

SOFTSKILL PROFILE AND PROSPECTIVE STUDENTS HABITS OF MIND THROUGH STUDENT ACTIVITY UNIT (UKM) ON FKIP PASUNDAN UNIVERSITY

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Abstract. Soft skill and habits of mind is an ability to be possessed by student teachers of Biology, especially in problems solving. The research aimed to describe the profile of soft skills and habits of mind through student activity unit (UKM) on FKIP Pasundan University. UKM is a means of student activities that can develop interest, talent, expertise and soft skills of students. The research used survey method with qualitative descriptive technique. The results obtained information that there are 12 courses are not liked by the students, namely courses: Genetics, Physiology and Entomology, Botany Criptogamae, Phanerogamae, Statistics, Nutrition, Physiology, Sundanese culture, Chemistry, and physics to Biology. Ability thinking skills students of Biology Education in problems solving overall problem resolution has category no good. The existence of a relationship between subjects who do not like the student with soft skill students in general.

Keywords : Profile, Softskill, Habits of Mind, UKM

I. INTRODUCTION

The quality of education in fact equal to the quality of learning. The quality of the learning process is influenced by various factors, including the quality of students, teachers, teaching, curriculum, facilities, infrastructure, cost and so on. However, among the various components of the teacher plays a very important and strategic. Without a good quality teachers, all the components of the learning process becomes meaningless, the low quality of the learning process that ultimately result in a lower quality of learning outcomes. Thus not surprising that the problem of low quality of education the teacher is the most rapidly hit oblique accusations as cause. Education grade is education that can perform quality learners maturation process developed by freeing learners dar ignorance, incompetence, powerlessness, untruth, dishonesty, and of bad character and quality of faith.

Along with the times, the essence of life is a problem-solving situation. As'ari, in conference and Workshop (Shadiq 2007), cites the opinion of NCREL (2003) that basically the 21st century is

characterized by the following characteristics: (1) a digital world, (2) requires inventive thinking, (3) require effective communication, and (4) require high productivity. So it is very important to introduce and familiarize students hone the problem-solving skills, good problem routine and problems. non-routine. Most of the problems in this world is problems non-routine that are structurally disorganized (ill-structured problem) and the solution allowed to use the algorithm. Unfamiliar examples of problems non-routine with settlement irregular (ill-structured problem) as quoted by Mullis (2012) of TIMMS 2011 is as follows. School math learning aims to make the students have the ability to solve problems that include the ability to understand the problem, devised a mathematical model, solve the model and interpret the obtained solution. However, it is still a contradiction with the facts shown by the TIMSS 2011 (Mullis, 2012) and PISA 2009 (Fleischmen, et al, 2010).

In general, the nature of real life when someone is no longer able to respond to issues related to life and no longer able to how to deal with the



necessary intelligent attitude to oriented action on resolving the issue, in this case said Habits of Mind. Someone who has a habits of mind can be said to be reflected of soft skills. Relation to graduates who already reflected habits of his mind, when faced with the problem of someone, he not only face it but also at once by action or thinking how to solve it. Krulik and Rudnick (Bismarbasa, 2012) define the problem-solving as a way that a person using the knowledge, skills and understanding to meet the demands of the situation is not routine. Polya (Eden, 2009) also explains that solving the problem is an attempt to find a way out of a difficulty to achieve a goal that is not immediately achievable. According to Garofalo and Lester (Suryadi), problem-solving include high level thought processes such as process visualization, association, abstraction, manipulation, reasoning, analysis, synthesis, and generalization that each need to be managed in a coordinated manner. By Polya (1973 in Dhoruri, 2010), there are two kinds of problems: (1) find (number, painting, etc.) and (2) prove. According to Dhoruri (2010), problem-solving skills will be achieved by students if the teacher learning to condition students to construct knowledge and facilitate the student's learning activities that involve problem-solving. Problem-solving is one type of intellectual skills by Gagné et al (Eden, 2009) are higher in rank and more complex than other types of intellectual skills. The problems presented should ask a problem in a comprehensive, application, analysis and synthesis. Learners must choose the necessary knowledge, learn it, and connect it to a given problem (Widjajanti, 2011). Arends (2007) states that the syntax of problem-based learning consists of five phases; directing students on the issue, organizing students to learn, help independent inquiry and groups, develop and present artifacts and exhibits and to analyze and evaluate the work.

Soft skills in each individual is different because soft skills are the result of interaction and communication in the life of society. Soft skills are not obtained in special courses but can be trained intensively in every lesson. The role of soft skills itself can shape a person's skills in

managing oneself and others so that relationships are very well established, as revealed by researchers at Harvard University in Rismansyah (2015) who stated that success is only about 20% determined by hard skills and the remaining 80% with soft skills, so hard skills and soft skills must be integrated well where hard skills can be obtained in the world of formal education while soft skills obtained through formal education and outside formal education.

The purpose of research is to determine the profile of education in general in Biology Education Studies Program FKIP Unpas, student response to the lectures resolve the problem, Softs kill (thinking habits: habits of mind) students in solving problems and profile of UKM. Observations in this case study are intended to determine the learning process that lasts for student teachers of Biology in Biology Study Program, FKIP Unpas. The results of observations expected to be useful to be used as a basis in determining the development strategy of learning programs for the sake of the implementation process of quality learning that ensures the success of student teachers in achieving their academic achievement, become teachers of biology that has the ability through experience, that are expected to produce graduates who have competitiveness one of them power that is capable of learning practice problem solving and more away again have the experience or ability to practice solving the problems in his life.

II. METHOD

The method used survey research to profile the learning process, skills resolve problems and soft skills/habits of mind students at the Faculty of Biology Education courses Teacher Training and Education (Guidance and Counseling) Pasundan University (Unpas) Bandung. Reviewers do not provide treatment or treatment of research subjects, but only trying to uncover the data is. From these data are then compared or linked using the assessment results with the questionnaire perception results about student and faculty interviews. The study was conducted at the Department of Biology, Faculty of Education



Teacher Training and Education. As described in Chapter I, the study is restricted to students of the seventh semester (odd), assuming that the student has signed almost all of the subjects in the S-1 in Biology Education courses FKIP Unpas Bandung. Study done for 1 month which begins in early May to early June 2017. The main activities include the assessment of the preparation phase (pre survey), execution and reporting of the study results. Event execution and reporting results of the study which includes the development of research instruments, instrument validation test, surveys and field observations, data analysis, report writing. Participants engage students 7th semester (odd) as many as three classes. (class A = 40, B = 43, B = 41). More specifically, the study used a sample of students from class C is numbered as many as 41 the number of students consists of men and women. Subsequently the samples obtained minimal 10% of the population, as much as 12.4 or rounded to 14 students. In this study used all students from class C totaling 41 students. Data necessary in this field of study, have been obtained by means of; Direct field observation, the acquisition of formal data, the use of questionnaires, interviews and document research. The data analysis technique used is planned to be used qualitative descriptive analysis. The results of the analysis in the form of presentation of data in tables and graphs.

III. RESULT

1. Profile of Learning, Problem Solving Skills Ability Students Biology Education Studies Program of FKIP Unpas.

Based on the calculation of the percentage, tests the ability of problem-solving skills of students in solving problems of the settlement of the problem as a whole has a category is not good, this is indicated by the percentage points below the minimum that is in order : (1) the ability to clarify the term concept is not yet clear to the percentage 11,9%; (2) the ability to formulate and analyze problems percentage of 13,7%; (3) the ability to seek additional information and other resources with the percentage of 16%; This means that the ability to solve problems in formulating

the problem and analyze the smallest problem is the skills possessed by students in solving the problems associated with everyday life, especially the included studies Ecology, Environment and Entomology. The following chart is presented Table 1 and Figure 1 as supporting data.

Table 1. Assessment Tests Students for Solving Skills Measure

No.	Criteria Problem	Average	Percentage (%)	Criterion
1	Ability to define problems and analyze problems	1.37	13.7	Not Good
2	Able to clarify the term concept is unclear	1.19	11.9	Not Good
3	Ability to define problems and analyze issues	1.7	17	Neither
4	Able to seek additional information and another source	1.6	16	Good
5	Being able to seek additional information from other sources	2.12	21	Good
6	Capable of clarifying the term concept unclear	2.2	22	Good
Total		20.87	100	

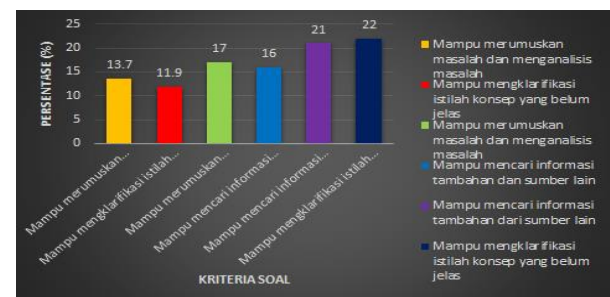


Figure 1. Assessment Tests Students for Measuring Skills Troubleshooting

2. Soft Skill/Habits of Mind Student Biology Education Studies Program of FKIP Unpas

Based on the recap observation of the student, in addition to the ability hardskill students targeted lecturers each end of the lesson is also professor of applying soft skill contained in the Student Education courses Biology FKIP Unpas, among which is responsible, working together, to respect others, to work optimally, think smart (habits of mind), critical thinking, creative

thinking, and thinking of innovative (as presented in Table 2 and Figure 2 below). The soft skill minimum value is think smart with the percentage of 2, 44% compared to the others. While the highest value of soft skill is innovative thinking with a percentage of 19.51%. Sequentially from high to low are : (1) critical thinking; (2) to think creatively and responsibly; (3) work optimally; (4) critical thinking; (5) respect for others; (6) work together; (7) think smart.

Table 2. Attitude Soft skill the Awakened in Student Learning Process

Aspect	No. Aspects	Type Category	Number of	Average	Percentage (%)
Type Softskill	35	Responsible	7	0.17	17.07
		Working	3	0.07	7.32
		Respect for another	4	0.10	9.76
		Working in a maximum of	6	0.15	14.63
		Thinking smart	1	0.02	2.44
		Think critically	5	0.12	12.20
		Thinking Creative	7	0.17	17.07
		thinking Innovative	8	0.20	19.51
		Total			41

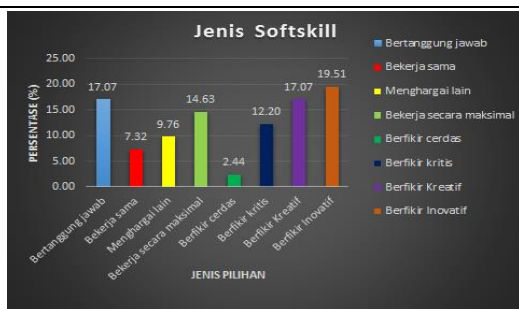


Figure 2. Attitudes Soft skill the Awakened in Student Learning Process

3. Relations Soft skill Students Study Program Biology Education FKIP Unpas ability Skills problem Solving (*Habits of Mind*)

Based on the observation of ratings soft skills/habits of mind (have not been observed) in the lecture by 3 observers on the target subject to

a number of students, obtained information that highest value of soft skills obtained on the courses Sundanese Culture and Religious Education. Achievement smallest value of Student soft skill in the subject of the target was observed that subjects Entomology and Animal Physiology and Zoology Invertebrates. This may imply the relationship between subjects unpopular with the student's soft skill in general. And if it is associated with problem-solving skills of students at one of the subjects, it can be that when students do not like the course this is possible because the faculty in implementing the learning using a method that does not require students to work in groups to provide opportunities for the emergence soft skills of students through the learning process.

4. Identification of UKM Work Program

Based on the survey results of UKM, there are several prospective teachers who are active in UKM such as in KSR. The researcher identifies the work program of KSR related to the development of student soft skills. Soft skills aspects will encounter the ability problem-solving skills.

IV. DISCUSSION

Over time last four years the sheer number of new students of Biology Education Studies Program, FKIP UNPAS, shows a rapid increase over the previous year as described. Various reasons for prospective students settled on Biology Education Studies Program FKIP UNPAS, collected through a questionnaire that was distributed to a number of student representatives semesters 5 and 7. As many as 60% of them expressed reasons for wanting to become a teacher of Biology, which consists of 44.29% wanted to become a biology teacher without the so-called college and 15.71% wanted to be a teacher of Biology educational outcomes Biology Education Studies Program FKIP UNPAS. In addition, 37.14% of students chose Biology Education Studies Program FKIP UNPAS, because it did not pass the entrance examination at other universities and 2,85% want

higher education regardless of their field of study. Although the new students of Biology Education Studies Program have increased from year to year the level is still low selectivity. Comparison between the number of students who enroll for the amount received is not tight. Percentage of stringency screening prospective students ranged from 5.72% to 11.26%.

This time faculty Study Program Biology numbered 31 people, made up of 21 permanent academic staff originating from the Department of Biology Education and other study programs in environmental FKIP Unpas and 3 orang faculty are not fixed/extraordinary coming from other universities in Bandung. Viewed from the side of educational qualifications, lecturer in Biology Education Studies Program, FKIP UNPAS sufficient. Some 10 people educated teaching staff last S3 (33.33%), 15 people educated S2 (50%) and 5 educated S1 (16.66%). The entire staff was educated S1 is currently studying S2. In addition, four people remain educated staff S2 is continuing his studies at levels of S3. The table in the appendix also shows most of the faculty have academic position Associate Professor, that is 15 people (50%). Position Associate Professor is owned by six lecturers (20%) and Playground Young 6 lecturers (20%). But there are still two lecturers who had the post of assistant expert (6.66%), while the post of Professor of solely owned by one lecturer only (3,33%).

Data on the number of students who are studying in Biology Education Studies Program, FKIP Unpas 2016 was 776 people. Overall comparison of the number of lecturers with the number of students is 1: 26, but if it was calculated the ratio between the total lecturer in the field of Biology with students is 1: 37. While the comparison of permanent lecturers who have expertise relevant to the number of students of Biology Education Studies Program is 1:52. Most professors who were interviewed had experienced more than 5 years of teaching in Biology Education Studies Program, FKIP Unpas. Some of the lecturers have supported the same course for more than 5 years, but most are still alternated courses tailored to the needs and conditions at the

time the semester progresses. Almost all tenured faculty support more than one subject, at least one course in each semester. However, most faculties support allied subjects, such as clumps of plant science, animal science or science education. Most tenured faculty Biology Education Studies Program that administers subjects in the group courses Science and Skills and Work Skills Course is not taught in courses, faculty or other universities. While the lecturer of the course in groups of Personality Development Course and Course Work Behavior mostly teaching also in courses or other faculties UNPAS environment.

Profile Biology Education Studies Program students are very diverse. This diversity includes socioeconomic background and region of origin student families. Biology Education Studies Program in demand by prospective students, especially those from West Java and Banten as well as enthusiasts of Central Java and some areas outside of Java such as South Sumatra, Bangka, and Belitung although the amount is not so much. Most students of Biology Education from environment capable middle-class. Therefore any scholarship offers are always used in the best possible. Scholarships are prioritized in addition to the students who have high academic skills, as well as to students who are economically disadvantaged. The appeal of courses for new students generally caused tuition/fees are not too expensive, employable graduates, the campus is located in a strategic location and a graduate of Biology Education Study Program Guidance and Counseling Unpas considered to have a good image in the community.

A questionnaire regarding students' perceptions of learning, in general, showed 81.43% of the students found the lecturers generally mastered the course material subject well, but the way of delivery is not good so elusive material. A total of 15.71% of the students found the material master lecturers and teaching a good way so that the material is more easily understood. Only 1.42% of students rate the teachers do not master the material well. Contrary to the assertions, 35.71% of the students found learning methods are presented lecturers are very



helpful understanding of the subject matter 21.43% whereas in general, the students found learning methods are presented lecturer does not help understanding of the subject matter 31.43% more students argue that most professors give lectures with a lecture and do not provide the opportunity to discuss. There is also (8.57%) of students showed that most professors give independent learning tasks without starting debriefing.

Criticism and suggestions for improvement of the learning process derived from the 90.90% of the students. Some of the students criticized the lecturer exemplary problem in terms of discipline. Students found there are still some lecturers who are often not even present late according to the schedule set. While in terms of learning, most students want a more varied learning methods and not only lectures, better teaching materials, as well as the media that further facilitate the understanding of students to the concepts that are abstract. According to interviews with professors argued that the support duties that often changed the course lecturers focus resulted in the deep subject matter. However, lecturers maximum effort to master the material. Various strategies pursued to help students understand the subject of lecture material. To obtain a more detailed picture of the learning process is carried out observations focused on the subject Physiology as one of the subjects is accompanied practicum with sustainable management, the courses Genetics accompanied lab but is managed separately and Embryology as a lab course that is not accompanied practicum.

Department of Biology graduate quality according to the user's perception of graduates is good. Some indications that support this perception is: Average GPA Biology Education Studies Program graduates in the past three years is 3.15 (table attached). Most of the students master the learning material and is able to perform the learning process well. This is evident from the average value of the course Practice and Introduction (PPL). After PPL, many students asked to teach at the school where they carry out tasks PPL. Although not many, the ability of

graduates to the job market independently is quite good. There are graduates who make a tutoring center, giving private lessons to students from elementary, junior high or high school; open data processing services for computer and statistical capabilities; opened the food industry because of its ability to develop the concept of fermentation technologies, in particular biotechnology and open stalls of ornamental plants and agricultural crops because of its ability to develop the science of horticulture and ornamental plants.

Biology Education Studies Program FKIP Unpas already have a tracking system graduates. To accommodate the activities it has had FKIP UNPAS Alumni Association. At the time of the graduation ceremony shared forms available at any time to be returned to the institution of the waiting period of graduates in obtaining employment. A number of alumni pretty much scattered across West Java and Banten.

Graduates Biology Educational Studies Program, Guidance and Counseling, Unpas projected to be a scholar ready to plunge into the world to work with a quick adjustment to the dynamic needs of the workplace. In each year, an average yield of 100-120 students, this means there is a balance between revenue and graduates each year, with the average graduate GPA of 3.15. Graduates of the course are mostly working in accordance with the disciplines that as teachers in educational institutions or courses (teacher) public and private, tutoring, private lessons. Biology Education Program graduates are already working as a civil servant in Bandung Regency presented in an appendix. The others work outside of education, however, still has relevance with its discipline, such as in healthcare institutions, fishery, agriculture, plantation, laboratories and other institutions both public and private. In addition a small portion of graduates develops her potential by developing entrepreneurial ornamental plants. The ability of graduates to compete with the same field of science graduates coming from other institutions rated likely better because based on user opinion graduates, graduates FKIP Unpas have good skills. However, the percentage of graduates who successfully



passed the selection employees and work in leading educational institutions still remains small. Teachers who teach in schools still a fraction glimpsed by private schools that have good quality, largely absorbed by educational institutions is a favorite. This is made possible by the competitiveness of graduates is still low and may also be caused by the lack of good imaging Biology Education Studies Program in the eyes of leading educational institutions, especially in Bandung.

The existence of UKM needs to be supported and facilitated by the campus because the potential of soft skills development can be explored so as to channel interest and talent. According to Herizon and Wirda (2012) soft skills is an ability that is intangible / cannot be seen but is needed for someone's success in the world of work. Participation in SMEs can hone the combination of soft skills and social skills that are the ability to interact with others in a social context. According to Rao (2015) revealed that by conducting soft skills training to improve job skills on students and the results of his research show that soft skills will enable students to grow as individuals who are ready to compete in the world of work and also able to open their own employment.

V. CONCLUSIONS

Based on the analysis and findings of the research shows that there are 12 courses that are not liked by the students of Biology Education FKIP Unpas, namely courses: Genetics, Physiology and Entomology, Botany Criptogamae, Phanerogamae, Statistics, Nutrition, Physiology animals, Culture Sunda, Chemistry, and Physics to Biology. Ability thinking skills of students of Biology Education FKIP Unpas in problem-solving overall has category no good. And if it is associated with problem-solving skills of students at one of the subjects, it can be that when students do not like the course this is possible because the faculty in implementing the learning using a method that does not require students to work in groups to provide opportunities for the emergence soft skills of

students through the learning process. Student activity in learning and participation in Student Activity Unit (UKM) is very important because it can improve hard skills, soft skills and habits of mind of a student. Soft skills can maximize the performance during the learning and also help in achieving career paths because they have special expertise so that college graduates have competence in the mastery and use of science and technology and ability to think analytically in problems solving.

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