

## Learning Contract: New Approach in Assessing and Evaluating Students' Co-Curricular Activities

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**Abstract:** Co-curricular or extra-curricular activities are an integral part of knowledge in supporting students' generic skills development in order to become quality human capital. In general, the co-curricular activities in Higher Education Institutions (HEIs) in Malaysia are of similar fields. However, the institutions have their own way to assess and evaluate the students' involvements in these activities. In relation to this, as of 2010/2011 academic session, the Universiti Kebangsaan Malaysia (UKM) has implemented a more flexible approach whereby student are given more freedom at choosing, creating and carrying out the activities based on a learning contract which are drawn out and agreed upon by the students and supervisors prior to the implementation of the said activities. A survey was conducted in order to determine the level of knowledge and understanding among students in relation to the learning contract and their readiness to use the learning contract in their next co-curricular activities. A set of questionnaire was developed and used as a research tool for that purposes. A total of 51 respondents were selected from Training for Trainers (TOT) workshop to participate in this survey. The study found that the level of understanding (mean = 4.06-4.16) and acceptance (mean = 4.02-4.46) on co-curricular activities learning contract among students are excellent. It was also reported that 86% of the students have clear knowledge about the learning contract and its implementation for co-curricular activities. The majority of students stated that they had achieved all the learning contract principles (mean = 3.92-4.25) and learning outcomes (mean = 4.00-4.18) required. In general, this research showed positive results on the implementation of learning contract in co-curricular activities in the UKM. The new approach to implementing and assessing co-curricular activities has already been accepted by most UKM students. Nevertheless, in order to achieve the optimum results, continuous steps should be taken by the respective parties to ensure that the students are well informed about the status of the learning contract.

**Key words:** Learning contract, student, co-curricular, generic skills, higher education, Malaysia

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### INTRODUCTION

In HEIs, all students' performances will be assessed in order to be awarded a degree and graduated from the institution. It is a common process and fundamental aspects in higher education system. In general, learning activities in HEIs have been structured by lecturer and the institution. Students were told the course's objectives that they needs to achieved, recourses which they should use for and the assessment methods use to evaluate their performance (Knowles, 1980, 1984, 1986). Students have been taught by lecturer-oriented approach in classroom setting and their performance has been assessed based on criteria set by lecturer which is more on written

examination (Hardigan, 1994; Hussain *et al.*, 2008). This method can be an obstacle to effective learning process and to develop generic skills among students. It is more valuable and significant if knowledge that student acquires from a lecture or course been practice in real situation instead for passing examination per se.

Co-curricular courses can be use as a platform to develop students' generic skills, interest and talent where they do not get or given much opportunity to have/do it in academic courses (Mahoney *et al.*, 2003; Canham and Bennett, 2002). Activities or projects carry out by students through co-curricular courses help them to understand the challenge in real world as well as to improve or build up their problem solving skills,

management skills and other generic skills. In public HEIs in Malaysia, all undergraduate students must involve in co-curricular activities in order to be awarded a degree and in the UKM, it is a compulsory requirement as stated in university regulations. Students must fulfil eight credit units for co-curricular activities which they can choose from the list of co-curricular courses they interested to join in such as in sports, community services, arts and cultures and uniform-based organisations. The courses have two parts of knowledge. The theoretical part had been taught in classroom and the practical part had been conducted in outdoor setting. At the end of the course, student needs to submit their written assignment and sit for an examination.

The transformation of higher education system, the economic change as a result of globalization and the demand from company/agency/organization to have highly qualified or quality workers to work in their institutions influenced UKM to enhance generic skills among students as to be more dynamic, progressive and empowering. In 2010, the university had taken drastic transformation by redesigning the co-curricular courses and introducing a new method of assessing student's performance in co-curricular activities that is the learning contract.

The co-curricular requirements are based on this learning contract. A student driven approach is used to replace the old approach of lecturer-oriented. Student has been given more freedom to choose and carry out activities or projects they like to get more or specific knowledge and enhance generic skills as they wish for. The new approach has 8 principles as shown in Fig. 1.

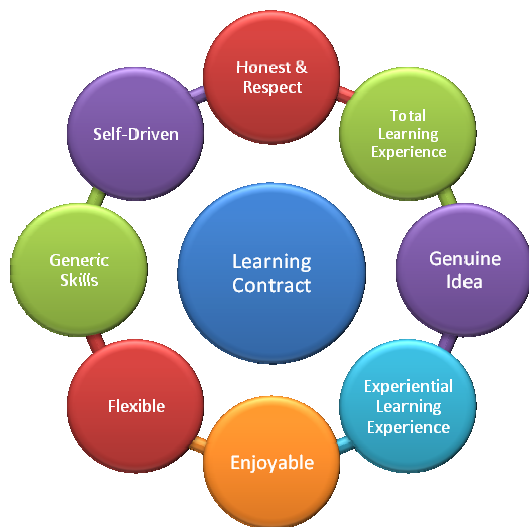


Fig. 1: Eight principles of learning contract

Students can implement their activity or project in various learning centres in the university depending on their interest for enhancing talents and developing skills in a flexible and enjoyable learning setting.

The aims are to allow students to have an experiential learning experience and to encourage them to initiate activity or project genuinely. Students are hoped to appreciate more on what they are doing and experiences they have gone through honest with people they dealt with as well as respect with freedom given by the university to have a total learning experience in conducting activity or project for co-curricular purposes. Activities and projects will be given credits and counted for total credits needed for graduation

The eight learning contract principles are used to achieve eight learning outcomes: social skill and responsibility; communication skill; information management skill and lifelong learning; value, attitude, ethic and professionalism; critical mind, problem solving and scientific approach; teamwork and leadership; management and entrepreneurship skill and creative and innovative skill. In principle, students who can achieve and complete all the eight learning outcomes are able to use and adapt their experiences in the university to various contexts of life, challenges and competitions after graduation.

This study discussed three main aspects in relations with learning contract exercises in co-curricular activities in UKM which are: the level of understanding and knowledge among students on learning contract; the level of acceptance among students and the implication of learning contract implementation in co-curricular activities in enhancing student's generic skills.

**Learning contract and co-curricular activities:** Malcolm Knowles has developed learning contract concept, a pedagogical tool or a mechanism used in higher education system as self-direction enhancement on what a student will do to achieve specified learning outcomes (Knowles, 1980, 1984, 1986; Cross, 1996; McAllister, 1996). It is a learning concept where student has responsibility to plan, conduct/perform and assess his or her learning experiences (Merriam and Caffarella, 1991). The concept is tested in academic and working environment. In academic environment, learning contract has been given much attention and was accepted all over the world (Brockett and Hiemstra, 1991). It has been extensively exercised and used in Social Work Education (Dore, 1994; Davis, 1993; Coulshed, 1993; Parsons and Durst, 1992), Nursing (Martens, 1981),

Pharmacy (Hardigan, 1994), Clinical Physiotherapy (Cross, 1996) and for empowering students in classroom (Huff and Johnson, 1998).

Learning contract is a written agreement between student and lecturer to help student learns by him or herself on what skills, knowledge or experiences they want to achieve (McAllister, 1996). Student has autonomy to set his or her learning goals and to choose, plan and initiate activities they interested the most (Knowles, 1984; Dart and Clarke, 1991). The contract must be developed through consultation between student and lecturer and agreed by both parties. Student has authority to make decision, responsible on learning processes, working together with lecturer individually or in a small group for activity/project, resource and strategy as well as showing outcomes agreed in the contract (Freedberg, 1989; Lemieux, 2001; Cross, 1996; Wilson and Cutting, 2001; Goriunova, 2010). Learning contract also been used in practical training as a way to empower student to be more motivated on what they want to do and appreciated on experience they get. It also used as a mechanism to increase the sense of responsibility between student and organization (Collins and Ottley, 1986; Fox and Zischka, 1989; Wilson, 1981; Huff and Johnson, 1998).

In UKM, learning contract has been used in co-curricular activities to enhance student's generic skills. Student has to decide on what activity or project they want to do (activity or project can be done individually or in a small group of students), find a supervisor (lecturer or professional) who can help them with the activity/project and discussed with supervisor for learning outcomes they want to achieve, assessment methods, strategy and resource needed for the activity/project. All the results from the discussion have to be put on writing and documented as a learning contract. Once both parties agreed and signed the contract, student has to carry out the activity/project. The contract need to be written in detail explaining on what student will learn, how they will learn and achieve the university's eight learning outcomes and how their performance will be assessed. The university hopes that the use of learning contract in co-curricular activities will enhance student's communication skills, be able to work as team, improve planning and managing skills and have analytical mind, leadership and problem solving skills (Johnston and Watson, 2004; Hermens and Clarke, 2009; Brecko, 2003). This approach intends to produce student that is able to be good individual, citizen and employee after graduating from the university. Of course he or she will reflect the quality of higher education institution they come from (Kuh *et al.*, 2006; Mulder, 2009; Rye, 2008).

Student's knowledge and understanding on learning contract is fundamental to ensure this new approach can be successfully employed in all co-curricular activities in the university (Lemieux, 2001). Tuohy and Bailey (2009) found in their study that it is important for student to understand what learning contract is and how it works to help student develop generic skills. They also reported that student need to have enough knowledge before initiating a programme or project and knowledge can be a decisive factor whether the program/project or the learning contract itself will success or fail.

## **MATERIALS AND METHODS**

This research has been conducted to find out the success level of using learning contract in co-curricular activities among the UKM's students. A set of questionnaire were used as a research tool. It contains 43 questions of which were divided into two types of question; direct and indirect questions. Direct questions are used to obtain students' opinion (Agree or not agree) on certain issues regarding learning contract exercises in co-curricular activities. On the other hand, indirect questions are based on 5-point Likert scale which is used to examine student's perception on teaching and learning processes in co-curricular activities based on learning contract. In general, the aims of this research are to see:

- The level of understanding among students on learning contract exercises in co-curricular activities
- Students' ability to achieve learning outcomes in co-curricular activities involved
- The effectiveness of methods used in disseminating learning contract information
- The acceptance level of students on learning contract exercise in co-curricular activities
- The implications of using learning contract in co-curricular activities on students

The questionnaire has been tested its reliability, validity and consistency by using Chronbach's  $\alpha$ -test. A total of 51 students were selected to participate in this study and they were participants of Training of Trainer (TOT) workshop. The respondents are committee members from various student societies and the 1st batch of students that have been exposed to learning contract in co-curricular activities and have an experience in implementing this new approach.

## RESULTS AND DISCUSSION

**Students' level of understanding on learning contract in co-curricular activities:** The study assumes that students will fully understand learning contract exercise in co-curricular activities once they have enough information.

The UKM Centre for Learning Accreditation has provided the Guideline for Co-curricular Activities based on Learning Contract and Centre for Learning Accreditation Undergraduate Handbook to help students understand the learning contract concept in co-curricular activities.

Besides, the centre also provides workshop, training and induction sessions to explain about learning contract to UKM's academic staffs and students from various clubs, societies and groups. The study found that the level of understanding among students on learning contract exercise in co-curricular activities is high (mean from 4.06-4.24) for four main elements, i.e., learning contract concept, purposes of using learning contract in co-curricular activities, ways of learning contract has been implemented in co-curricular activities and procedures to apply learning contract for co-curricular activities (Table 1).

Generally, 92% of respondents understood on learning contract concept and its purposes. Furthermore, 88.2% of respondents understand on how learning contract has been implemented in co-curricular activities

and how to fill the learning contract form. The results show that the information provided by the UKM Centre for Learning Accreditation is enough and very well received by students.

**Students level of knowledge on learning contract exercises in co-curricular activities:** Elements in Table 1 have been detailed in order to assess a level of knowledge among students on learning contract exercise in co-curricular activities. Students were asked in more detail whether they really understand the concept, procedures and processes in learning contract. Questions were developed by using positive and negative statements.

For the negative statements (false answer is the real answer), the study found that the level of knowledge among students on learning contract exercise in co-curricular activities is very high (mean values from 1.63-1.98) (Table 2). About 88.2% of respondents understand clearly the elements in learning contract except element 2 (implementation) and element 5 (grade evaluation).

For the positive statements, the level of knowledge is also high (mean values from 1.86-2.0) (Table 3). About 86% of respondents really understand the elements in learning contract.

Furthermore, the study found that 96.1% of respondents understand very well element 3-10 in the learning contract.

Table 1: Students level of understanding on learning contract exercise in co-curricular activities

	Really do not understand		Do not understand		Unsure		Understand		Really understand		Mean
	f	%	f	%	f	%	f	%	f	%	
Students understanding											
Understand on what learning contract is all about	0	0	0	0	4	7.8	35	68.7	12	23.5	4.16
Understand on the purposes of learning contract	0	0	0	0	4	7.8	31	60.8	16	31.4	4.24
Understand on how learning contract has been implemented in co-curricular activities	0	0	1	2	5	9.8	35	68.6	10	19.6	4.06
Understand on how to fill learning contract form	0	0	0	0	6	11.8	36	70.6	9	17.6	4.06

Table 2: Students level of knowledge on learning contract exercises in co-curricular activities (negative elements)

Statements	True		False		Mean
	f	%	f	%	
Learning contract registration is similar with other academic courses registration	7	14.0	43	86.0	1.86
Learning contract can be conducted through academic courses	18	37.5	30	62.5	1.63
Supervisor can be select only in a group of lecturers in the faculty	1	2.0	50	98.0	1.98
Learning contract must be conducted within 2 semester only	3	6.0	47	94.0	1.94
Grade from learning contract is not being calculated in CGPA	13	27.1	35	72.9	1.73
Students are not require to provide a report after implementing activity/project related to learning contract	5	10.0	45	90.0	1.90
Students must have 6 learning outcomes in order to complete his/her learning contract in co-curricular activities	6	11.8	45	88.2	1.88
Learning contract is limited only for certain semester only	3	6.0	47	94.0	1.94

Table 3: Students level of knowledge on learning contract exercises in co-curricular activities (positive elements)

Statements	True		False		Mean
	f	%	f	%	
Activity/project based on learning contract can only be registered if a group has minimum 15 students	43	86.0	7	14.0	1.86
Activity/project proposal and the implementation of learning contract must come from students	44	88.0	6	12.0	1.88
The implementation of learning contract must be agreed by both parties, students and supervisor	49	96.1	2	3.9	1.96
Students must fulfil 320 notional hours for learning contract	45	90.0	5	10.0	1.90
All soft skills asked by the university can be achieved through learning contract	48	96.0	2	4.0	1.96
Learning contract contains enjoyable components for students while carrying out activity/project	51	100.0	0	0.0	2.00
Learning contract emphasizes authentic idea from students	49	96.1	2	3.9	1.96
Learning contract emphasizes experiential learning for students	51	100.0	0	0.0	2.00
Learning contract emphasizes total learning experience for students	50	98.0	1	2.0	1.98
Learning contract emphasizes trust and honesty among students while carrying out activity/project	51	100.0	0	0.0	2.00

Table 4: Students acceptance on the implementation of learning contract in co-curricular activities

Statements	Totally do not agree		Do not agree		Unsure		Agree		Totally agree		Mean
	f	%	f	%	f	%	f	%	f	%	
Learning contract should be implemented in the UKM	0	0	3	5.9	7	13.7	27	52.9	14	27.5	4.02
8 Learning Outcomes (LO) can be achieved through learning contract	0	0	1	2.0	4	7.8	29	56.9	17	33.3	4.22
The exercise of learning contract in co-curricular activities is only carried out in the UKM	0	0	2	4.1	5	10.2	20	40.8	22	44.9	4.27
The UKM has capability in implementing learning contract	0	0	1	2.0	3	5.9	33	64.7	14	27.5	4.18
Activity/project can be carried out in any learning centres in the UKM	0	0	1	2.0	4	8.0	27	54.0	18	36.0	4.24
Activity/project can be carried out together with organizations outside the UKM	0	0	2	3.9	6	11.8	26	51.0	17	33.3	4.14
External expert can be appointed as second supervisor	0	0	1	2.0	9	17.6	24	47.1	17	33.3	4.12
The implementation of learning contract given freedom to students to choose activity they like	0	0	1	2.0	1	2.0	26	51.0	23	45.1	4.39
Learning contract encourages students to produce new and authentic ideas	0	0	0	0.0	1	2.0	25	50.0	24	48.0	4.46
The 320 notional hours are enough for students to fulfil their learning contract	0	0	0	0.0	4	7.8	26	51.0	21	41.2	4.33

**Students acceptance on learning contract implementation:** Good understanding on learning contract among students is a result from enough information and explanation sessions given to students.

Thus, a high percentage of students is also estimated to agree to exercise the learning contract. The study found that about 88.9% of respondents can accept the use of learning contract in co-curricular activities. Based on 10 elements analysed, mean values for each element has been found from 4.02-4.46 (Table 4). Although, 80% of respondents agree with all the elements listed, element 1 (implementation of learning contract in the UKM) and element 7 (the appointment of external expert) should be elaborate more to students.

**Students experiences in exercising learning contract in co-curricular activities:** The study found that students understand the new concept of learning contract exercised in the co-curricular activities. They reported that all the eight learning contract principles (element 1-8) and learning outcomes (element 9-16) have been achieved (mean values from 3.98-4.25) (Table 5). Students' success

in fulfilling all the eight learning contract principles and learning outcomes shows that the implementation or the use of learning contract in co-curricular activities is on the right track. It has potential to be implemented in other formal courses in UKM. The learning contract exercise also does not interrupt students' life and their academic achievement (Table 6).

Understanding the concept and implementing learning contract in co-curricular activities are two different things. The study shows that the level of understanding among students on learning contract principles is high (mean from 4.70-5.00) before they implement it (Table 7). However, it has been decreased after they implement the learning contract (mean values from 3.92-4.25). Nevertheless, it is still in a good shape as the mean values is still high. However, the students are confidence in achieving learning outcomes after the implementation of this new approach (means values are from 4-4.18 (Table 8). The high confidence level of students on the implementation of learning contract shows that both the university and students trust and help each other for the better future.

Table 5: Students' experiences in exercising learning contract in co-curricular activities

Statements	Totally do not agree		Do not agree		Unsure		Agree		Totally agree		Mean
	f	%	f	%	f	%	f	%	f	%	
Enjoy while carrying out activity/project	0	0	0	0.0	11	21.6	33	64.7	7	13.7	3.92
Drives student to carry out activity/project (student driven) by his/herself	0	0	1	2.0	4	7.8	36	70.6	10	19.6	4.08
Increase student's soft skills	0	0	0	0.0	2	3.9	34	66.7	15	29.4	4.25
Enable to conduct activity/project more flexible	0	0	1	2.0	4	7.8	36	70.6	10	19.6	4.08
Learns from experiences through activity/project (experiential learning)	0	0	0	0.0	3	5.9	34	66.7	14	27.5	4.22
Develops trust and honesty	1	2	0	0.0	2	3.9	36	70.6	12	23.5	4.15
Goes through total learning experience	0	0	0	0.0	6	11.8	31	60.8	14	27.5	4.16
Enable to produce new and authentic idea	0	0	0	0.0	9	17.6	30	58.8	12	23.5	4.06
Enable to develop social skills and responsibility	0	0	0	0.0	5	9.8	35	68.6	11	21.6	4.12
Enable to develop communication	0	0	0	0.0	5	9.8	34	66.7	12	23.5	4.14
Enable to develop information management skills and lifelong learning	0	0	1	2.0	5	9.8	35	68.6	10	19.6	4.06
Enable to develop values, attitudes, ethics and professionalism	0	0	0	0.0	4	7.8	34	66.7	13	25.5	4.18
Enable to develop critical thinking, problem solving and scientific approach skills	0	0	1	2.0	5	9.8	35	68.6	10	19.6	4.06
Enable to develop leadership and teamwork skills	1	2	0	0.0	5	9.8	32	62.7	13	25.5	4.10
Enable to develop management and entrepreneur skills	0	0	1	2.0	8	15.7	32	62.7	10	19.6	4.00
Enable to develop creative and innovative skills	0	0	2	3.9	6	11.8	32	62.7	11	21.6	4.02

Table 6: The implementation of learning contract and students' life

Statements	Totally do not agree		Do not agree		Unsure		Agree		Totally agree		Mean
	f	%	f	%	f	%	f	%	f	%	
Leisure time for socialising is limited	7	13.7	10	19.6	22	43.1	10	19.6	2	3.9	2.80
Focused for academic learning has been interrupted	5	9.8	14	27.5	24	47.1	8	15.7	0	0.0	2.69
Stress	2	3.9	18	35.3	17	33.3	12	23.5	2	3.9	2.88
Time to visit family is limited	5	10.0	16	32.0	18	36.0	10	20.0	1	2.0	2.72
Time for rest/sleep has been limited	4	7.8	23	45.1	16	31.4	7	13.7	1	2.0	2.57
Nothing benefited to me	18	35.3	19	37.3	12	23.5	1	2.0	1	2.0	1.98

**The implication of learning contract exercise on students:** Overall, students involved in this study have given positive, constructive and affirmative views on the exercising of the learning contract in co-curricular activities.

They experienced on conducting activities and implementing the new approach after they clearly understood the concept and procedure of the learning contract. Students are aware of the implication of using learning contract in co-curricular activities in developing their generic skills. They responded well with the eight principles of learning contract principles. The study found that all 32 elements in eight learning outcomes recorded high mean value between 3.78 and 4.26 (Table 9).

From the eight learning outcomes analysed, only three need to be given extra focus in future, i.e., LO3 (information management skills and lifelong learning), LO5 (leadership skills and teamwork) and LO6 (critical thinking skills, problem solving and scientific approach). In overall, all the eight learning outcomes are still significant as the mean value is 4.02.

Table 7: Students' understanding before and after the implementation of learning contract

Learning contract principles	Mean before the implementation	Mean after the implementation
Enjoyable	5.00	3.92
Student driven	4.70	4.08
Soft skills	4.90	4.25
Flexible learning	4.67	4.08
Experiential learning	5.00	4.22
Trust and honesty	5.00	4.15
Total learning experience	4.95	4.16
New and authentic ideas	4.90	4.06

Table 8: Confidence level of students on achieving learning outcomes with new approach

Learning outcomes	Mean
Enable to develop social skills and responsibility	4.12
Enable to develop communication skills	4.14
Enable to develop information management skills and lifelong learning	4.06
Enable to develop values, attitudes, ethics and professionalism	4.18
Enable to develop critical thinking, problem solving and scientific approaches skills	4.06
Enable to develop leadership and teamwork skills	4.10
Enable to develop management and entrepreneur skills	4.00
Enable to develop creative and innovative skills	4.02

Table 9: Mean values for students' generic skill elements from learning contract exercises in co-curricular activities

Elements	Values	Learning outcome	Values
<b>Elements of learning outcome 1</b>			
Thinking about academic achievement	4.16	Social skills and responsibility	4.15
Cares for friends	4.16		
Responsible to action taken	4.12		
Cares for environment	4.16		
Involves in environmental campaigns	3.98		
Supports national integration	4.26		
Opens for friendship	4.12		
Sympathy to others	4.22		
<b>Elements of learning outcome 2</b>			
Using proper body language	4.22	Communication skills	4.04
Enable to present ideas orally and spontaneously	4.02		
Enable to speak with others openly	4.12		
Enable to speak English	3.78		
<b>Elements of learning outcome 3</b>			
Enable to use certain software	3.78	Information management skills and lifelong learning	3.89
Skills are used in life	4.08		
Enable to collect and manage information	3.82		
<b>Elements of learning outcome 4</b>			
Enable to work with others	3.96	Values, attitudes, ethics and professionalism	4.03
Works until other people satisfied	4.00		
Ready to help	4.12		
Works with procedures	4.04		
<b>Elements of learning outcome 5</b>			
Enable to identify other people problems	3.90	Critical thinking skills, problem solving and scientific approach	3.93
Enable to elaborate problem in more detail	3.86		
Finds information before make a decision	4.02		
<b>Elements of learning outcome 6</b>			
To be a leader or follower when needed	4.20	Leadership skills and teamwork	3.93
Often chosen to lead	3.88		
Avoids giving problem to group members	3.70		
<b>Elements of learning outcome 7</b>			
Enable to give ideas or suggestions for group	3.96	Management skills and entrepreneurship	4.13
Enable to achieve aims targeted	4.26		
Enable to plan, conduct, monitor and assess activity	4.08		
Enable work in a team	4.22		
<b>Elements of learning outcome 8</b>			
Explores current resources for creativity and innovative	3.98	Creative and innovative skills	4.09
Always to improve ideas	4.16		
Uses all opportunities for better future	4.14		
<b>Total</b>			4.02
Learning contract implementation impact on students			

Learning contract implementation impact on students

However, the university needs to have continuous efforts to strengthen the implementation of learning contract in co-curricular activities, especially in improving elements in the learning outcome with mean values <4.

## CONCLUSION

The implementation of learning contract in co-curricular activities in the UKM shows positive and convincing result as what the university anticipate. As mentioned earlier, the research is conducted to the first group of students who were given information and explanation on learning contract and who had exercised it in their co-curricular activities. Other research needs to be conducted to all university students involved in co-curricular activities in order to see the overall view on learning contract exercises. Furthermore, it is important to improve the mean values of learning outcomes elements. The success of learning contract implementation in

co-curricular activities is depending on how information has been disseminated to students. Once students have enough information, they have knowledge and fully understand on what they should do to exercise learning contract in co-curricular activities. As learning contract has a lot of benefits to students, more time should be given to students to digest and implemented this new approach in co-curricular activities.

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