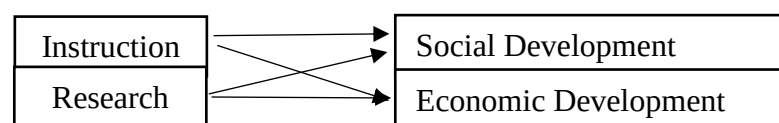
through its mandated functions. In Adams Smith's "The Wealth of the Nation," graduates are those who accumulate and build social and political organizations to mobilize resources. To him, the economic value of education is measured according to the number of students who finish education. He theorizes that the quality of management also improves with experience and circumstances related to large-scale economic activities. Also, Smith believes that the active factors of economic development are human beings. Globally, universities grew rapidly during the 20th century, and by mid-century, larger cities, often located in central regions, had their own university [3]. As a result of these developments, the distance between the peripheral and central regions increased in university attendance [4][5]. Furthermore, many young people who moved out of their original home areas to do their studies haven't returned afterward [6][7]. However, in most peripheral regions, the labour market situation for new graduates was favourable before the university's establishment [8] due to a shortage of highly skilled human capital.

In addition, the role of universities in regional development and innovation is expected to continue to increase [9] [10]. This growing role can be attributed in part to the growing need for knowledge in the current economy [11] [12]. While universities play both a direct and indirect role in this regard, they are also responsible for the training of highly skilled workers, which allows companies to process and use knowledge and thus compete in the

knowledge-based economy [13] [14]. On the other hand, in graduate employability studies conducted by [15] [16] [17] [18], it was concluded that higher education institutions need to have closer links to the world of work and provide other opportunities to their students in order to improve graduate employability. They also discovered from their research that prior work experience appears to have a highly positive influence on employability. However, the role of internships and work placements should not be overestimated, as these studies show no significant link between internship taken and employment rate. Additionally, combining studies with non-relevant work during the academic year may have a negative effect; employer involvement in course design and delivery is positively associated with graduates' quality of initial employment; and involvement in extra-curricular activities is positively associated with graduates' quality of initial employment; and participation in extracurricular activities as well as study/work abroad opportunities is also linked to successful outcomes in the workplace. It is important for teachers and the school where they teach to be prepared on technical levels. As well, teachers expressed their readiness to perform their duties and functions in connection with the new normal education program [19].

As reviewed in the related literature, Figure 1, shows the linkage between the two functions of the SUC's and the social and economic development.

Figure 1: Schematic Diagram of The Study



The Problem

The study aimed to determine the extent of the effectiveness of the instruction and research functions of SUC's and the extent of the social and economic development achieved by graduates. It also sought to find out the contribution of SUC's Region XII to the social and economic development of graduates.

Hypotheses

Ho1. The instruction function of SUC's has no significant contribution to social and economic development.

Ho2. The research function of SUC's has no significant contribution to social and economic development.

Research Methodology

The study utilized descriptive-correlation research to determine the contribution of the State Universities and Colleges (SUC's) to social and economic development. The settings of the study are in the Northern, Southern, and Central Areas of Region XII, the Philippines. The higher institutions selected for the study were the University of Southern Mindanao (USM), Kabacan, North Cotabato, Sultan Kudarat Polytechnic State College (SKPSC), Lutayan Campus, Tacurong City. Sultan Kudarat, Cotabato City State Polytechnic College (CCSPC), Cotabato City, Cotabato Foundation College of Science and Technology (CFCST); Doroloman, North Cotabato, Mindanao University, Fatima Compound, General Santos City. The 196 respondents of the study were SUC's alumni who were employed and graduates, and they were chosen regardless of social and economic status.

This study utilized a questionnaire. It was subjected to content and face validity by a panel of experts. The reliability was done through the split-half method, and this was corrected using the Spearman Brown Formula as the test was only true for half of the respondents' scores. The questionnaire yielded an index of 94, which meant that the questionnaire was highly reliable. The questionnaires were distributed with the help of some alumni who were not one of the respondents. An informal random interview was personally conducted by the researcher to complement and reinforce the data collected. Secondary data was also collected to validate the findings and also for justification purposes. Descriptive statistics were used to describe and present the general findings of the study. The Pearson Product Moment Correlation Analysis was used to describe the linear association of the relationship between the selected variables and the social and economic development of the graduates using 1 test at a 0.05 significance level. Multiple Regression Analysis was used to determine the contribution of the SUC's to social and economic development.

Results and Discussions

Instruction Functions

In this study, instruction functions included curricular offerings, instructional assessment, supervision, and administrative support for instruction.

The SUC's implements curricular offerings that meet the standard requirements per the CHED Memorandum, with a mean rating of 3.69. During the interviews with respondents, it was confirmed that the courses provided helped them develop analytical and critical thinking skills. The following values and work ethics which were integrated into the class subject matter were: policy awareness, punctuality, responsiveness, truth assertion, gratitude, national consciousness, responsiveness,

positive thinking, access to education, citizenship, patriotism, self-worth, achievement, creativity, positive self-concept, honesty, sense of achievement, sincerity, happiness, and inner harmony. These values were taken directly from the faculty syllabus. This result implies that the students' attitudes will be molded to become responsible citizens if values are woven into the teaching.

Meanwhile, the Supervision of Instruction was rated highly implemented, with a mean rating of 3.63. When asked how they assess their students, the faculty mentioned formative tests like quizzes, unit tests, summative tests, projects and term papers, as well as practicum and performance tests. In addition, the program heads conduct classroom observation, enforce rules on faculty attendance, perform faculty performance evaluations, and conduct faculty meetings. This suggests that the SUC's conducted performance evaluations of their faculty. Hence, one way to improve instruction is to evaluate one's teaching performance. The key to employability cannot be achieved through individual or institutional efforts alone; it requires both collaboration and participation.

A mean rating of 3.60 is given to the administrative support for instruction across the SUC's. Among these supports were the provision of conducive instructional design, a well-equipped library conducive to learning and research, computer and internet services, modern audio-visual equipment, medical services, scholarships and financial assistance programs, and prompt customer service. The findings revealed that the SUC's ensures that all necessary facilities, equipment, and student services are available. Furthermore, personnel work on time, and when services are required, they respond quickly. When questioned, they stated that the SUC's provided prompt services during enrollment and grade release because these were computerized. As a result, the personnel were approachable, accessible, and trustworthy.

Table 1: The Instruction Function

Functions	Mean	Description
Curricular offerings	3.69	Highly Implemented
Instructional assessment and supervision	3.63	Highly Implemented
Administrative support for instruction	3.60	Highly Implemented
Total	3.64	Highly Implemented

Research Functions

In this study, instruction functions included faculty research expertise, student research capabilities, and administrative support for research.

The faculty research expertise was rated highly implemented by the respondents, with a mean rating

of 3.59. The faculty conducted research that was relevant to national development goals and was based on the national higher education research agenda. During the faculty interview, they stated that their activities are based on the needs of the service area. The finding implied that the faculty

were actively involved in the SUC's research endeavors.

Table 2 displays data on the students' research abilities. The respondents rated the implementation as highly implemented, with a mean rating of 3.58. When asked about it, respondents stated that they had been trained and exposed to research activities. The respondents also stated that during their time in the SUC's, the majority of the faculty required them to conduct research related to their field of specialization. As a result, they defended these studies in front of the tribunal panel. The results revealed that SUC's students were adept at conducting research. This implied that they were knowledgeable and capable of conducting research. Furthermore, with a mean rating of 3.59, respondents rated administrative support for research as highly implemented. This support

includes the allocation of funds for the conduct of faculty and student research activities; the establishment of links for funding support and assistance; the provision of facilities and equipment such as the internet, statistical software, and other ICT resources; and the provision of a conducive and well-equipped workplace. The SUC's also provides opportunities for advanced studies and training to develop faculty research competence, as well as the provision of a conducive and well-equipped workplace. The findings suggested that the administration supported the research activities, with the administration's goals including not only the institutions but also the region's economic development. Practicum provides the student with the essential scientific experiences needed on a daily basis, thus providing a valuable learning experience. Those who graduate put those newfound skills into practice in the workplace.

Table 2: The Research Function

Functions	Mean	Description
Faculty research expertise	3.56	Highly Implemented
Students research capabilities	3.58	Highly Implemented
Administrative support for research	3.59	Highly Implemented
Total	3.58	Highly Implemented

Social Development

Table 3 revealed that the respondents had a high level of social and economic development, with mean ratings of 3.60 and 3.64, respectively. This finding explains why the respondents were well-developed socially. In another interview, they stated that, while they are very busy with their jobs, they are also kept up to date on the country's issues and problems. They support all of the government's programs and projects for betterment, and they share their resources with the less fortunate people in the community, according to them. They also support local businesses, protect the environment from degradation and destruction, promote Philippine tourism, promote peace and order in the community, participate actively in barangay and religious activities, and promote a healthy environment. These findings revealed that the graduates' social development was explained by the fact that they were responsible citizens. It implies that because

they are responsible, they feel accountable to their environment and to other people, and it also explains how graduates use the education they received from SUCs for their own benefit and/or the benefit of both the community and the nation.

Economic Development

As gleaned in the Table, the graduates' economic development was highly developed, with a mean rating of 3.62. This describes how graduates' benefit from employment benefits, income, and sustenance for personal and family needs. This result also suggests that salary was the primary source of income for some of the respondents. When asked, they confirm that, in addition to their salary, some respondents have other sources of income. They also stated that they occasionally accept part-time jobs such as encoding and that others are involved in a small-time business.

Table 3: Social and Economic Development

Development	Mean	Description
Social	3.60	Highly Developed
Economic	3.64	Highly Developed

SUC's Contribution to Social Development

From the model summary of multiple linear regression analysis in Table 4, the R-value of the model was .925, indicating the multiple correlation coefficients that explain the relationship between independent and dependent variables. The regression model R square coefficient determination value was .840, indicating that instruction and

research accounted for 84% of the variance in social development. Other variables not included in this study accounted for the remaining 16% of the variance in graduates' social development. The overall model, as shown in Table 4.1, is significantly useful in explaining social development, $F(3, 15) = 32.11$ $p < .05$. development among graduates for their well-being and the communities to which they belong.

Table 4: Results of Regression Analysis on the Contribution of SUC's to Social Development

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.925 ^a	.840	.804	4.44531

- a. Predictors: (Constant), instruction, research
b. Dependent Variable: Social Development

Table 4.1: Results of ANOVA on the Contribution of SUC's to Social Development

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1942.643	3	643.872	32.611	.000 ^b
	Residual	316.335	15	19.940		
	Total	2258.978	18			

- a. Dependent Variable: Social Development
b. Predictors: (Constant), instruction, research

SUC's Contribution to Economic Development

Based on the model summary of multiple linear regression analysis in Table 5, the R-value of the model based on the model summary of multiple linear regression analysis was .997, indicating the multiple correlation coefficients that explain the relationship between independent and dependent variables. The regression model R square coefficient

determination value was .994, indicating that instruction and research accounted for 99.4% of the variance in economic development. The remaining .6% of the variance in graduates' economic development was accounted for by other variables not included in this study. Table 5.1 shows that the overall model is significantly useful in explaining economic development. $F(3, 132) = 7277.78$ $p < .05$ among graduates for their well-being and the communities to which they belong.

Table 5: Results of Regression Analysis on the Contribution of SUC's to Economic Development

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.997 ^a	.994	.994	.0358875

- a. Predictors: (Constant), instruction, research
b. Dependent Variable: Economic Development

Table 5.1: Results of ANOVA on the Contribution of SUC's to Economic Development

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.120	3	9.373	7277.78	.000 ^b
	Residual	.170	132	.001		
	Total	28.290	135			

- a. Dependent Variable: Economic Development
b. Predictors: (Constant), instruction, research

Conclusion

Instruction is a great factor in the social and economic development of graduates, which can be attributed to the teachers' teaching in the classroom, such as well-prepared lessons, verbal interaction, library utilization, and coursework assignments. The SUC's functions of instruction and research. That are well-designed and well implemented can greatly develop the positive social values and economic well-being of the graduates. The success of graduates is contingent on the SUC's curriculum, supervision of classes, research expertise, and administrative support. Overall, the SUC's - mandated functions are effective mechanisms for instilling desirable social attitudes, values, and strong confidence in students for their well-being and the communities to which they belong.

Recommendations

From the findings of the study, it is recommended that the SUCS should formulate intensive programs for their graduates addressing more concerns for job placements. Through this, the institutions may help their graduates to boost further their social and economic development.

Conflict of Interest

This research has been conducted by an independent researcher who maintains no conflict of interest.

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