

## The Effectiveness of Co-Curricular Activities (Bina Insan Guru) for The Male and Female Students June Intake 2022 in IPG Gaya Campus

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### Abstract

This study aims to observe the effectiveness of the co-curriculum activities (*Bina Insan Guru*) on male and female students in June 2022 intake at the Institute of Teacher Education Gaya campus. The instrument for this study was a questionnaire consisting of cognitive, psychomotor, and affective components. This questionnaire was adapted from the outdoor education questionnaire (Santhanadass, 2015). Cronbach's alpha and expert validity were used to obtain the validity and reliability of this instrumented test. The Pearson Product Moment analysis shows that the evaluation instrument's expert validity value is 0.88-0.92, and the reliability value is 0.85. Pre-experimental group pre-test–post-test approach was used in this study. Meanwhile, 334 male and female graduate subjects of June 2022 intake were selected randomly as the study samples. All subjects underwent a pre-test, were given a four-day intervention and retested in the post-test. This study was conducted at Zipline Borneo Kiulu Tamparuli. *MANOVA* results showed a significant difference between the pre-test and post-test for male and female graduate students. This study's outcomes showed that co-curricular activities, namely *Bina Insan Guru* (BIG) that was carried out, had a high positive impact. It is recommended to maintain this program and co-curricular activities to improve the competence of the *Institut Pendidikan Guru (IPG)* at Gaya Campus students.

### Introduction

The *Bina Insan Guru* (BIG) programme is a component in teaching education that was created to fulfil the goals of the Falsafah Pendidikan Kebangsaan (FPN- National Education Philosophy) in meeting current challenges such as culture shock and environmental changes through knowledge gained outside the classroom to adapt ourselves to the situation that occurs. Among the activities in BIG are camping, water activities, and group training. Through BIG, future teachers can be exposed to the aspects of balanced self-development, the relationship of teachers with humans and nature, trust, profesionalisme, community, various types of

community services, educational services to the community, creativity and innovation and gain experience related to the outside world (Pisol et al., 2016).

BIG is conducted annually according to the existing teacher training syllabus, but the evaluation of this programme is rarely carried out or evaluated for its effectiveness. Although entrance and exit surveys are provided to evaluate the subjects, they are not specific to the activities carried out and do not look specifically at the evaluation of the activity. What is worrying today is that the students who leave higher education institutions and become new employees only have skills in their field but lack soft skills such as communication (Klaus, 2010). This is emphasized by Stevenson & Starkweather (2010), that these soft skills had become a determining factor of project success and project management. This study aimed to observe the effectiveness of BIG activities among male and female graduate students of IPG Gaya Campus June 2022 intake in making an impact and having values that could help students from the aspects of cognitive, psychomotor, and affective.

BIG is a program that trainee teachers must pursue before undergoing teaching practicum in schools. Among the objectives of this program was to develop high-level thinking skills in analyzing complex problems and situations to make informed decisions and solve problems, as well as be able to think reflectively to implement continuous improvement. In addition, the BIG program aims to produce teachers who respond positively to different environmental conditions and needs and develop communication skills in various cultures at the same time, appreciating and displaying spiritual characteristics, values, ethical, and teachers' morals as well as planning, implementing, leading programs, collaborating, and taking active roles in the group as well as showing resilience and physical, mental, emotional, spiritual, and social strength.

Halim & Sahid (2020) stated that soft skills involve a set of skills or capacities that a person needs to have to deal with the challenges of daily life successfully. According to him, soft skills combine the efficiency of personal *transversals* such as sociability, language and communication abilities, friendliness, ability to work in a team, and other personality traits that characterize interpersonal relationships. Usually, soft skills are learned through observation, training, experience, and the involvement of students in various co-curricular activities. Many studies have shown that the involvement of students in various co-curricular leads to the development of diverse personal and social skills, which are soft skills (Ab Ghani et al., 2020; Roslan & Hamid, 2020)

According to the opinions of Jackson & Bridgstock (2021), it was stated that co-curricular activities such as camping consist of self-directed activities for students to gain knowledge and soft skills. Activities or projects depending on the student's interests and inclinations are carried out in different learning centres. It aims to improve their talents and skills in a more comfortable and entertaining learning environment. In addition, by involving students in co-curricular activities such as camping, they can develop generic skills that influence student personalities. According to Siddiky (2020), teamwork, leadership, and communication skills can improve students' interpersonal skills through camping activities. From the perspective of Ritchie (2018), teachers' perceptions of the relationship between student participation in co-curricular activities and their competency skills showed that students who actively participated in co-curricular were found to be more competent in communication skills. Cognitive skills, self-management skills, and academic performance (Ismail et al., 2022).

Mustapa et al (2018) explained that co-curricular activities such as BIG are indispensable in developing a graduate's potential, especially when they are in the teaching environment or give an impression of a student's success in the working environment later. Studies have

shown that the quality and ability of students in academic and technical skills can predict their future success. These soft skills are essential to be mastered by graduates and be complementary to other fields such as information technology, engineering, architecture, and research and development.

The Theory of Multiple Intelligences pioneered by Gardner (1999) became the backbone of this study. This theory discusses the difference in potential between individuals. This means that every human being has strengths and weaknesses. The potential referred to in this case is the potential that can be measured using degrees of intelligence. Gardner (1999) has categorized potential into several sections, namely linguistic, logical mathematics, spatial, musical, bodily-kinesthetic, interpersonal, intrapersonal, naturalistic, and *existentialism*. According to Gardner's theory of Multiple Intelligences (1999), when students try to understand and identify their potential, they will try their best to highlight their intelligence.

### Method

The one-group pretest-posttest method was used in this pre-experimental study. Ary et al (2002) explain that the study of one group pretest-posttest is a study that aims to observe the extent of comparison between the pre-test and post-test scores after an intervention is carried out on a group before being retested during the post-test. The outdoor education questionnaire instrument developed by Santhanadass (2015) was used in this study. The questionnaire for this study was divided into three parts and consisted of 50 items which stand from cognitive, psychomotor, and affective. The validity value of this instrument is .89-90, while the reliability of this instrument is .89. The BIG Camp by the IPG Gaya Campus was held for four days.

### Study Sample

The researchers used the effect value of the minimum sample size ( $d$ ) to reduce the degree of impact errors. The researchers determined a significant level of  $\alpha = .05$  in this pilot study. The sample size selection for this study was based on *Power Tables for Effect Size* from (Cohen, 1988). The sample size should be 64 respondents to reject the null hypothesis at the significance level of .05 when the power and effect size is set at the power value of .80 and the effect size of .050. However, the researchers used a study sample of 80 respondents (40=male, 40=female) from the 334 respondents (population) who attended after considering possible factors of absence or *mortality* (Campbell dan Stanley, 1963).

### Data Analysis and Research Findings

Table 1 shows the results of statistical analysis,  $F(3.66) = 1143.47$ ,  $p < .05$  Wilks' Lambda = 0.2, *partial eta squared* ( $\eta^2$ ) = .98 are significant. The analysis finds showed that the learning component factors of Outdoor Education contribute up to 98% to the overall variant of cognitive, psychomotor and affective components among the male subjects of the study.

Significant differences between each dependent variable could be seen, with the significant levels  $p < .016$  (.05 divided by three dependent variables measured simultaneously) based on the *Bonferroni adjusted method*. The results showed significant differences between the pre-test and post-test scores for male graduates' cognitive, psychomotor, and affective components. *Univariate F* test on the cognitive component scores showed the significant *main effects* on pre-and post-test,  $F(1, 68) = 25.57$ ,  $MSE = 17.108$ ,  $p < .001$ , *partial*  $\eta^2 = .27$ . The psychomotor component score shows a significant *main effects*  $F(1,68) = 15720.01$ ,  $MSE = 33.548$ ,  $p < .001$ , *partial*  $\eta^2 = .87$ . The affective component score shows the

significant *main effects*,  $F(1,68) = 2435.21$ ,  $p < .001$ ,  $MSE = 10.361$ ,  $partial \eta^2 = .97$ . The analysis results showed that there was a significant difference between pre-and post-test scores for the male graduate students.

Table 1

MANOVA For Male Graduate Students Based on Cognitive, Psychomotor, and Affective **Multivariate Test**<sup>c</sup>

\*\* $p < .05$

	Value	F	Hypotheses df	Error df	Sig	Partial Eta Squared
Wilks' Lambda	.019	1143.469 <sup>b</sup>	3.000	66.000	.000	.981

#### Tests of Between –subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig	Partial Eta Squared
Components	Cognitive	437.500	1	437.500	25.572	.000	.273
	Psychomotor	15720.014	1	15720.014	468.584	.000	.873
	Affective	25232.014	1	25232.014	2435.207	.000	.973
Error		1163.371	68	17.108			
		2281.257	68	33.548			
		704.571	68	10.361			

\* $p < .016$

Note : a.  $R$  squared = .273 (Adjusted  $R$  Squared = .263)

b.  $R$  squared = .973 (Adjusted  $R$  Squared = .972)

c.  $R$  squared = .873 (Adjusted  $R$  Squared = .871)

Table 2 shows the results of statistical analysis,  $F(3,66) = 1146.56$ ,  $p < .05$  Wilks' Lambda = 0.2,  $partial \eta^2 = .98$  is significant. The analysis finds showed that the learning component factors of Outdoor Education contribute up to 98% to the overall variant of cognitive, psychomotor, and affective components among female graduate students.

Significant differences can be seen between each dependent variable, with the significant levels  $p < .016$  (.05 divided by three dependent variables measured simultaneously) based on the *Bonferroni adjusted method*. *Univariate F* test on the cognitive component scores showed the significant *main effects* on pre-and post-test,  $F(1, 68) = 28.84$ ,  $MSE = 11.595$ ,  $p < .001$ ,  $partial \eta^2 = .29$ . The psychomotor component score shows a significant *main effect*,  $F(1,68) = 1433.46$ ,  $MSE = 9.708$ ,  $p < .001$ ,  $partial \eta^2 = .95$ . The affective component score shows the significant *main effects*,  $F(1,68) = 1717.69$ ,  $p < .001$ ,  $MSE = 12.036$ ,  $partial \eta^2 = .96$ . The analysis results showed that there was a significant difference between pre-and post-test scores for the female graduate students.

Table 2

MANOVA For Female Graduate Students Based on Cognitive, Psychomotor, and Affective  
**Multivariate Test <sup>c</sup>**

\*\*p<.05

	Value	F	Hypotheses df	Error df	Sig	Partial Eta Squared
Wilks' Lambda	.019	1146.562 <sup>b</sup>	3.000	66.000	.000	.981

### Tests of Between –subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig	Partial Eta Squared
Components	Cognitive	334.414	1	334.414	28.841	.000	.298
	Psychomotor	13916.700	1	13916.700	1433.469	.000	.955
	Affective	20674.414	1	20674.414	1717.696	.000	.962
Error		788.457		6811.595			
		660.171		689.708			
		818.457		6812.036			

\*p<.016

Note : a. R squared = .298 (Adjusted R Squared = .287)

b. R squared = .962 (Adjusted R Squared = .961)

c. R squared = .955 (Adjusted R Squared = .954)

### Discussion

Overall, the post-test scores for male and female groups were higher after implementing BIG Camp activities. As a result, the researcher emphasized the importance of BIG camping activities in terms of cognitive, psychomotor, and affective components. D'Amato and Krasny (2011); Thapa (2010) explained that the students who went through the camp activities showed positive changes in the post-test. The activities helped students understand soft skills more deeply in terms of skills, knowledge, and social values. This study's findings were supported by Sibthorp and Jostad (2014); Gordon (2011), which showed a significant increase in students who went through BIG camping because students were very attracted to fun activities. In addition, students also learned something new while gaining experience and applying it in classroom learning. A study by Cui and Su (2013); Saw et al (2013); Victor and Vipene (2013) also found that BIG camping activities could build and train students' ability to be more independent thinking and solve the problem as well as provide the opportunity to master skills autonomously.

BIG camping activities could also shape the values of quality human skills such as student integration aspect and cooperation spirit in the group to achieve a goal or solve a problem. Indirectly, it would help to establish good two-way communication within the group. Moreover, it would also increase the motivation of graduates not to give up and continue to try until they succeed, raises self-esteem values, and help students to increase their self-confidence while carrying out activities. Meanwhile, regarding leadership, the graduates could learn to make decisions and cultivate a sense of responsibility for the group. This finding is equivalent to the study by Dawson and Russell (2012); Erpestad (2013); Kalkusová and Vomáčko (2014); Lucaciu, Marinau, Stef and Dragos (2014); Harun and

Salamuddin (2013) stated that BIG camping could provide exposure as well as a high impact on the social values that could change the students' perception and behaviour after going through outdoor education programmes.

Studies found that the theory of Multiple Intelligences (Gardner, 1999) helped develop students' talents, knowledge, and abilities to an individual's life and respond effectively to their environment. This was supported by Coriell (2013); Sigurðsson (2013); Meyer (1997), who stated that co-curricular activities could develop personal potential based on the experience obtained to be applied in learning and daily life. This study's findings proved that Multiple Intelligences (Gardner, 1999) through camping activities could make students more motivated, united, and confident. This was also supported by Bennetts (2011); Sayle (2013); Bas (2010); Wiegane-Green (2010), who explained that camping activities could change students' perspectives and behaviours from negative to positive and provide new experiences that could change students' attitudes towards doing good and having goals in their lives.

### **Suggestion**

The researcher proposed that future studies that measure the achievements of graduate students using questionnaires be extended to the entire population of the Institute of Teacher Education in Malaysia. The researchers also suggested that activities in each cognitive, psychomotor and affective component be added and extended across land and water activities. Furthermore, other researchers could conduct studies on each age and gender of graduate students to observe their achievements in BIG activities as a whole. In addition, this study could be conducted as a *quasi*-experimental that compares BIG activities in the Institute of Teacher Education in Borneo with other institutes to assess graduate students' quality and personality changes for the three components of cognitive, psychomotor, and affective in the future.

### **Conclusion**

Based on the effectiveness study of BIG activities on male and female students in the June 2022 intake showed a positive and significant impact on the implementation of co-curricular activities in IPG Gaya campus activities. This was because the BIG carried out had impacted male and female students. A formal and reliable assessment helped evaluate students for all three components of the cognitive, psychomotor, and affective domains. In addition, this study also showed that students who participated in BIG have good aesthetic values, which helps them in self-discipline and avoiding social problems. This also meant that the activities carried out attracted the interest and attention of trainees to participate earnestly and present themselves during the activities. Indirectly, the study achieved the research objective as there is effectiveness in BIG activities and showed resilience and physical, mental, emotional, spiritual, and social strength.

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