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Preliminary Findings of the iCGPA Implementation on Diploma in Public Administration Programme of Faculty of Administrative Science and Policy Studies, Universiti Teknologi MARA

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ABSTRACT

In line with Malaysia Education Blueprint (Higher Education) 2015-2025, the implementation of Integrated Cumulative Grade Point Average (iCGPA) for Diploma in Public Administration (DPA) in the Faculty of Administrative Science and Policy Studies (FSPPP), Universiti Teknologi MARA (UiTM) was started in July - October 2016 academic session. Hence, there is a need to evaluate the implemention of the iCGPA attainment. Therefore, this paper aims to examine the iCGPA achievement on the first cohort of the DPA students based on their examination and academic performance. Results from the first iCGPA cohort in DPA were analysed and compared to produce a report on the iCGPA evaluation. The findings had revealed that the DPA students were able to attain better GPA and CGPA and lower percentage of failure rates. In addition, the findings had revealed that the faculty was able to meet its academic Key Performance Indicators (KPI). Indeed, throughout the iCGPA implementation, students were able to reach grade B and A+ for all the nine (9) learning outcomes proposed in iCGPA. To monitor the results, the faculty has developed the iCGPA Reporting Card (iRC) in 2017 which aims to assess the attainment of Program Learning Outcomes (PLOs) to monitor the continuous improvement efforts in teaching and learning and a friendly user reporting card in reporting the overall undergraduate academic programme achievement (iCGPA). It was suggested that iCGPA is to be continued at diploma levels with proper modifications and should be extended to all UiTM campuses which offer DPA programme.

***KEYWORDS**: iCGPA, Programme Learning Outcomes*

INTRODUCTION

The Integrated Cumulative Grade Point Average (iCGPA) is a grading system which aims to assess the students' academic performance as well as professional ability in order to enhance their marketability. The Higher Education Ministry started to pilot iCGPA at several public universities including Universiti Teknologi MARA (UiTM) in September 2015. It aims to produce holistic graduates who not only excel academically but are also equipped with the necessary soft skills which reflect in eight (8) Program Learning Outcomes (PLOs). The designated PLOs as proposed by the Ministry of Higher Education (2016) are; knowledge (PLO1), practical skills (PLO2), social and responsible skills (PLO3), values, attitudes and professionalism (PLO4), communication, teamwork and leadership abilities (PLO5), problem solving and scientific skills (PLO6), information management and lifelong learning skills (PLO7) and management and entrepreneurial skill (PLO8) Based on the literature, there is a continuous argument on the disparity between what employers or industry players need and the readiness of the higher institutions or university students toward the industry workforce (Selingo, 2015; Ahmad Ibrahim, 2017). The industry always claims there still a missing gap between what they have in the industry and what is being taught at the institutions (Abdullah et al. ,2017). Many scholars argued that through the conventional method, many students failed to graduate with the complex reasoning skills needed in today's workplace (Yasmeen, 2010: Edward, 2009 & Mortenson, 2003). Neumann and Banghart (2001) regard the relationship between academic and industry must be bridged further to minimize the gap which involves designing, delivery and assessment of the specific courses including the students' academic assessment.

Hence, in response to the ever-changing industry needs, the Ministry of Higher Education of Malaysia (MOHE) decided to introduce the iCGPA and firmly believed that this is the holistic mechanism of the students' academic assessment in the higher institutions. However, it is challenging to get full support from academicians at the higher learning institutions throughout the journey to introduce the iCGPA. The main concern was, lacking of qualified trainers in iCGPA and academicians are facing enormous hurdles throughout the process of iCGPA implementation because it requires extended time and outreach thought because it will affect course outcomes, teaching methodologies and student's assessment rubrics. Thus, academicians considered iCGPA as a tiring system and additional burden to the current practice (Sanip & Abdul Rahman, 2018). However, most authors discovered that the strength of iCGPA reflected from its eight (8) learning domains. Most respondents (academicians and industry players) agreed iCGPA explicitly portray student's performance. Hence, it assists them to perform further interventions, improvement and as mechanism to select a right candidate for future jobs (Abdullah et al., 2017). However, on 20th June 2018, the newly appointed Education Minister announcing that iCGPA system is no longer compulsory in public universities. This decision was made after gathering feedbacks from thorough sharing sessions and various research. This system was found to have deviated the attention of lecturers from their main tasks which are teaching, writing, supervising their students' performance and serving the public (Zanariah, 2018).

Therefore, this paper aims to examine the Learning Objectives achievement and to evaluate the achievement of iCGPA implementation among the undergraduates' learners of Diploma in Public Administration (DPA); the first cohort that had undergone the iCGPA implementation in the Faculty of Administrative Science and Policy Studies, Universiti Teknologi MARA (UiTM). Therefore, this study will address the following research questions:

1. What is the achievement of iCGPA Program Learning Outcomes (PLOs) among the Diploma in Public Administration students?

2. What are the job expectation and job satisfaction of the academic professionals?

METHODS

This research has adopted a cross-sectional study design. This design is commonly used in exploratory and descriptive research in order to collect data about people, event or situation (Sekaran & Bougie, 2016). This method is suitable with the research as it examines the students' results at the end of the programme.

The sample of study involved was the DPA students from July - October 2016 academic session. They were chosen as they were the pioneer cohort of DPA students who have undergone the implementation of iCGPA in UiTM. At the time this paper was produced, this cohort has reached its final semester (semester 5) on the iCGPA implementation which meant they have undergone four (4) academic semesters in iCGPA. The number of DPA students involved in this study varies according to semester taking into accounts number of students seating for the examination for that particular academic session. This will be explained in Section four (4) related to findings and results. Thus, this paper was written by taking into consideration only the four (4) consecutive examination performance.

This study has adopted a census technique in which the whole population was involved in this study. Census is a systematic method that collects and records the data about the members of the population (Cohen et al., 2010). It is a well-organised procedure for analysing information regarding the members of the population. Census is a complete count of the universe, where in each and every unit of the universe is included in the collection of data. Therefore, a total of 210 DPA students from the first cohort of iCGPA October 2016 was assessed in this study.

Data were collected based on the students' final examinations results of final year students who completed their study in four (4) consecutive academic semesters namely semesters October 2016, March 2017, January 2018 and June 2018. Final examination results were excerpts from the System Information Management System (SIMS), administered by the Academic Affairs Division, UiTM. From the database, reports were examined to evaluate the performance of the students at the end of the iCGPA implementation for each semester.

Data were analysed based on descriptive statistics based on the attainment of the eight (8) Diploma of Public Administration's Program Learning Outcomes (PLOs) in their final examination results. The percentage and grades as result scores for each PLO were examined using descriptive statistics generated automatically by the SIMS. In addition, reports on numbers of dean list recipients, Grade Point Average (GPA) and Cumulative Grade Point Average (CGPA) were also examined to support the findings of the study.

RESULTS

The achievement of iCGPA Program Learning Outcomes (PLOs)

The findings were evaluated based on the first iCGPA cohort's final examination results. At the time in which this paper was written, the said cohort is at the fifth semester and approaching the complete cycle for iCGPA implementation. In reaching the first objective, "to examine the achievement of iCGPA PLOs among the Diploma in Public Administration

students", data were extracted from the System Information Management System (SIMS). The result was presented in Table 1(a) and Table 1(b).

Table 1(a). iCGPA Program Learning Outcomes (PLOs) Achievement of DPA programme

Semester	PLO1		PLO2		PLO3		PLO4		PLO5	
	%	*Grade*	*%*	*Grade*	*%*	*Grade*	*%*	*Grade*	*%*	*Grade*
June 2018	66.58	B			77.24	A-	76.69	A-	84.53	A
January 2018	70.55	B+	75.49	A-	79.47	A-	69.57	B+	87.27	A
March 2017	66.65	B	-	-	79.86	A	70.89	B+	81.23	A
October 2016	67.92	B	-	-	72.75	B+	69.01	B	81.38	A

Table 1(b). iCGPA Program Learning Outcomes (PLOs) Achievement of DPA programme

Semester	PLO6		PLO7		PLO8		PLO9	
	%	*Grade*	*%*	*Grade*	*%*	*Grade*	*%*	*Grade*
June 2018	90.91	A+	76.99	A-	68.20	B	-	-
January 2018	79.95	A	91.68	A+	-	-	-	-
March 2017	84.26	A	84.82	A	-	-	-	-
October 2016	71.25	B+	79.94	A	-	-	88.02	A

Table 1(a) and Table 1(b) show the nine (9) PLOs for Diploma in Public Administration (AM110) in iCGPA implementation. Both tables compare the PLOs achievement according to four (4) different semester representing the first iCGPA cohorts. Each PLO indicates different attributes; PLO1 (Knowledge), PLO2 (Practical Skills), PLO3 (Critical Thinking and Scientific Skills), PLO4 (Communication Skills), PLO5 (Social Skills, Teamwork and Responsibility), PLO6 (Values, Ethics, Moral and Professionalism), PLO7 (Information Management and Lifelong Learning Skills), PLO8 (Managerial and Entrepreneurial Skills), PLO9 (Leadership Skills).

iCGPA was fully implemented for DPA in October 2016 academic session. The results trend varies according to the PLOs. For PLO1 (Knowldege), the students' grade was at Grade B for October 2016, March 2017 and June 2018. The grade increased for January 2018 session which recorded Grade B+, during the cohort was at the third semester. The knowledge at Grade B illustrates that the students' level of understanding on the subject matter at the program was not excellent as expected, especially in the faculty's core courses. This is because the knowledge that was assessed through quizzes, tests and final examination through the PLOs showcase that more need to be done for increasing their understanding. PLO1 was assessed through all courses in DPA.

For PLO2, PLO8 and PLO9, it was not fully embraced in the whole semester. PLO2 on practical skills was assessed during the cohort was at Semester 3 for CSC253 course (Interactive Multimedia). The Grade A- indicates that students were good at their practical skills in dealing with multimedia and assesments in relations to computer software. These skills are

pertinent in preparing the students for the future employment. For PLO8 (Managerial and Entrepreneurial Skills), it was assessed through ENT300 (Fundamental of Entrepreneurship) and this cohort recorded a Grade B (68.20%). As for PLO9 on Leadership Skills, it was evaluated through HBU courses for co curricular and this cohort possessed very good leadership skills at Grade A (88.02%).

There is an increasing trend for PLO3, PLO4 and PLO6 assessment. PLO3 recorded an increasing trend from B+ to A and sustain at A- for the third and fourth semesters. It was assessed for ACC, MAT, LAW and certain HBU courses. The elements were considered for courses with mathematical, accounting and legal perspectives in encouraging students to have a "critical thinking, scientific skills" and ability to think out of the box in solving problem-based questions. There is tremendous rise for PLO6 on "values, ethics, moral and professionalism" as this cohort improved from Grades B+, A and then A+. This was assessed for certain HBU courses, MGT and CTU courses. As for PLO4 on "communication skills" it shows an improvement trend. PLO4 was assessed through individual presentation on group assignment and these attributes were considered critical in dealing with industrial feedback on the communication skills of the graduates from the public universities.

The best results were for PLO5 and PLO7 as both PLOs sustained at grade A. The former was on "social skills, teamwork and responsibility" while the latter was on "information management and lifelong learning skills". It was assessed by most of HBU courses and few other courses, namely MGT162, CTU and PAD courses.

Overall results of iCGPA implementation

To evaluate the overall results of iCGPA among the first cohort for DPA, several indicators are used namely; (a) number of dean list recipients, (b) range of GPA score , and (c) range of CGPA score. These indicators were the faculty and university's academic performance indicators in examination reporting. Table 2 indicates the number of dean list recipients for the first cohorts of iCGPA in DPA programme.

Table 2 reports the numbers of dean list recipients from the first cohort of iCGPA. The data reports a variance numbers of recipients according to semester. For the first semester, 71 (33.81%) students from the first cohort received a dean list award for GPA more than 3.50. The numbers of the recipient slightly decreased by 0.65% for the following semester and sharply increased to 45.45% recipients where 90 from 198 students received a dean list. However, during the fourth semester, the numbers of the dean list recipients decreased by 6.37% which only 77 students from 197 managed to get it.

Table 2. Dean List Recipients for the First Cohort of iCGPA Implementation

Semester	**Dean List Recipients**	
	n	*%*
June 2018	77/197	39.08
January 2018	90/198	45.45
March 2017	66/199	33.16
October 2016	71/210	33.81

The numbers of dean list recipients contribute to the increase or decrease of GPA and CGPA scores of the students. Table 3 shows the GPA score for the first cohort and Table 4 is on the CGPA score:

Table 3. Grade Point Average (GPA) for the First Cohort iCGPA

GPA	October 2016		March 2017		January 2018		June 2018	
	n=210	*%*	*n=199*	*%*	*n=198*	*%*	*n=197*	*%*
1.00-1.49	2	0.95	-	-	-	-	-	-
1.50-1.99	9	4.29	4	2.01	1	0.51	2	1.02
2.00-2.49	7	3.33	6	3.02	6	3.03	6	3.05
2.50-2.99	41	19.52	30	15.08	17	8.59	21	10.66
3.00-3.49	80	38.10	93	46.73	84	42.42	91	46.19
3.50-4.00	71	33.81	66	33.17	90	45.45	77	39.09

From Table 3, it can be seen that there is improvement on GPA scores among DPA students as a result from iCGPA implementation. This is because numbers of students with GPA from 1.00-1.49, 1.50-1.99, 2.00-2.99 and 2.50-2.99 was decreased as the semester increased. Throughout the iCGPA implementation these groups of students were able to push their GPA higher. Majority of students from the first cohort of iCGPA managed to receive CGPA more than 3.00 and above. The highest score was on March 2017 when 93 (46.73%) students received GPA at 3.00-3.49 and on January 2018 in which 90 (45.45%) students recorded GPA score at 3.50-4.00. From the results, the first cohort of iCGPA never upset the faculty in contributing the highest numbers of dean list recipient compare to the other cohorts.

Table 4. Cumulative Grade Point Average (CGPA) for the First Cohort iCGPA

CGPA	October 2016		March 2017		January 2018		June 2018	
	n=210	*%*	*n=199*	*%*	*n=198*	*%*	*n=197*	*%*
1.00-1.49	2	0.95	-	-	-	-	-	-
1.50-1.99	9	4.29	1	0.50	1	0.51	-	-
2.00-2.49	7	3.33	10	5.03	8	4.04	7	3.55
2.50-2.99	41	19.52	34	17.09	29	14.65	27	13.71
3.00-3.49	80	38.10	87	43.72	90	45.45	90	45.69
3.50-4.00	71	33.81	67	33.67	70	35.35	73	37.06

Finally, Table 4 illustrates the CGPA results of the DPA students throughout the iCGPA implementation. Similar with the GPA trends, the CGPA recorded decreased number of students at the scores of CGPA 1.00-1.49, 1.50-1.99, 2.00-2.49, and 2.50-2.99 according to the different academic session. More students were able to increase their CGPA throughout the CGPA implementation. Majority of the students were at the score of CGPA 3.00-3.49 as the numbers increased from 80 to 87 from October 2016 to March 2017. The record sustained at January 2018 and June 2018 in which 90 students managed to get the GPA at 3.00-3.49. The numbers of students with CGPA 3.50-4.00 also can be considered excellent as this group of DPA students were able to sustain their dean list award to be grouped as the potential students vying for Vice Chancellor Award.

DISCUSSION

The learning outcome approach is implemented based on the ideas that the lecturer should set the expected performance standard and test whether the students have achieved the intended knowledge and skills (Murtonen et al., 2017). The Malaysian Qualifications Agency (MQA) is an institution that is responsible to assure the quality and comparability of teaching and learning offers by various higher education institutions in Malaysia. Learning outcome is defined as a statement on what students should know, understand and can do upon the completion of a period of study (Malaysian Qualifications Agency, 2009). MQA has established eight (8) significant academic learning outcome domains known as Malaysian Qualifications Framework (MQF) domains; that consist of (a) knowledge, (b) practical skills, (c) social skills and responsibilities, (d) values, attitudes and professionalism, (e) communication, leadership and team skills, (f) problem solving and scientific skills, (g) information management and lifelong learning skills, and (h) managerial and entrepreneurial skills. The eight (8) domains were used for iCGPA implementation in assessing students' ability, knowledge, skills, attitude and behaviours.

From the previous section, two purposes of this paper have been answered. In terms of PLOs achievement, the DPA students recorded good achievements as they managed to place themselves at Grades B and A+. Nevertheless, a concern need to be taken in improving PLO1 (Knowledge) as it records Grade B for all of the semesters. The Bloom's Taxonomy needs to be revised in testing the knowledge of DPA students as according to Murtonen et al. (2017), different level of knowledge and appropriate verbs need to be revised to construct the learning outcomes. Knowledge is the basic understanding and fundamental thoughts in proving the student's capabilities on the subject matters that have been learned. Hence, the students' knowledge needs to be strengthened with appropriate assessments.

Meanwhile, PLO3, PLO5, PLO6 and PLO7 indicate excellent attributes to students as the Grade A retained in the groups. DPA students fulfilled PLO3 and this is regarded as important to support Sasson, Yehuda and Malkinson (2018) that claim on the global demands related to scientific skills. PLO5 on social skills, teamwork and responsibilities remarks an excellent attributes that DPA students able to achieve throughout the iCGPA implementation. This is because the assessments in PLO5 consider the individual and collective social responsibility as proposed by Bielefeldt and Canney (2016). DPA students are also able to instill the values, ethics, moral and professionalism in themselves in the fulfilment of PLO6. Suggestion by Bossers et al. (1999) and Katılmış (2017) can be considered in improving the assessment at PLO6. The difficult part is on creating the indicators for its assessment as PLO6 is considered as intrinsic and very subjective to be measured.

In addition, through PLO7 on lifelong learning, it was proven that students will be able to use the lesson learned in the courses in the next level of their education qualifications and will further benefit their livelihood. Subsequently, further attention need to given to PLO2, PLO8 and PLO9 as it were not comprehensively addressed throughout the iCGPA implementation. This is needed as Garnjost and Brown (2018), Hemdi et al. (2016) as well as Varela et al. (2013) highlighted the importance of the attributes as outlined in the three PLOs. Social sciences courses offered by DPA might be too complex to fullfill the attributes. Course facilitators were suggested to be creative in exploring the best method in assessing the PLOs as proposed by most scholars in the area of education.

In response to PLOs achievement, it reflects the overall academic performance of the DPA students throughout the iCGPA implementation. It was discovered that the iCGPA programme was able to improve the academic excellence of the students as this cohort was able to produce the highest number of dean list recipient. Consequently, it affects the GPA and CGPA achievements as majority of the students through iCGPA implementation were able to place themselves at the score of GPA and CGPA 3.00 and above. This was contributed with the teaching and learning methods and its assessments mechanism which was proposed in iCGPA and claimed to successfully increase the students score. This is the cutting-edge for iCGPA, by fulfilling the courses learning outcomes through application of appropriate assessements on the students. Consequently, the first cohort of DPA in iCGPA implementation was regarded as crème de la crème due to their outstanding academic achievement.

Furthermore, a study by Sanip and Abdul Rahman (2018) that focuses on implementation of iCGPA has a view that the teaching pedagogy should be aligned with the 21st century education. The design of the curriculum should provide teaching and learning activities which supported heutagogies (self-directed learning), paragogies (co-learning and cocreation of knowledge), and cybergogies (engagement in online learning). They revealed that a face-to-face interaction is highly needed for the medical students to understand the teaching material. In addition, a recent study to examine the effectiveness of teaching method in business education by Farashahi and Tajeddin (2018), discovered that students perceived simulation as the most effective teaching method for developing their interpersonal skills and self-awareness followed by case study and lecture respectively. They also discussed about the limitation on using self-assessment for cognitive, skill-based and affective learning outcomes. In short, this shows how important aligning teaching outcomes with the teaching pedagogy is a critical part in the process of teaching and learning.

CONCLUSION

The Faculty of Administrative Science and Policy Studies (FSPPP) through its undergraduate programmes namely Diploma in Public Administration (DPA), Bachelor of Corporate Administration (hons.) (BCA), and Bachelor of Administrative Science (hons.) (BAS) UiTM Negeri Sembilan, Seremban Campus were chosen for pioneering the iCGPA system. At the very beginning of iCGPA implementation process, it requires full support and agreement from all academicians in developing Program Educational Objectives (PEOs), and Program Learning Outcomes (PLOs). Higher management must constantly communicate and conduct several series of workshop to ensure all academicians grasp the knowledge and understand the implementation of iCGPA.

In conclusion, it was confirmed that the iCGPA implementation have benefited the Diploma in Public Administration (DPA) students' academic achievements. It was proven from the numbers of dean list recipients as well as GPA and CGPA scores. Nevertheless, further studies are required to compare the performance according to different cohorts, campuses and mode of study (to include the flexible learning mode/ePJJ). Subsequently, comparison also can be initiated for evaluating the iCGPA performance for Diploma and Degrees programme in FSPPP, in other social science or science and technology disciplines. If iCGPA is evaluated, it is suitable and relevant to be implemented for undergraduate programmes (particularly diploma level), it is advisable for the Ministry of Education to revise the needs for it in the future through more simple assessment and reporting measures. It is hoped the iCGPA programme serves its aims in producing holistic graduates.

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