Deanship of Academic Development
Teaching and Learning Center

ACADEMIC PROFESSIONAL DEVELOPMENT PROGRAM (APDP) AT KFUPM

November 2019

Academic Professional Development Program (APDP)

Introduction

Academic professional development programs designed to enhance students learning through enhancing the quality of teaching and learning are a common feature of higher education institutions. A faculty member wishing to achieve a successful career faces a multitude of challenges resulting from his various responsibilities. A freshly appointed faculty member needs to quickly develop to cope and adapt to effective teaching, evolving instructional technologies, and advances in his field of interest. However, all faculty members need to develop to attain their highest expectations.

Academic success requires a faculty to strike a critical balance between these different areas. Successful faculty members achieve this balance by experience and often times after tremendous effort that could be overwhelming, and frustrating. While nothing substitutes hard work, there is a general understanding that university academic development programs have a positive impact on faculty members and students; even though the extent of their impact on faculty members and the teaching and learning culture at the universities are less well evidenced. Such programs can accelerate the process of flourishing a junior faculty and may very well reduce frustration. Experience gathered from implementing junior faculty career development programs indicates that faculty members whom their institution actively contributes for their career development are more likely to stay longer and give back to that institution in scholarly productivity and creativity.

Hence, King Fahd University of Petroleum and Minerals (KFUPM), recognizing the importance of such development programs in improving the quality of teaching and learning has developed a structured academic professional development program (APDP) for its faculty members. **The program is mandatory for Assistant Professors with less than 3 years of teaching experience and optional for others.**

1. Mission

To enhance students learning through enabling faculty members to enhance the quality of teaching and learning at KFUPM.

2. Objectives

The overall objective is to support faculty members in developing knowledge and skills for fulfilling their different roles efficiently and effectively towards enhancing student learning. The specific objectives include:

1. Fostering an environment of continuous development through well-structured development program
2. Enhancing the value of the educational role of faculty
3. Enabling faculty members to attain their highest potential in their role towards enhancing students learning

3. Outcomes

The expected outcomes of the program are to:

1. Raise the awareness about quality teaching and learning
2. Use principles and theories related to students learning, and motivation
3. Enhance faculty engagement with students
4. Embed good practices in teaching and learning such as:
   - Apply current effective instructional pedagogies to enhance students engagement and learning
   - Use instructional technologies for enhancing students learning
5. Integrate well-designed assessment tools into course design to foster in depth learning such as:
   - Aligning assessment with learning outcomes and teaching strategies
   - Using assessment as feedback for learning
   - Adopting methods and practices for ensuring the quality of assessment

4. Duration
The duration of the Academic Professional Development Program, APDP is two semesters.

5. Eligibility
The program is open to all faculty members with professorial rank but compulsory for Assistant Professors with less than 3 years of teaching experience at a University level.

6. Program Components

6.1 PROGRAM ACTIVITIES

The duration of the program is one-academic year. Each year a cohort of faculty members will join the program and participate in the following activities:

1. **Training Workshops**: A number of training workshops (including one on research) will be conducted during the program. Three to four workshops will be conducted during the reporting week activities and two to three will be conducted during each semester. List of workshops is given in Appendix B.

2. **Peer Consultation in Teaching (PCT):** The PCT is to provide faculty members with formative feedback on their teaching, intended exclusively for faculty self-development of their teaching skills. The feedback will make KFUPM faculty members better and more-effective teachers, leading ultimately to the enhancement of students learning. The PCT need to be conducted during the semester of joining the program. The teaching and learning center will provide a follow-up consultation.

3. **Academic Proficiency Portfolio (APP):** Each participant is required to develop APP. The Portfolio is intended to be a document with a broader scope to be developed over a faculty's career. Participants are expected to focus on the teaching aspects in their portfolio by reflecting on their experiences gained during the one-year program. A participant is considered to have met the program requirements of achievement if his portfolio meets the requirement of "Comprehensiveness". The other aspects of assessment of the portfolio are for developmental / formative purposes and not to be used for summative purposes as a criterion of program achievement. The APP will be reviewed and assessed by experts in the subject at the end of the program. A brief write-up on the purpose, main items and assessment aspects of APP is given in Appendix C.

4. **Self-Assessment:** Participants need to complete a self-assessment instrument, "**Approaches to Teaching Inventory (ATI)**," at the beginning and at the end of the program. The inventory is a research-based assessment instrument developed to help instructors self-assess and further develop their teaching skills. A copy of the Inventory as well as a brief description of how to reflect and score the inventory is given in Appendix A.

6.2 PROGRAM COMPLETION

6.2.1   To complete APDP successfully, a participant has, at least, to participate in the following activities of the program:

   I.   **Training workshops**: Participation in the first 5 workshops listed in Appendix B is compulsory for Assistant Professors with less than 3 years of teaching experience while other participants must attend 5 workshops from the list in Appendix B.

   II.   **Peer Consultation in Teaching**

6.2.2   All participants are strongly encouraged to complete the other activities of the program.

6.2.3   Upon successful completion of the program, participants will be awarded a certificate of completion and will be entitled to motivational aspects listed under section 8.

6.3 PROGRAM EVALUATION

Evaluating academic professional development programs is not a straight forward matter. The literature on this topic indicates the complexity of linking academic development to tangible activities such as enhancement of students learning and that a direct relationship between development programs and students learning outcomes has not been established yet. But; nevertheless, the literature confirms that it is possible to evidence changes in teacher understanding, knowledge, skills and practices. The dominant form of evaluation of faculty development program is the participant's satisfaction. Other recent forms include participant's interviews, self-reports, portfolio and student's interviews.

The following methods will be used to evaluate the effectiveness of APDP.
1. Participants satisfaction and self-report.
2. Participants interviews: Participants will be interviewed at the end of the program to seek their input and reflections on how the program helped them develop their perspectives and practices in teaching and learning and their satisfaction with experience of the program.
3. Output indicators which tend to generate statistics on how much and how many. A list of output indicators that shall be used to evaluate APDP is given in Table 1.
4. Outcome indicators: Even though outcome indicators are difficult to measure; but they provide information about quality. A list of outcome indicators that shall be used to evaluate APDP is given in Table 1.

7. Motivation

Besides enhancing faculty members' knowledge and practice in teaching and learning, (hence enhancing students learning), participation in APDP has other motivational aspects that include:

Project Grant

Completion of the program will entitle a participant to submit a proposal on a subject related to enhancing students learning and skills. The proposal; if accepted will be funded through DAD grant. The overall objective is to enable faculty members who completed APDP to identify a teaching and learning pedagogy of interest and conduct a systematic method for implementing it in the course he is teaching. The experience need to be shared with others.

Workshop/Conference Attendance

Successful completion of the program will entitle the participant to apply for attending a quality interaction workshop/conference on education. The application will be evaluated by DAD. The applicant need to conduct a public seminar to share his experience with others within one-month duration of attending the workshop/conference.

Educational Award

Successful completion of APDP will satisfy the continuous professional development component (item No. 6) of the Distinguished Professor in Education Award Criteria.

DAD Fellow
Successful completion of APDP will satisfy selection criteria No. 1 of the DAD Fellow Program

Table 1: Output and Outcome indicators

Output Indicators	Outcome Indicators

1. Number and proportion of participants that completed APDP (or Non completion rate)
2. Number and proportion of new appointments enrolled in APDP
3. Number and proportion of participants completed APDP who are nominated for teaching awards
4. Number and proportion of participants competed APDP who received Teaching Award/ Grants
	1. Quality of teaching as evidenced by:
	   • Students evaluation
	   • Peer review
	   • Faculty portfolio
	2. Number of APDP graduates:
	   • Winning teaching awards
	   • Applying for promotion
	3. Students satisfaction rate
	   • Surveys

Appendix A: Approaches to Teaching Inventory (Trigwell et al [1])

This inventory is designed to explore a dimension of the way that academics go about teaching in a specific context or subject or course. This may mean that your responses to these items in one context may be different to the responses you might make on your teaching in other contexts or subjects. For this reason we ask you to describe your context.
Please name the subject/course of your response: . . . .

For each item please circle one of the numbers (1-5). The numbers stand for the following responses:

 1 - this item was **only rarely or never** true for me in this subject.
 2 - this item was **sometimes** true for me in this subject.
 3 - this item was true for me **about half the time** in this subject.
 4 - this item was **frequently** true for me in this subject.
 5 - this item was **almost always or always** true for me in this subject.

Please answer each item. Do not spend a long time on each: your first reaction is probably the best one. Complete this page first before you

		Only Rarely				Almost Always
1.	In this subject students should focus their study on what I provide them.	1	2	3	4	5
2.	It is important that this subject should be completely described in terms of specific objectives that relate to formal assessment items.	1	2	3	4	5
3.	In my interactions with students in this subject I try to develop a conversation with them about the topics we are studying.	1	2	3	4	5
4.	It is important to present a lot of facts to students so that they know what they have to learn for this subject.	1	2	3	4	5
5.	I set aside some teaching time so that the students can discuss, among themselves, key concepts and ideas in this subject.	1	2	3	4	5
6.	In this subject I concentrate on covering the information that might be available from key texts and readings.	1	2	3	4	5
7.	I encourage students to restructure their existing knowledge in terms of the new way of thinking about the subject that they will develop.	1	2	3	4	5
8.	In teaching sessions for this subject, I deliberately provoke debate and discussion.	1	2	3	4	5
9.	I structure my teaching in this subject to help students to pass the formal assessment items.	1	2	3	4	5
10.	I think an important reason for running teaching sessions in this subject is to give students a good set of notes.	1	2	3	4	5
11.	In this subject, I provide the students with the information they will need to pass the formal assessments.	1	2	3	4	5
12.	I should know the answers to any questions that students may put to me during this subject.	1	2	3	4	5
13.	I make available opportunities for students in this subject to discuss their changing understanding of the subject.	1	2	3	4	5
14.	It is better for students in this subject to generate their own notes rather than copy mine.	1	2	3	4	5
15.	A lot of teaching time in this subject should be used to question students' ideas.	1	2	3	4	5
16.	In this subject my teaching focuses on the good presentation of information to students.	1	2	3	4	5
17.	I see teaching as helping students develop new ways of thinking in this subject.	1	2	3	4	5

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18.	In teaching this subject it is important for me to monitor students' changed understanding of the subject matter.	1	2 3 4 5	
19.	My teaching in this subject focuses on delivering what I know to the students.	1	2 3 4 5	
20.	Teaching in this subject should help students question their own understanding of the subject matter.	1	2 3 4 5	
21.	Teaching in this subject should include helping students find their own learning resources.	1	2 3 4 5	
22	I present material to enable students to build up an information base in this subject.	1	2 3 4 5	

Scoring the inventory

From you scoring on the questionnaire please enter in the table each individual score

Question no	Score	Question no	Score
1		3	
2		5	
4		7	
6		8	
9		13	
10		14	
11		15	
12		17	
16		18	
19		20	
22		21	
Total		**Total**	
	Information Transfer/ Teacher-focused	Conceptual Change/ student-focused	

Once you have completed scoring the inventory, transfer your scores on to the bar graph shown below. Shade in your scores to create two columns.

55		55	
50		50	
45		45	
40		40	
35		35	
30		30	
25		25	
20		20	
15		15	
10		10	
5		5	

Information Transfer/ Teacher-focused

Conceptual Change/ student-focused
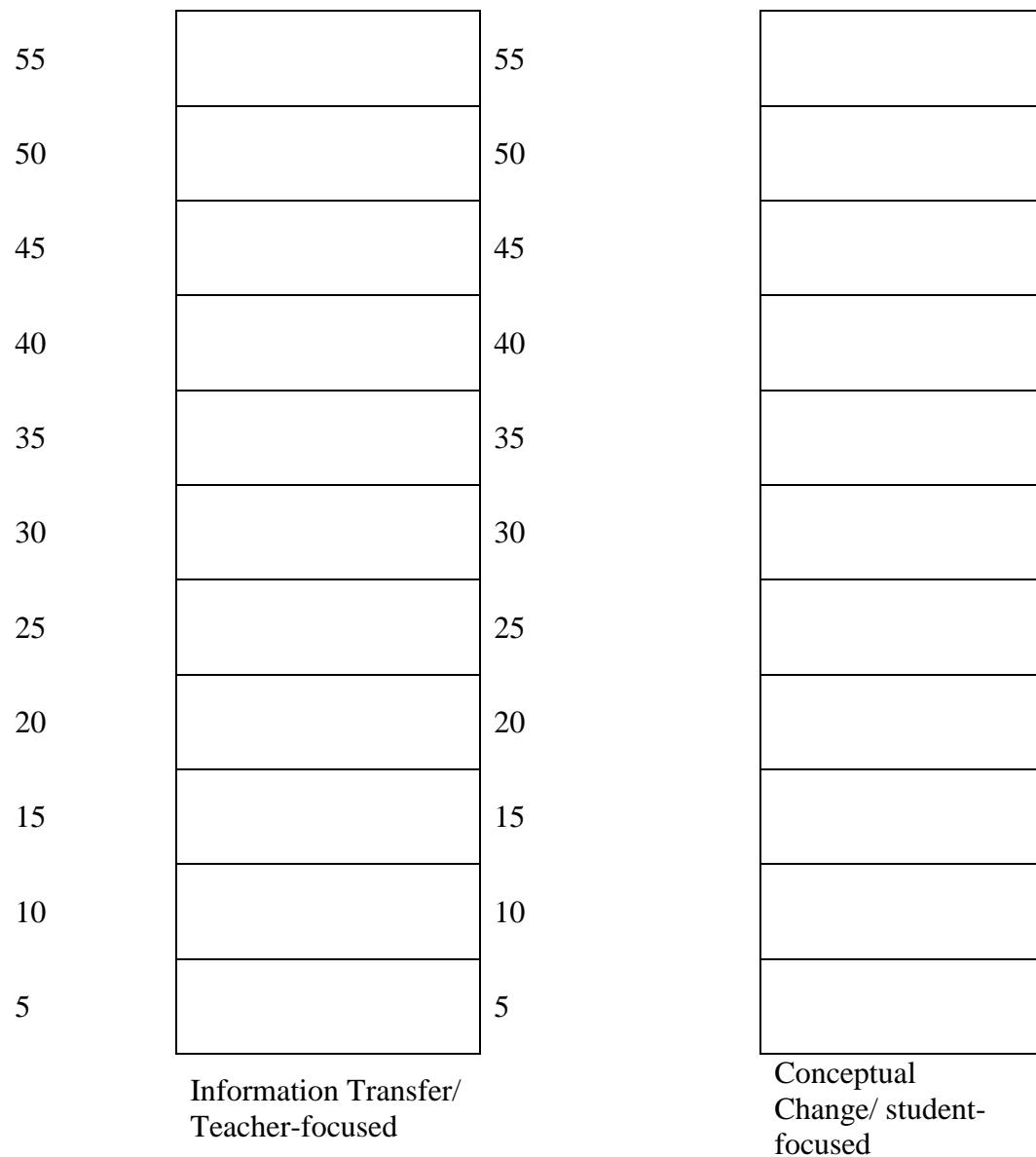
The approaches to teaching inventory can be used as a useful starting point when you are considering your own teaching. There are no published or acknowledged norms.

Please bear in mind that approaches to teaching are context specific and so your responses in one context may well be very different to another context. You may approach one area of your teaching very differently to another.

Reflecting on your approach to teaching

Use the questions as a prompt for reflection on your teaching. It may be useful to make some notes.

Trigwell and Prosser describe 5 approaches to teaching
- Approach A: Teacher-focused strategy with the intention of transmitting information to students.
- Approach B: Teacher-focused strategy with the intention that students acquire the concepts of the discipline
- Approach C: A teacher/student interaction strategy with the intention that students acquire the concepts of the discipline
- Approach D: A student-focused strategy aimed at students developing their conceptions
- Approach E: A student-focused strategy aimed at students changing their conceptions

Approach A will tend to be indicated by a higher score in the first column and approach E by a higher score in the second column.

- Given the information that you have, which of the five approaches best describes your teaching?

- Does this surprise you?

- Given the context and subject you are teaching, is this the best approach?

- If you wished to change your approach, how may you do it? (think here about the enabling factors and also what barriers there may be and how you may overcome them)

- How may your approaches to teaching fit with some of the emergent University teaching and learning strategies, such as enquiry based learning?

- If you teach another context or subject try doing the ATI again for that subject, are the results the same or different? What may this be telling you?

These questions are intended to start the reflective process, you may well think of others.

This Approaches to Teaching Inventory is used with the kind permission of Professor Keith Trigwell, University of Sydney.

[1] Trigwell, K., Prosser, M. & Ginns, P. (2005). Phenomenographic pedagogy and a revised approaches to teaching inventory. Higher Education Research and Development, 24 (4), 349-360.

Appendix B: List of Workshops

	Workshop Title	Components	Outcomes	Duration
1	APDP101: Using Active Learning and Students Centered Pedagogies	Thinking about and selecting learner centered teaching and learning methods. Pedagogical principles implementation of active learning to respond to classroom hiccups such as lack of participation, student confusion, and time management.	1. Understand the importance of students-centered and active learning pedagogy 2. Explore different active learning strategies 3. Develop ideas for implementation of active learning strategies	3:00 hrs
2	APDP102: Use of Technology for Teaching and Learning	Technology use in higher education and how it influence learning Digital engagement in teaching and learning Ways to include educational technology to support student learning	1. Identify ways that educational technology can be used to support instruction and student learning 2. Understand digital engagement in teaching and learning 3. Apply at least one new skill in regards to educational technology in the classroom	2:00 hrs
3	APDP103: Course Planning	Integrated course design Defining course goals, objectives, and outcomes Taxonomies of learning outcomes Connecting outcomes, learning activities and assessment strategies Forward and backward course design Determining course content Thinking about appropriate teaching methods and tool.	1. Recognize the components and importance of integrated course design 2. Recognize the relationship between goals, objectives, and outcomes of a course. 3. Explore the relationship between learning outcomes, and learning activities and assessment strategies. 4. Develop learning outcomes that reflect the course goals and quality standards.	3:00 hrs

4	APDP104: Effective Assessment	Review components of integrated course design Formative and summative assessment Classroom Assessment Tools (CAT) Formative assessment and active learning Assessing learning outcomes Test function and test formats, Test construction and item writing Psychometric quality, reliability validity Norm referenced vs criterion referenced testing	1. Review alignment of assessment with learning outcomes and teaching strategies 2. Understand the concepts and importance of assessment. 3. Differentiate between different roles of formative and summative assessment and various assessment models. 4. Use assessment as feedback for learning and evaluation 5. Adopt methods and practices for ensuring the quality of assessment (e.g. use item analysis)	3:00 hrs
5	APDP105: Motivating Students to Learn	What is motivation? Intrinsic and extrinsic motivation Strategies to effectively motivate students Increasing Student intrinsic motivation Motivating Non-Majors Assessing Motivation	1. Define an effective learning environment and its implications. 2. Understand intrinsic and extrinsic motivations and their implications to learning 3. Identify and discuss strategies that effectively motivate learners and manage the educational experience. 4. Adopt ideals for enhancing students' intrinsic motivation for learning	

6	APDP106: Student Learning Theories	Overview of Learning Theories: Behaviorism, Cognitive Constructivism, Social, Constructivism Neuroscience and how students learn Cognitive Science: memory and learning Psychology: motivation and learning Implications for teaching Organizing the learning process Learning to think in a discipline	1. Explain the concepts of learning and learning theories. 2. Recognize the implications of individual and collective contemporary learning theories on students. 3. Identify innovative applications of learning theories in the classroom.	2:00 hrs
7	APDP107: Planning an Effective Class Session	Define course policies. Preparing and refining the course syllabus. Designing lesson plans and lecture content. Leading the first day of class Preparing and delivering an effective lecture	1. Review the components and importance of integrated course design 2. Analyze lessons that align outcomes, learning activities and assessment strategies. 3. Understand and create a course syllabus 4. Understand and design a course lesson plan. 5. Understand the importance of leading the First Day of Class	3:00 hrs
8	APDP108: Constructive Feedback	Types of feedback Characteristics of Constructive Feedback Assessment for checking students' understanding Innovative feedback strategies Reflecting on feedback Sustainable feedback Responding and reflecting on student evaluations	1. Use assessment for providing useful feedback for learning 2. Use assessment for checking students' understanding 3. Use student achievement and feedback to improve teaching	2:00 hrs
9	APDP109: Team based learning (TBL)	Overview of team based learning Team based learning Basics and rationale Design and implementation	1. Describe the rationale for team based learning 2. Compare TBL with lecture 3. Understand structure of team based learning	3:00 hrs

		Managing student teams Team formation and peer evaluation	4. Compare flipped classroom and team based learning 5. Develop ideas for implementation of TBL within a course	
10	APDP110: Classroom Management	Challenges faced by the instructor in the class Importance of teamwork in school management Understanding classroom management Observable characteristics of a well- managed classroom Classroom procedures Characteristics of good classroom management Classroom management strategies	1. Understand the importance of faculty role in the classroom management 2. Identify the different types of mistreatment that can occur in the classroom 3. Outline strategies for dealing with difficult situations in the classroom 4. Practice, various approaches in managing issues related to the learning environment 5. Reflect on one's individual responsibility towards improving the classroom atmosphere	2:00 hrs
11	APDP111: Developing teaching portfolio	What is teaching portfolio Teaching Responsibilities Writing Teaching Statement, or Teaching Philosophy Connecting Specific Pieces of Evidence of Effective Teaching. Sources of evidence Teaching Portfolio Tips and Guide Putting together a teaching portfolio	1. Understand the importance of teaching portfolio 2. Identify major components of any teaching portfolio. 3. Strategically compile and reflect on teaching materials for use in a teaching portfolio 4. Streamline information for more impactful presentation in a teaching portfolio.	3:00 hrs
12	APDP112: Flipping the classroom	Strategies for "flipping" courses. Pedagogical strategies for teaching in a flipped classroom. Techniques for exposing students to content before class. Methods that reach diverse learners and improve student learning.	1. Identify pedagogical strategies for teaching in a flipped classroom 2. Select methods that reach diverse learners and improve student learning. 3. Develop an individual plan for "flipping" a class in an upcoming course.	3hrs

		Planning for "flipping" a class in an upcoming course.	4. Identify in-class activities that facilitate learning.	
13	APDP113: Research Methodology	Overview of Research and its Methodologies Writing literature review Selecting and defining a research problem, Hypothesis and test Conducting the research activities Writing Research Reports Writing Research Proposals Case Study	1. Understand some basic concepts of research and its methodologies 2. Identify appropriate research topics 3. Select and define appropriate research problem and parameters 4. Prepare a project proposal (to undertake a project) 5. Organize and conduct research (advanced project) in a more appropriate manner 6. Write a research proposal (grants)	2hrs

Appendix C: **Academic Proficiency Portfolio**

The purpose of Academic Proficiency Portfolio is to have a document of self-observations and reflections on the faculty's perspectives and practices on all aspects of academic proficiency which is maintained over the career of the faculty. With teaching being a core aspect, other aspects of academic proficiency may include academic advising, student mentoring, academic program assessment and accreditation, educational outreach, scholarship in teaching and leadership in academic development. In order to facilitate and streamline the process of maintaining the portfolio and getting feedback from multiple perspectives, the University may implement an e-Portfolio solution.

The Academic proficiency portfolio shall consists of the following main items:

- **Philosophy**: An outline of the faculty member key expectations and values on several aspects relevant to higher education and his role as an academic. Some of the possible aspects on which a faulty member may state his perspectives are the following:
  - Purpose of higher education
  - Students learning and motivation
  - Strategies to support student learning
  - Purpose and principles of assessment for student learning
  - Design of curriculum
  - Academic Development
- **Academic Experiences**: This is a statement of a faculty member academic experience performed during his career. Supporting material (list of courses taught in different semesters, samples of course syllabus, sample of student assessment and feedback, sample of curriculum design, scholarship of teaching and learning etc.) should be attached as Appendix of the portfolio. The statement of academic experience describes the faculty member's approach in performing various tasks and his rationale for the way he performed those tasks. The rationale should map to the philosophy statement.
- **Self-Assessment of Achievements**: The faculty member reviews the evidence of effectiveness of his perspectives and practices in his role as an academic. The artifacts of evidence (student evaluation, results of his research on teaching practice etc.) needs to be attached to the portfolio as Appendix.
- **Plans for the Future**: A statement about the future academic activities plan and commitment towards the development of academic practices.

The academic proficiency portfolio will be reviewed by at least by two reviewers. The reviewers will provide their assessment on the following aspects of the portfolio

- **Comprehensiveness**: The portfolio must be thorough and should provide sufficient observations about the faulty member's perspectives and practices. The portfolio should also be comprehensive in self-evaluation of teaching practices based on appropriate and adequate evidences.

- **Philosophy and Practice of Teaching, Learning & Assessment**: A reviewer will indicates how he would categorize the philosophy and practice of teaching, learning & assessment.
5. **Scholarly Teaching**: The reviewer will rate the extent to which a faulty member is engaged in a scholarly and reflective teaching and learning.