

**The Effectiveness of Remedial Course Program
in Increasing Academic Performance: A Study of
Atma Jaya Yogyakarta Undergraduate
Education in Business and Economics**

— *Review of* —
**Integrative
Business &
Economics**
— *Research* —

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ABSTRACT

The purpose of this study is to empirically test whether students academic performance have improved after Atma Jaya Yogyakarta University enacted a remedial course program. The university, including its Faculty of Economics, suffered problems concerning student's relatively low grade point average (GPA) and long study period. The GPA of undergraduate students studying in the Faculty of Economics in 2011-2012 was 3.12 and the length of study for undergraduate program was 5.5 years. One of the reason that was suspected to be the cause of those problems was that students have to repeat courses several times in order to pass, and this repetition had to be done in a new semester. Beginning 2012, the University enacted a program to improve students academic performance, which is an increase in course grades, by performing a short remedial course. The remedial course is done immediately after the semester ends. Students do not have to wait for a new semester to repeat courses which they did not pass. Undergraduate students in the Faculty of Economics were used as sample in the study. The sample were selected using cluster random sampling. The research is done using primary data gathered by means of questionnaires and secondary data related to students' grades. Based on the analysis using paired sample t-test it is proven that student's grades have significantly increased after taking the remedial course. In congruent with the empirical test, questionnaire results show that students felt the program was useful for them and had positive reactions towards this program. The students thought that the program was able to help them increase their grades, improve their GPA, and reduce the study period.

Keywords: remedial education, education, GPA, undergraduate.

1. BACKGROUND

The Indonesian 1945 Constitution (*Undang-undang Dasar 1945, abbreviated UUD 1945*) has placed education as the focal point of the nation's welfare. A better education will lead to a better commonwealth of the country. A main part of the country's education system is higher education, which is education at the university or college level. This level of education will have a direct impact on the quality of the workforce. Quality of human resources is essential especially in this competitive global era.

College education has objectives that are in line with the national education system. The objectives of college education are ruled in Government Regulation no. 60/1999. These objectives are: (1) to prepare students on becoming society members who have academic and professional skills, which will be useful to enrich knowledge, technology, and art; and (2) to develop and disseminate knowledge, technology, and art which will be useful to improve societal and cultural welfare.

The learning (and teaching) process is the primary part of the whole education process. In the teaching and learning process, a teacher or lecturer, is responsible for assisting students to achieve optimum academic performance. There are 6 (six) components of the teaching and learning process (Zain, 1997). These six components are: 1) teacher (lecturer), 2) student, 3) study materials, 4) learning method, 5) learning tools, and 6) learning evaluation.

Among the six components of learning process above, evaluation of students' learning achievement shows whether or not the learning and teaching process is successful. Evaluation is concerned with assessing the effectiveness of teaching, teaching strategies, methods and techniques. It provides feedback to the teachers about their teaching and the learners about their learning. Miller, Linn and Gronlund (2013) defines evaluation as a systematic process of collecting, analysing and interpreting information to determine the extent to which pupils are achieving instructional objectives. In general, evaluation has the following characteristics:

- 1) Evaluation implies a systematic process which omits the casual uncontrolled observation of students.
- 2) Evaluation is a continuous process. In an ideal situation, the teaching- learning process on the one hand and the evaluation procedure on the other hand, go together. It is certainly a wrong belief that the evaluation procedure follows the teaching-learning process.
- 3) Evaluation emphasizes the broad personality changes and major objectives of an educational program. Therefore, it includes not only subject-matter achievements but also attitudes, interests and ideals, ways of thinking, work habits and personal and social adaptability.
- 4) Evaluation always assumes that educational objectives have previously been identified and defined. This is the reason why teachers are expected not to lose sight of educational objectives while planning and carrying out the teaching-learning process either in the classroom or outside it.
- 5) A comprehensive program of evaluation involves the use of many procedures; a great variety of tests; and other necessary techniques.
- 6) Learning is more important than teaching. Teaching has no value if it does not result in learning on the part of the student.
- 7) Objectives and accordingly learning experiences should be so relevant that ultimately they should direct the students towards the accomplishment of educational goals.
- 8) Evaluation assesses the students and their complete development brought about through education.
- 9) Evaluation is the determination of the congruence between the performance and objectives.

In short, evaluation involves not only the student, but also the lecturers (teachers) and the teaching-learning process as well.

There are obstacles in achieving effective teaching-learning process which results in optimum performance of students. Eventhough an ideal teaching-learning process is executed, there is still a probability where students are still having difficulties and result in a less than optimum academic performance. Students might still face difficulties in their studies that will also result in a longer study period (of college and university students). Students who have a delay in finishing their undergraduate studies will face a more competitive work market, since they have to compete with the younger graduates. This in turn will make the university's undergraduate program lose its attractiveness.

Atma Jaya Yogyakarta University (abbreviated UAJY) is a university located in Yogyakarta, a city in central Java. UAJY has 11 (eleven) undergraduate programs. All of those programs are accredited by the Board of National Accreditation for Higher Education (*Badan Akreditasi Nasional Perguruan Tinggi, abbreviated BAN PT*). Eventhough the programs are accredited, problems concerning student academic performance and length of study still exists. The grade point average (GPA) of undergraduate program has an average of 3.15 in 2010. Whereas the average duration to complete an undergraduate degree at this university is 5.5 years in 2010. These two measures are clearly non-competitive, considering the number of universities in the Yogyakarta area that are more prestigious than UAJY.

The low GPA and the long duration of undergraduate study in UAJY is suspected to be because of the high frequency a student have to repeat certain courses which they failed. Because of the repetition of courses, a student will have a longer time to finish their undergraduate degree. In order to increase average GPA and shorten the length of study in the undergraduate programs, UAJY enacted a remedial program beginning 2011/2012 academic year. The rector of UAJY has issued decree no. 142/HP/Rem/2011 that explains on the enactment of a remedial program. The goal of a remedial program is to improve a student's learning outcome that meets the minimum academic requirement. Besides the objective, the decree only provides explanation on the maximum grade of a remedial course. The decree does not specify the courses that must be equiped with a remedial course, nor the grading system for the remedial program. As of 2014, the program has been implemented for 3 (three) years but no evaluation of the program has been done. The university does not know yet whether the program effectively increased student's academic performance. So, in short, the purpose of this study is to evaluate the effectiveness of the remedial program run by UAJY, as well as to propose a strategy which can effectively increase a student's academic performance. Thus, three research question will be addressed in this study. They are:

1. Is there a significant difference of students' academic performance before and after students undergo the remedial program?
2. Has the remedial program effectively increased the academic performance of UAJY students?
3. What are the strengths and weaknesses of UAJY's remedial program, from students perspective?

2. THEORETICAL FRAMEWORK

Several topics will be discussed individually in this section. These topics are: 1) remedial education defined, 2) characteristics and principles of remedial education, 3) the

objectives of remedial education, 4) models for remedial education, and 5) remedial education procedure.

2.1. REMEDIAL PROGRAM DEFINED

The Cambridge Dictionary explains that a remedial action is intended to correct something, or to improve a bad situation. It also mentions remedial (of an activity) is intended to correct or improve something, e.g. skills. Remedial programs are designed to close gaps between what students know and what they are expected to know. Thus a remedial program is a program designed to “cure”, or repair a teaching-learning process, that will result in the achievement of learning objectives. The learning objectives are the minimum requirement for a student to pass a certain course. Teaching-learning process is determined to be unsuccessful if the students are unable to achieve the minimum requirement(s).

According to Good (1973) in Juliana (2011), remedial program is defined as classifying students who cannot achieve minimum requirement of a course separately from other students. So, the program is tailor-made to the needs of this group of students. A remedial course is especially designed to the needs of a specific student or group of students. So, the remedial course could not be done massively to meet a common need. Since a remedial program is tailor-made to meet specific needs, identifying the specific areas of students' weaknesses is an essential part of the program. Once these weaknesses have been identified, then the most suitable remedial program can be designed.

When lecturers design the ordinary course objectives and teaching-learning programs, the design was to meet the minimum requirement of that course. Ideally, when lecturers encounter that students were not able to meet the requirement, and realizes the weaknesses that students have, it is then lecturers must re-design the course specifically to meet the needs of this group of students. Remedial programs or classes should be designed to overcome specific difficulties and weaknesses each student have.

2.2. CHARACTERISTICS AND PRINCIPLES OF REMEDIAL TEACHING

Based on the definition and to meet the outcome of remedial program, remedial teaching should have the following characteristic and follow these principles (Bunai, 2007):

1. Remedial teaching should be special (specific). The speciality of remedial teaching are (a) it should be conducted after weaknesses and difficulties in learning have been identified. Once identified, the remedial teaching should be directed to overcome those weaknesses and learning difficulties. (b) Instructional goals of remedial teaching should be aimed to eliminate weaknesses and difficulties, (c) Teaching methods and tools should be modified to the needs of the students' weaknesses and difficulties, (d) specific parties, such as mentors, and teaching professionals, should be involved in the remedial teaching process, (e) Teaching tools should vary according to the needs of the students, (f) encourage more personal approach from teachers to students, and (g) tools for evaluation should be modified to students' need.
2. The target of the remedial teaching is specific; it is only for students that have difficulties in achieving the minimum requirement of passing a course.
3. The program has specific functions. The specific functions of remedial programs are: (a) corrective function; the remedial program can be evaluated and adjusted to the specific needs of students so they can improve performance. (b)

comprehension function; students and teachers alike will be able to comprehend the difficulties in studying that students face. (c) Adjustment function; the teaching process adjusts to the needs of students. (d) enrichment function; the remedial program will be able to enrich students learning experience, deepen knowledge, thus improve a student's academic performance. (e) Acceleration function; since the remedial program is designed specifically to overcome students' difficulties, the program can accelerate students who are behind in their studies so that they can reach the minimum requirement of a course. And (f) therapeutic function; this type of teaching can "cure" a student's problem in studying.

4. The program is therapeutic. The program is designed specifically to overcome and "heal" specific problems that students face.
5. The program is tailor-made and individualistic. Each student can face different type of study difficulty. The remedial program is a case-by-case type of teaching approach.

As mentioned above, the remedial program is a specific and tailor-made program, designed in accordance to the students' needs. The Indonesian Ministry of Education and Culture (2008) announced that specific and tailor made programs such as a remedial program, must have several principles. These principles are:

1. Adaptive
Learning is basically an individual process. It means that each student have different learning experience, difficulties, and thus different learning results. A good remedial program must be accommodate the special needs of students. So, it must be designed to give each student the opportunity to learn in their own pace, ability, and style.
2. Interactive
Students and teachers must be able to interact with one another directly throughout the remedial teaching-learning process. In order to achieve teaching-learning objective, remedial programs must be equipped with a continuous monitoring process. Once a student faces difficulties, it can be immediately treated.
3. Flexibility
The remedial program should incorporate teaching models and evaluation system that is suitable. So, the program should be flexible in the choice of teaching and evaluation methods.
4. Immediate feedback
Feedback as to a student's progress is very important. It is required to determine how much improvement a student has made, and what still needed to be done. The feedback can be corrective and or confirmatory.
5. Continuous availability
The remedial program is a part of the teaching learning process which remedies students with difficulties in order to achieve minimum standard requirement or learning objectives. It means that the regular teaching-learning programs and remedial teaching-learning programs must be a related and continuous process, and always available when students need them.

2.3. OBJECTIVES OF REMEDIAL PROGRAM

The basic objective of remedial programs are the same as regular teaching-learning programs, that is assist students to achieve required competencies, and achieve the learning objectives stated in the curricula. The specific objective of remedial programs is to help needed students who failed in certain courses with additional (and specialized) learning programs. The remedial program will help students to realize and overcome their difficulties, and also help lecturers to improve their teaching skills.

The objectives of remedial programs are as follows (Ikhsan, 2011, Yahya, 2009, and Chrisnajanti, 2002):

1. Improve students' learning method as well as lecturers' teaching method.
2. Increase the students' and lecturers' understanding on their strengths and weaknesses.
3. Adjust the teaching-learning process to accommodate students' needs (characteristic).
4. Enrich the teaching-learning process.
5. Accelerate the student's understanding of a certain course/field.
6. Assisting students to overcome (heal) difficulties in personal and social-related aspects.

2.4. TEACHING MODELS FOR REMEDIAL PROGRAM

There are several models (or approaches) to teaching and learning in a remedial program. These models are (Chrisnajanti, 2002):

- a. Curative approach. This approach can be implemented after it known that a student or group of students have failed to achieve study objectives. Three strategies can be used, they are (1) performing a make-up test, (2) giving additional knowledge for enrichment, and (3) accelerating the study process.
- b. Preventive approach. This approach is enacted upon students who are estimated to have difficulties in the upcoming course. So, the remedial program is done prior to the regular teaching-learning process. The remedial program can be executed to individual students, to groups of homogeneous students, or by having a separate class.
- c. Development approach. This approach is based on assumption that a students' difficulties in studying must be detected as early as possible so an effective aid can be executed, and not deter the student's process in achieving study objectives.

The Indonesian Ministry of Education and Culture (2008) explained that there are four alternative approaches to remedial programs. These are:

1. Giving additional explanations and examples.
2. Using a different teaching strategy compared to the previous one. Difficulty in understanding a course or topic can be due to the teaching strategy implemented. So, it is possible that by using a different strategy, students will now be able to understand.
3. Repeating the teaching-learning process of a topic that was difficult for the students.
4. Using a variety of media. The use a variety of media can be more attractive to the students rather than using just one type of media. This can encourage students eagerness to learn.

A more complete approaches to remedial programs is mentioned by Bunai (2007). These approaches are:

- a. Re-teaching the same topic using a different platform.
- b. Individual or small group consultancy.
- c. Giving extra homework to assess students' difficulty in a certain topic.
- d. Providing extra references or books that is relevant with the difficult topic the students face.
- e. Using more audiovisual tools, and more variety of those audiovisual tools, such as using videos, movies, recorder, and images. This can improve students' understanding since they have a direct experience.
- f. Personal consultancy with the lecturer, campus consulting or psychologist, who will help students overcome personal problems which may cause difficulty in studying.
- g. Peer tutorial. Students who are smarter or have met the study objectives can serve as a tutor to those students that have study difficulties. Students can will be motivated and understand better when they are taught by their friends, rather than by lecturers.
- h. Using games as tools for learning. This makes the learning process more fun, and more easily understood.
- i. Using flashcards. This is an individual approach that will help a student understand concepts that is difficult for him/her.
- j. Reading practice. This approach is only used on students that have very poor academic performance.
- k. Taking advantage of students' learning ability. For example, a student is having difficulty in learning History by using textbooks. This student has a great listening skill, so the student can learn history by listening to records or CDs in history.

Many teaching-learning models are available. Lecturers can choose the most suitable approach depending on the need of each (or group) of students.

2.5. REMEDIAL PROGRAM PROCEDURE

In order to effectively run a remedial program, certain steps (procedures) need to be done. The structured steps that must be followed are:

1. Perform an analysis of diagnosed students
A diagnose is a process to identify the students that have difficulties in studying. By performing a diagnosis, lecturers will be able to identify which student have difficulties and what the difficulties are.
2. Finding the root of the students' difficulties
There can be many reasons why students face difficulty in studying. The next step would be to trace the root of those difficulties. Same difficulties may arise from different reasons. Once the ground reason is identified, then a suitable remedial approach can be planned.
3. Planning a remedial program
Teaching-learning of a remedial program is no different from other teaching-learning process. A study plan with adjusted study objective to meet the needs of the students must be made.
4. Execute the remedial program
The study plan is then executed. The remedial program must run as soon as possible, without significant delay. The sooner the program is executed, the better chance of succeeding and overcoming the study problems students face.

5. Evaluate the remedial program

To assess whether the remedial program is successful or not, an evaluation of it must be done. The evaluation can be based on the progress students made after taking the remedial program. If students are progressing and their skills have improved, then it means that the program is effectively increasing students' academic performance. On the other hand, if there is no significant progress in students' academic performance, that it can be said that the program is not effective.

A remedial program always begins with analysing students' difficulties in studying. This step will identify in what part of the course the student is stumbling on. Once identified, a relevant treatment can be applied to eliminate the problem and thus improve student's academic performance.

3. RESEARCH METHOD

The following section explains in detail the sampels used for the research and the tools for analysis.

3.1. RESEARCH SAMPLE

The population of the research is undergraduate students in the Faculty of Economics UAJY, that have joined the remedial program in 2011 – 2014 academic year. The faculty hosts three undergraduate programs: Accounting, Economics, and Management. Sampling method used is the cluster random sampling method. The population is grouped into clusters that represents the three undergraduate program.

The three clusters are students taking Accounting course (AKT), Economic course (EKO), and Management course (MAN/KEU/PMS). Students also take other general courses such as Bahasa Indonesia and Pancasila. Students enrolling in these courses (UMU) are also included. Sampels are taken from students taking the following courses:

Table 1
Research Sample

| No. | Course Code | Course Title |
|-----|-------------|--|
| 1 | AKT100 | Introduction to Accounting 1 |
| 2 | AKT200 | Introduction to Accounting 2 |
| 3 | AKT211 | Intermediate Accounting 1 |
| 4 | AKT322 | Managerial Accounting |
| 5 | AKT334 | Portfolio Theory and Investment Analysis |
| 6 | AKT423 | Management Control System |
| 7 | AKT432 | Accounting Theory |
| 8 | EKO100 | Introduction to Macro Economics |
| 9 | EKO101 | Introduction to Micro Economics |
| 10 | EKO301 | Microeconomics 2 |
| 11 | EKO321 | Bank and Other Financial Institutions |
| 12 | EKO420 | Managerial Economics |
| 13 | EKO430 | Indonesian Economics |
| 14 | MAN100 | Introduction to Business |
| 15 | MAN110 | Introduction to Management |
| 16 | MAN340 | Organizational Behavior |
| 17 | MAN350 | Change Management |

| | | |
|----|--------|-------------------------------|
| 18 | PMS230 | Marketing |
| 19 | KEU330 | Advanced Financial Management |
| 20 | UMU105 | Bahasa Indonesia |
| 21 | UMU302 | Pancasila |

3.2. DATA COLLECTION

Primary data and secondary data are used in this research. Primary data are collected using questionnaires which were distributed to students participating in the remedial program of the courses mentioned in the sample above. The questionnaire is divided into two sections. The first section is related to respondent's identity, and the second section are the questions. The second section consists of 10 (ten) questions, using Likert scale of 3 (three): 1 = disagree, 2 = neutral, and 3 = agree. The 10 questions asked about the usefulness of remedial program, evaluation of the remedial program, and input for improving the remedial program in UAJY.

Secondary data were collected using archival or database approach (Jogiyanto, 2007). The data comes from remedial program database in the Faculty of Economics UAJY. The information collected from the database consists of participants' (students') name, their grades before taking the remedial program, and their grades after taking the remedial program.

3.3. DATA ANALYSIS TECHNIQUE

Data analysis is divided into two: (1) primary data analysis, and (2) secondary data analysis. Each analysis used different procedures and tools. Primary data analysis uses data gathered from questionnaires distributed to students. The analysis conducted were descriptive analysis, which consists of mean, minimum, dan maximum scores, as well as proportion analysis. Secondary data analysis is used for analysing secondary data gathered from the remedial database. Quantitative analysis was performed on the secondary data using statistical tools.

The steps performed in the quantitative analysis are as follows:

- a. Identify the remedial program courses used in the research (see Table 1)
- b. Collect secondary data from the remedial database which consists of students' grade for each course before taking the remedial program and students grade for the same course after taking the remedial program.
- c. Before statistical tests can be done, students grade which are letters (A, B, C, D, and E) are converted into numbers. This is done to simplify to the statistical tests. Grade A is excluded from the conversion since the maximum grade of remedial program is B. The conversion is as follows:

| Score in letters | Score in numbers |
|------------------|------------------|
| E | 1 |
| D | 2 |
| C | 3 |
| B | 4 |

- d. Perform descriptive analysis.
- e. Perform one-tail, paired sample t-test to see whether the students' grade after taking the remedial program has significantly increased compared to before taking the program. The hypothesis tested is $H_a: \mu_2 > \mu_1$, where μ_2 is the average

- grade after the remedial program and μ_1 is the average grade before the remedial program. H_a is accepted if the sig. one-tailed < 0.025 and the mean of $\mu_2 > \mu_1$.
- f. Calculate the percentage of students that have an increase in their grades after taking the remedial program to the total number of students enrolled in the remedial program. This percentage will corroborate with the statistical analysis findings to see whether the remedial program effectively increased students' academic performance.

4. DATA ANALYSIS RESULTS

4.1. QUANTITATIVE ANALYSIS

The quantitative analysis will be explained first, and the primary data analysis next. The quantitative data analysis comprise of descriptive statistics analysis and one tail, paired sample t-test.

4.1.1. DESCRIPTIVE STATISTICS

Data compiled for this test are students grades before taking remedial program and after taking remedial program of 21 (twenty-one) courses for years 2011 – 2014. A total 2,487 data were analysed. Table 2 shows the description of the data gathered. The students' averag score before taking the remedial program is 2.5308. This is equivalent to between D and C grades. The maximum score before taking the remedial program is 3, equivalent to C. After taking the remedial program, the average score increased to 3.1118, or equivalent to between C and B grades. The maximum score after the remedial program is 4, equivalent to B. This means that students' grades have increased after the remedial program.

Tabel 2
Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|-----------------------|------|---------|---------|--------|----------------|
| before_rem | 2487 | 1.00 | 3.00 | 2.5308 | .67283 |
| after_rem | 2487 | 1.00 | 4.00 | 3.1118 | .96997 |
| Valid N (listwise) | 2487 | | | | |

4.1.2. ONE-TAIL, PAIRED SAMPLE T-TEST

One-tail, paired sample t-test is conducted for the following groups of data: (1) the whole sample (21 courses altogether), (2) Accounting courses (AKT), (3) Management courses (MAN, KEU,PMS), and (3) Economic courses (EKO and UMU). Degree of tolerance used in the test is 5%.

Table 3
One tail, paired sample t-test – Whole Sample

| | |
|-------------------|-------|
| before_rem mean | 2.53 |
| after_rem mean | 3.11 |
| Sig. (one-tailed) | 0.000 |

Table 3 shows the test result for the whole sample. It shows that the sig.(one-tailed) is 0.000, and the average (mean) of scores after the remedial is higher than before remedial ($3.11 > 2.53$). This means that the average score of participating students after the remedial program significantly increased. Thus, the hypothesis is proven.

4.1.3 ONE-TAIL, PAIRED SAMPLE T-TEST FOR ACCOUNTING COURSES

The following table shows the t-test results specifically for courses in Accounting (AKT).

Table 4
One tail, paired sample t-test – AKT Courses

| | |
|-------------------|-------|
| before_rem mean | 2.38 |
| after_rem mean | 2.84 |
| Sig. (one-tailed) | 0.000 |

Table 4 shows that the sig.(one-tailed) is 0.000, and the average (mean) of scores after the remedial is higher than before remedial ($2.84 > 2.38$). This means that the average score of participating students in AKT courses after the remedial program significantly increased.

4.1.4 ONE-TAIL, PAIRED SAMPLE T-TEST FOR MANAGEMENT COURSES

The following table shows the t-test results specifically for courses in Management (MAN/KEU/PMS).

Table 5
One tail, paired sample t-test – Management Courses

| | |
|-------------------|-------|
| before_rem mean | 2.73 |
| after_rem mean | 3.45 |
| Sig. (one-tailed) | 0.000 |

Table 5 shows that the sig.(one-tailed) is 0.000, and the average (mean) of scores after the remedial is higher than before remedial ($3.45 > 2.73$). This means that the average score of participating students in management courses after the remedial program significantly increased.

4.1.5. ONE-TAIL, PAIRED SAMPLE T-TEST FOR ECONOMIC COURSES

The following table shows the t-test results specifically for courses in Economics (EKO) as well as Bahasa Indonesia and Pancasila (UMU).

Table 6
One tail, paired sample t-test – EKO and UMU Courses

| | |
|-------------------|-------|
| before_rem mean | 2.73 |
| after_rem mean | 3.42 |
| Sig. (one-tailed) | 0.000 |

Table 6 shows that the sig.(one-tailed) is 0.000, and the average (mean) of scores after the remedial is higher than before remedial ($3.42 > 2.73$). This means that the average score of participating students in economics and UMU courses after the remedial program significantly increased.

4.1.6. DISCUSSION ON QUANTITATIVE ANALYSIS RESULTS

Statistical test results done on several groups of data revealed consistent results. The results prove that students' grades (scores) significantly increased after taking the remedial program. Tests prove that statistical significant increased resulted, seen from the sig.(one-tailed) of all four groups being less than 0.025 and the mean after the remedial program is always higher than before (see tables 2, 3, 4, 5 and 6).

Based on the results above, it can be concluded that the remedial program in Economics Faculty UAJY has effectively increased students' grades. According to Table 2, the students scores increased from 2.53 to 3.11, and this increase is statistically significant (see Table 3). So, the students grade has increased from D/C to C/B.

Using the same data gathered for the t-test, it is found that the highest increase happened in the first semester the program was enacted. This was the first semester of 2011/2012 academic year. The scores increased (on average) 0.75 during that semester, and 70.11% of the participants grades have increased. This was the highest increase among other academic years of the research period. The increase in the grades lowered in the second semester of 2011/2012. Table 7 shows the average scores before and after the remedial program during the research period.

Table 7
Average Scores of Participants

| Semester | Average score before | Average score after | Increase | Percentage of participants with increase in score |
|------------------------|----------------------|---------------------|----------|---|
| First, 2011/2012 | 2.41 | 3.16 | 0.75 | 70.11 |
| Second, 2011/2012 | 2.62 | 3.06 | 0.44 | 57.33 |
| First, 2012/2013 | 2.51 | 3.12 | 0.61 | 60.00 |
| Second, 2012/2013 | 2.55 | 3.15 | 0.65 | 63.45 |
| First, 2013/2014 | 2.52 | 3.06 | 0.54 | 58.78 |
| Second, 2013/2014 | 2.54 | 3.16 | 0.62 | 66.47 |
| Average of 6 semesters | 2.53 | 3.11 | 0.58 | 62.08 |

Increase in students' academic performance can also be seen from changes in grades based on the group of courses (accounting, management, and economics). The result can be seen on Table 8 below. The table shows that lowest increase in grades was found in accounting courses, while highest increase was found in management courses. The low increase in grades of accounting courses was below the average increase of all courses in the remedial program.

Table 8
Average Scores of Courses in the Remedial Program

| Courses | Average score before | Average score after | Percentage of increase |
|------------|----------------------|---------------------|------------------------|
| Accounting | 2.38 | 2.84 | 19.32 |
| Management | 2.73 | 3.45 | 26.37 |
| Economics | 2.73 | 3.42 | 25.27 |
| Overall | 2.52 | 3.11 | 23.41 |

4.2. PRIMARY DATA ANALYSIS

4.2.1 RESPONDENTS' PROFILE

Primary data was collected using questionnaires. These questionnaires were randomly distributed to undergraduate students of three departments; Accounting, Management, and Economics, in the second semester of 2013/2014 academic year. A total of 131 questionnaires were collected. Respondents profile is described in Table 9. The table shows that most of the respondents are in their 4th semester (47.33%) and 6th semester (33.59%). The average number of courses taken in a remedial program is 2 courses (56.49%) and only 3.8% of the respondents take 4 courses.

Table 9
Respondents' Profile

| | | N=131 | Percentage (%) |
|--|-------------------|-------|----------------|
| Department | | | |
| 1 | Accounting | 88 | 61.18 |
| 2 | Management | 23 | 17.56 |
| 3 | Economics | 20 | 15.27 |
| Total | | 131 | 100.00 |
| Semester of Study | | | |
| 1 | Semester 4 | 62 | 47.33 |
| 2 | Semester 6 | 44 | 33.59 |
| 3 | Semester 8 | 25 | 19.08 |
| Total | | 131 | 100.00 |
| Experience in taking remedial courses | | | |
| 1 | 0-2 times | 34 | 25.95 |
| 2 | 3-4 times | 71 | 54.20 |
| 3 | 5-6 times | 18 | 13.74 |
| 4 | More than 6 times | 8 | 6.11 |
| Total | | 131 | 100.00 |
| Number of courses taken in remedial program | | | |
| 1 | One course | 13 | 9.91 |
| 2 | Two courses | 74 | 56.49 |
| 3 | Three courses | 39 | 29.77 |
| 4 | Four courses | 5 | 3.82 |
| Total | | 131 | 100.00 |

4.2.2. RESPONDENTS' ANSWERS

The next table, which is Table 10, shows the average (mean) score of each question in the questionnaires.

Table 10
Respondents' Answers

| No. | Statement (question) | Mean |
|-----|--|------|
| 1 | I feel that the remedial program has been able to help me improve my grade and my GPA. | 2.15 |
| 2 | Every semester, I always take a remedial class | 1.89 |
| 3 | I feel that the remedial program help me to finish my degree on time and or quicker. | 1.93 |
| 4 | I feel that the remedial program's assesment method is transparant, fair, and reflect the students' performance. | 1.55 |
| 5 | I feel that students taking the remedial program will always increase their grades. | 1.26 |
| 6 | I feel that prior to the remedial exams, there should be a class meeting of more than one time. | 2.15 |
| 7 | I feel that remedial program should be done by having a remedial exam directly after the regular semester ends. | 1.44 |
| 8 | I feel that the tuition fee for remedial program is reasonable to the service received by the students. | 1.58 |
| 9 | I think that the remedial program model used right now (by the faculty) is appropriate. | 1.78 |
| 10 | I hope that this type of remedial program will be continued in the foreseen future. | 2.04 |

According to the respondents' perception, the remedial program is very useful in increasing grades and GPA. This is proved by the average answer to statement no. 1 (2.15). The answer to this statement is the highest, along with statement no. 6, about the students' need for more than one class meeting of a remedial program. The remedial program in UAJY is only done in two meetings; the first one is short tutorial and the second is the exam. The students feel that just one class meeting is not enough. This is proven by the answer to statement no. 6 (average 2.15). The lowest average score was found for statement no. 5 (average 1.22). The students disagree that grades will automatically increase after the remedial program. Second to the lowest score was for statement no. 7. Most students disagree to the idea that remedial programs can be done just by performing an exam, directly after the semester ends (average 1.44).

There are two main advantages of remedial program, they are increasing students' GPA and expediate the students study period. A separate question was included in the questionnaire to address this issue. The respondents' opinion on these advantages can be seen on Table 11 below.

Table 11
Advantages of Remedial Program

| | Disagree (=1) | Agree (=2) | Strongly Agree (=3) | Average |
|-----------------|---------------|-------------|---------------------|---------|
| Increase GPA | 19 (14.50%) | 73 (55.73%) | 39 (29.77%) | 2.15 |
| Expediate study | 38 (29.01%) | 64 (48.85%) | 29 (22.14%) | 1.99 |

The research shows that 85.50% of the respondents feel the advantages of the remedial program in increasing their GPA, and 70.99% of the respondents feel that the remedial program can make them finish undergraduate studies quicker. It can be concluded that students do feel that the remedial program is useful for them. Eventhough it is advantageous and useful to students, but 77.86% of respondents still feel that the remedial program guarantees increase in grades. It means that hard work and strong effort is still required to improve grades and academic performance.

4.2.3. EVALUATION OF THE FACULTY OF ECONOMICS' REMEDIAL PROGRAM

According to the student's point of view, the remedial program at the Faculty of Economics UAJY is executed well and properly. 70.52% of the respondents agree that the program is advantageous and useful for them.

The current model run by the faculty is a two week program, one meeting in each week. A total of two meetings. The first meeting is short tutorial, or review, and the second meeting (week two) is exam. The assessment of the class is done individually by each lecturer. So, it is possible that the assessment scheme for the same course is done differently in each class since the lecturer is different. Participants of remedial programs are those students with grades below B. This means that the students participating in the remedial program has a variety of grades, ranging from E to C.

This model of a remedial program is not ideal, theoretically. The duration is very limited, only one meeting for tutorial, and the evaluation is only by means of exam. The participants in one class is homogenous, since the grades range from E to C. This does not meet the design of a remedial program which emphasize on specific needs, and tailor-made to the student's difficulties. The ultimate goal to overcome students' difficulties is not proven to be eliminated by the program. The faculty should evaluate and identify the problems encountered in the regular program before enacting the remedial program as a "medicine" for the assumed problem. An alternative method to increase student's academic performance is blended-learning (Brioso, 2017). Research done by Brioso (2017) proved that blended learning, a teaching-learning process which blends traditional classroom with information technology, has been able to improve academic performance effectively. It is a rigorous process but has positive results in Phillipine classrooms that were investigated.

Another critique towards the faculty's remedial program is on the fairness of the grading system. Each lecturer is independent in determining the grading scheme. Students are questioning the fairness and consistency of this grading system since it varies among lecturers. The respondents' answers confirm this. The average answer related to this issue is 1.55 (next to the lowest). 69 students or 52.67% of respondents viewed that the grading system is less transparent and not fair.

Another point of evaluation is the tuition fee for the remedial program. More than 50% of the respondents feel that the tuition fee is reasonable, based on the services which they receive. The service here is the one meeting for tutorial and one meeting for exam. The students only have to pay an equivalent of one credit for each course they take. There are still 46% of the respondents feel that the tuition is too expensive compared to the tuition for a regular program which has 14 class meetings.

5. CONCLUSION

The questionnaire results show that students of the undergraduate program in the Faculty of Economics UAJY support the remedial program. 107 respondents (81.66%) expect that the program will still continue in the foreseeable future. High expectations from the students of the program shows that the remedial program brings advantages and usefulness to their studies. The statistical results prove that students grade increased after they took the remedial program. This means that the program effectively increased

students' academic performance. The program is able to increase GPA and shorten the study period in completing the undergraduate degree.

Eventhough the remedial program is seen successful in increasing academic performance, several weaknesses to the program still exist. Students still feel that the grading system of the remedial program is unfair, not transparant, and inconsistent. This is due to the lack of guidance from the university as a whole on the issue. The UAJY remedial program is not an ideal remedial teaching-learning process since it is not specific enough to meet different types of students. Several students also critized the tuition fee which is too expensive for merely two meetings, compared to the regular program which has 14 (fourteen) class meetings.

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