Ministry of Manpower
Directorate General of Colleges of Technology
Sultanate of Oman

Common Pedagogical Framework

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COMMON PEDAGOGICAL FRAMEWORK
OF THE
COLLEGES OF TECHNOLOGY

PREFACE

This Common Pedagogical Framework (CPF) was developed to guide the Colleges of Technology (CoTs) in the field of teaching and learning. Extensive work has been done by various colleges in establishing their pedagogical frameworks. Each college formed a team of well-informed, experienced and committed educators to draft its own Pedagogical Framework (PF) based on program and institutional documentation, context-specific and international researches, and theories and best practices in learning and teaching. Some colleges completed partial surveys of learners' styles during the development of their first PF.

To improve the quality of delivery of standardized curriculum across the CoTs, QAD found it necessary to have a CPF and, hence, initiated the process in a workshop in October 2012. Two specialization committees volunteered to organize the different pedagogical frameworks into one unified document containing the collective pedagogical principles of the CoTs.

This unified PF will be implemented for a period of two academic years during which each college will conduct studies and analysis on their learners' needs and styles to be consolidated at a later stage. Results will be used for revisions of this PF after the prescribed period (*Please refer to **Appendix 1** for a sample survey instrument).*

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INTRODUCTION

Pedagogy literally means the art and science of educating the children and often used as a synonym for teaching (Corner, 2013). The hyper-dictionary (2013) defines pedagogy as, "the activities of educating or instructing or teaching; activities that impart knowledge or skill" (www.education.org). According to Australian Education Office (2013), pedagogy is an art and science of teaching

Pedagogical framework (PF) is the guiding principles set by an educational institution to direct the teaching and learning process for achieving the intended outcomes – the objective of an educational institution is to serve the students (inputs) by facilitating their learning (process) to turn them out as graduates with specific knowledge, skills and attributes (output) (QAD, October 2012). A PF is a set of broad principles (not classrooms actions) based on significant research that guides the quality of delivery of the required curriculum (DEC Eastern Adelade region, 2010)

A pedagogical framework, or interchangeably, a conceptual framework for teaching and learning, is developed to set a theoretical standard for teaching and learning in the colleges. QAD (October 2012) stressed the need for a common pedagogical framework to provide coherence in program and course delivery, learning and assessment processes for the Colleges of Technology (CoTs).

Without a framework, the following may occur:

- Course delivery and assessment may change with the lecturers and the classroom methods will be favored by individual lecturers.
- The assessments of discrete items of knowledge will not be based on a holistic view.
- The skills and attributes of graduates will be unpredictable and scattered.

In the CoTs, the key teaching and learning aspirations are to provide quality teaching and learning to develop graduates acquiring the prescribed graduate attributes (GAs). Hence, the common PF was developed for the following purposes:

1) to have a common teaching philosophies and a focused irrespective of diverse backgrounds and experiences (i.e. teaching philosophies, and styles, pedagogical methods, expectations about students' levels of knowledge and skills, etc.).

2) to have a teaching environment that takes into account the factors such as gender, prior knowledge, learning styles, experiences, language proficiency, values and beliefs, access to technology, motivation for study, learning disabilities, etc.

3) to improve the quality of the organizational environment in which these modes of education take place and the quality of pedagogic materials; and lastly,

4) to enhance the skills of the teachers, trainers and managers in the use of innovative teaching methods and techniques.

COMPONENTS OF THE FRAMEWORK

The CPF of the Colleges of Technology (CoTs) is shown as a graphic illustration of the relationship of major components that shape the teaching and learning philosophy of CoTs *(see **Figure 1**)*. The relationships between various components are illustrated, where the conceptual underpinnings of each layer reflects the pedagogical philosophy of CoTs.

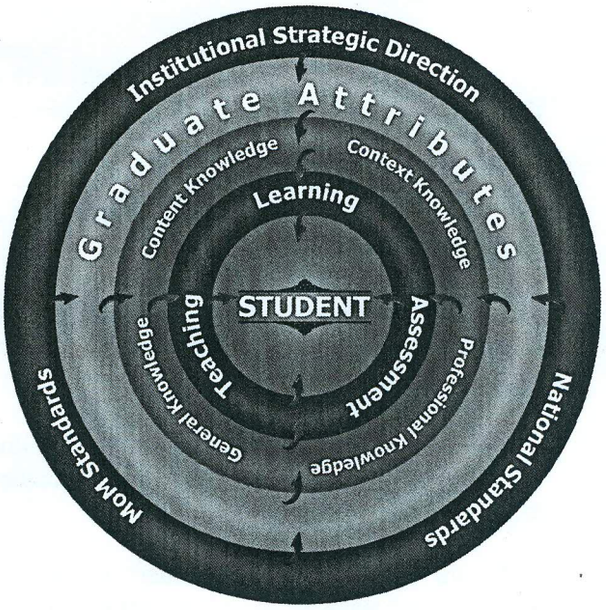

Figure 1. Pedagogical Framework of CoTs

This pedagogical framework is developed to guide the educators in the colleges of technology through the teaching, learning and assessment processes. The framework is built upon the basic premises of the following components/layers (from outside to inside core)

I. First Layer: Institutional Strategic Directions (Vision, Mission, Values), Ministry of Manpower Standards, and National Standards

This layer consists of the institutional strategic directions (Vision, Mission and Values) that guide the CoT's processes, programs and activities, the national standards from OAAA and MoM standards. CoTs have always been guided by these standards to enhance and ensure quality and effectiveness of delivery of programs and services

A. Institutional Strategic Directions

A Strategic Plan (SP) is prepared by each college to achieve common college goals and objectives. The pedagogical framework envisages the new approved Vision, Mission, Values and Graduate Attributes (CoTs 3rd Strategic Plan, 2013-2018), which are common to all CoTs.

Vision

We will be a leading technological institution providing high quality teaching and learning to prepare and empower the Omani professionals of the future to contribute to national socio economic development

Mission

To deliver high quality student centered education that produces competitive graduates who enter the labor market with confidence, strong technological and personal skills, prepared for a life of contribution and success

Values

Professionalism	CoTs are committed to deal professionally with stakeholders in all aspects taking the accountability of all assigned duties and responsibilities.
Integrity	Honesty and fairness in dealing with colleagues and students is what the CoTs believe in. All sort of feedback shall be given honestly and a fair treatment is received by all.
Flexibility	CoTs stakeholders are expected to be flexible. They are ready to take new roles and responsibilities. They shall be able and willing to accept new challenges and develop new skills.
Teamwork and tolerance	CoTs have multicultural communities with diverse ideas, however, all stakeholders are motivated to work in teams and be considerate in following ethical behavior.
Creativity and innovation	CoTs are encouraging stakeholders to be creative and innovative in handling their tasks by providing various workshops and presentations on new ideas.
Communication	All communication channels at CoTs are used effectively to exchange information. This ensures the proper dissemination of information to the stakeholders.

B. Ministry of Manpower Standards

The CoTs are under the supervision of the Ministry of Manpower. The Ministry of Manpower facilitates and manages technical education and vocational training programs in the Sultanate and is also the provider of some of the most important technical education programs through its Colleges of Technology. During implementation of these programs, the CoTs follow standards set by MoM for curriculum, instruction, and assessment.

C. National Standards

In 2001, the Oman Accreditation Council (now Oman Academic Accreditation Authority (OAAA) was set up to help the Higher Educational Institutions by raising awareness and providing assistance to improve quality of education to international standards. In 2004, Requirement for Oman's System of Quality Assurance in Higher Education (ROSQA) was developed and contained standards and procedures to be used in institutional and program accreditation. The institutional standards and the accreditation process were introduced based on international best practice. There is a two-stage approach to institutional accreditation, the first stage is the Quality Audit and the second stage is the Standard Assessment. This approach will enable the higher education institutions to build their internal quality systems.

Quality Audit is the 1st stage in Provider Accreditation which started in 2008. It is an internationally respected method for facilitating improvement efforts by providers of higher education, and for providing the public with a level of assurance that the quality of our higher

education institutions is being attended to through external review. By participating in this process, CoTs along with other HEIs of Oman join the practice of Quality Audits *(QAMhttp://www.oac.gov.om/QAM_2008_FINAL2.pdf)*. The evaluation process helps the CoTs to determine their capacity and capability to continually improve and achieve their aspirations.

The Standard Assessment is the 2nd stage. Standards are the level of requirements and conditions that must be met by institutions or programs to be accredited or certified by a quality assurance or accrediting agency. These conditions involve expectations about quality, attainment, effectiveness, financial viability, outcomes and sustainability. The standards will provide assurance that the CoTs are competent to provide quality education.

II. Second layer: Graduate Attributes (GAs)

This layer constitutes the Graduate Attributes (GAs) that are to be embedded in the CoT graduates. Bearing in mind the national and international developments in the fields of various specializations offered at CoTs, a set of Graduate Attributes were developed at the strategic planning workshop for CoTs, conducted by QAD. These attributes to a large extent determine the various knowledge that is passed on to students.

Graduate Attributes of CoTs are:

Attribute 1	Are well disciplined and committed to hard work and a high standard of productivity
Attribute 2	Are able to apply the knowledge and skills to a diverse and competitive work environment
Attribute 3	Are able to think critically, analyze and solve problems
Attribute 4	Have a high degree of competence in using information and communication technology
Attribute 5	Are professionally competent and up to date in their field of specialization in a changing global environment
Attribute 6	Can gather and process knowledge from a variety of sources and communicate effectively in written and spoken English
Attribute 7	Can effectively demonstrate and apply good interpersonal skills in team work and leadership roles
Attribute 8	Are committed to self-development through lifelong learning
Attribute 9	Are socially responsible citizens aware of contemporary issues in contributing to national development
Attribute 10	Are able to demonstrate and apply their entrepreneurial skills

Appendix 2 *provides a sample of possible application of teaching methods appropriate for specific learning styles to help in the achievement of identified graduate attributes. On the other hand,* ***Appendix 3*** *presents a self-assessment instrument on graduate attributes for students.*

III. Third layer: Types of Knowledge: Content, Context, General, and Professional

The third layer comprises of four types of knowledge: Content, Context, General, and Professional that are delivered and acquired through the teaching and learning processes. Knowledge is a primary

component of the pedagogical framework for CoTs. This layer describes what the lecturers intend to apply and integrate into their teaching and learning activities for CoT students.

The CoTs organize workshops and short training programs to strengthen the pedagogical knowledge of its educators and refine their teaching performance. Furthermore, students and peer evaluations of a teacher's performance concerning pedagogical aspects are systematically included in each academic department's annual review process, the result of which are used to revise and improve teaching.

Below is a discussion of each knowledge type:

- **Content Knowledge**
  Content knowledge encompasses what Bruner (as cited in Shulman, 1992) called the "structure of knowledge"–the theories, principles, and concepts of a particular discipline. Especially important is content knowledge that deals with the teaching process, including the most useful forms of representing and communicating content and how students best learn the specific concepts and topics of a subject. " [*(Grossman, as cited in Ornstein, Thomas, & Lasley, 2000, p 508) http://www.intime.uni.edu/*]

Content knowledge is the backbone-constituent of education in the Colleges. A significant part of students' education at the CoTs is dedicated to content knowledge acquisition and the skills needed to use this knowledge in their future careers. Hence, educators at CoTs should have a breadth of content knowledge in the arts and sciences and a broad knowledge in key areas such as language and communication skills. This knowledge promotes teacher confidence, facilitates learners' understanding, and triggers students' interest in the subject. Mastery of content knowledge also implies the ability to update one's knowledge and remain current in the field in order to make contributions to the field, to understand others' innovation, to research and embark on new initiatives, and to exchange ideas and collaborate with other scholars and practitioners.

Students and faculty participation in CoTs, national, regional, and international events such as competitions and conferences is a venue for content knowledge sharing, application, and growth.

- **Context Knowledge**

The term context knowledge is inclusive of all issues relevant to the learning environment and pedagogical context. This includes a wide spectrum of issues ranging from pure pedagogical to pure practical concerns. For example, context knowledge may include knowledge of students' pre-Colleges educational background (especially for teachers with different educational experience), knowledge of the history of the Colleges and evolvement of their programs, knowledge of the country and norms of the society, cultural aspects of the learning experience, special needs, the local market, stakeholders and partners, etc. CoTs educators are inducted about general issues upon joining the Colleges. Specific inductions are provided within each department. Every member of the Colleges learning community is expected to acquire context knowledge by research, inquiry, interaction with other learners (whether students, other educators or colleagues), and active participation in the CoTs teaching and learning processes.

- **General Knowledge**

The pedagogical philosophy of the Colleges of Technology follows a holistic approach. The convergence of content and context knowledge blended with good knowledge of general matters makes a balanced knowledge foundation. In addition to the (inevitable) integration of general knowledge into teaching and educational materials, a number of extra-curricular activities that take place in the Colleges to sustain general knowledge acquisition and sharing

In addition to the needed content and context knowledge, educators play vital multi-faceted roles where they are expected to image thorough knowledge in matters of general interest. These include culture; religion; history; world geography and nations; health, safety and environment; international bodies and independent organizations; and an understanding of different political systems. Educators at CoTs encourage the learners to always update themselves through media in order to acquire general knowledge. Moreover, teachers are encouraged to use the current information when discussing subject areas. This general knowledge is necessary for any diverse learning community. It is also important for shaping a well-rounded mentality of the learner. The focus of education at CoTs is to provide in-depth specialized knowledge in their respective fields of study, connect these integral types of knowledge, have the skills to update knowledge, and apply them creatively.

- **Professional Knowledge**

Professional knowledge completes the quintuple foundation of knowledge. It closes the loop between scholarship, academia, and industry. Educators and learners at CoTs enjoy access to a wealth of professional knowledge and information about relevant advancements in industry. Several courses are offered to support professional knowledge acquisition. In addition to credited courses, the On-Job-Training program is an example of efforts serving this cause. On the teachers' side, they have to keep up with the new trends by attending professional development programs.

The CoTs maintain strong relationships with industry through their specialization committees, curriculum development committees, and industry consultants. Alumni and employers' surveys are used to gauge the success of the programs offered especially with respect to professional knowledge and professional conduct of graduates.

IV. Fourth layer: Pedagogical Philosophy: Teaching, Learning, and Assessment

This layer outlines the CoTs principles on the three essential elements namely: Teaching, Learning, and Assessment.

High quality **teaching** and **learning** is promoted and reinforced by well-organized **assessment** system. Colleges believe in the symbiotic relationship of these three important processes. Although each process has components independent from the other two processes, each is a significant segment to the whole educational experience of students in CoTs. Assessment provides a clear insight into student learning and gives teaching a basis for instructional decisions and modifications of teaching methods or strategies. Therefore, assessment is included as an essential component within the teaching and learning practices in CoTs.

Teaching, learning and assessment are essential to the learning experiences at CoTs. The knowledge foundation discussed in the third layer does not mean acquisition of abstract knowledge only, but also knowledge evaluation, sharing, updating, and application and the skills needed in order to impart them to the learners. Students are offered with appropriate teaching, learning and assessment experiences to achieve the desired outcomes and enable them to acquire, develop and demonstrated the intended graduate attributes.

Guiding Principles For Teaching And Learning

Teaching and learning are two sides of the same coin. The curriculum suggests that "the purpose of developing pedagogy is to improve student learning by selecting the most powerful teaching strategies for a specified learning outcome and to support the different learners to achieve that outcome. In a sense, it is about knowing how to choose the right tools for the job. Teachers want to see their students change from what they are into what they can become by their teaching. They provide the tools and knowledge for students to connect past and present learning and to generate new skills and understanding.
An effective teacher uses variety of teaching strategies because different strategies used in different combinations with different groupings of students will improve learning outcomes. Also, there are some strategies which are better suited to teaching certain skills and certain learning styles and abilities. *(http://the-teacher.wikispaces.com/Pedagogy+-+Teaching+and+Learning+Strategies)*. *(Refer to **Appendix 4** for a list of teaching methods taken from the PF of the CoTs that may be adopted appropriately.)*

The CoTs are guided by the principle of motivating students to learn, the characteristics of which are:

1. **Dynamic and Diverse:** Faculty members use a wide range of teaching-learning strategies and approaches that create active participation of the learners in the learning process rather than being passive receptors of knowledge
2. **Content-rich and Language-rich**. Teacher's knowledge of the subject matter is essential in order to impart important concepts, principles and theories to students using a classroom language that create an authentic experience in enriching target language use among the students.
3. **Team-oriented and Individual**. Team-based learning strategies allow students to work collaboratively in small groups but each individual student is held accountable for the work contributed to the group.
4. **Culturally Attuned:** Commitment to teaching should consider the cultural ethnicity of the learners and the community thereby encouraging pride and respect of identity and national development.
5. **Positive and Supportive**: Teachers should be able to facilitate acquisition of knowledge, and skills by establishing a classroom atmosphere conducive to learning through responsible behavior and pro-social attitude among students.
6. **Learner-centered:** Teaching should focus on what the student is learning and how the student is learning. This entails teaching approaches that seeks to engage students directly in the learning processes which will enhance academic achievement and promote the development of important learning skills, such as critical thinking and problem solving.
7. **Theoretical and Practical**: Professional instruction of teachers is not exclusively theoretical, but involves a certain amount of practical work giving the student a better grasp of the significance of the subject-matter he has acquired.
8. **Technology-infused**. Being a technological institute, teaching and learning activities should be supported by various technology resources available to increase student learning engagement and motivation.

Assessment

The value of assessment to teaching and learning should not be underestimated. It contributes significantly to the quality of **teaching** and **learning**. Appropriately designed assessment provide teachers with constructive guidance to plan for effective teaching and also influences the manner by which students approach their study. Assessment is a very potent tool in teaching to raise the achievement of learners thereby realizing the intended learning outcomes.

Assessment is a process used to obtain data about how well the students performed. Lecturers need to know what the students have accomplished. Teachers are guided by the learning objectives as stated in the course outcomes. Students' knowledge and skills are assessed based on the achievement of the course outcomes. Hence, assessment requires exam writers to be highly specific about what outcomes to assess. This will ensure a fair and accurate assessment.

Table 1. List of some assessment methods used by departments at CoTs:

Departments/Centre Assessment method	ELC	Business	Engineering	IT	Pharmacy	Fashion design	Applied sciences
Short Quizzes	✓	✓	✓	✓	✓	✓	✓
Mid-Semester Exam and final exam	✓	✓	✓	✓	✓	✓	✓
Project reports and presentations	✓	✓	✓	✓	✓	✓	✓
Assignments	✓	✓	✓	✓	✓	✓	✓
Vocabulary log	✓	✗	✗	✗	✗	✗	✗
Portfolios	✓	✗	✗	✗	✗	✗	✗
Practical activities	✗	✓	✓	✓	✓	✓	✓
Oral exams	✓	✗	✗	✗	✗	✗	✗

The table above shows some common assessment practices which are used by various departments in CoTs. Generally, 50% of the aggregate comes from the final examination and the rest comes from the results of continuous assessment and mid semester examination.

V. Fifth layer: Students

The fifth layer or the core of the Pedagogical Framework is the STUDENT. The pedagogical framework is intended to facilitate achievement of the mission of the CoTs through a student-centered education.

As illustrated in the figure, the STUDENT is the heart of the education process in the CoTs. All the pedagogical aspects from the outermost layer to the innermost layer of the framework are designed with the prime consideration of developing the potentials of the STUDENTS and nurturing them to become morally and aesthetically responsible members of the society.

Education at CoTs aims at producing STUDENTS with the required knowledge and skills to contribute to the socio-economic development of Oman.

CONCLUSION

This Common Pedagogical Framework is a theoretical construct that encapsulates the educational aspirations and academic principles of the Colleges of Technology distinguishing them from other HEIs in Oman.

The main aim of this CPF is to unify the practices of the seven colleges in fulfilling their responsibility of educating and enlightening the learners under their tutelage. It establishes a

common point of reference for the teachers in performing their roles in developing the students' cognitive, affective , and psychomotor abilities and potentials.

The framework, presented in a graphical illustration (*See Figure 1*) has five key layers interrelated with one another. The outermost layer consists of the standards that provide the context and direction for the other elements in the structure and the general perspective of the entire framework. The second layer specifies the attributes that uniquely characterize graduates of the CoTs. These attributes are laid down in the context and direction stipulated in the first layer. The four types of knowledge that learners should acquire in order to develop the desired attributes are expounded in the third layer. The fourth layer provides the pedagogical philosophy of the CoTs covering three most important processes in education (Teaching, Learning, and Assessment). This layer provides guidance to the educators to effectively fulfill their teaching duties and assess student progress order to ensure that learning transpires productively. The core layer which is considered to be the heart of the framework is the Student. Here lies the rationale for the very existence of the Colleges of Technology – the advancement and enhancement of the Student, the future leaders who will fulfill the task of national development.

The CPF will be implemented for a period of two consecutive academic years in all the CoTs. Within this period, studies to be spearheaded by the Specialization Committees concerned will be conducted to verify the relevance and suitability of the framework or parts thereof. Results will be analyzed and changes will be proposed based on findings.

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Appendix 1

Questionnaire: Students Learning Styles

This questionnaire will help you discover what kind of learner you are. Read each row and **tick** the **ONE** option that is most like you.		
I prefer lessons where we can discuss things.	I prefer lessons where there is something to look at (like a picture, chart, diagram or video) or something to draw.	I prefer lessons where we can do something practical – or at least move around.
I often fiddle with things in class (a pen, paper clip or rubber band.)	I often sing or hum to myself in class.	I often doodle in class.
When learning a new skill, I prefer to just get on with it.	When learning a new skill, I prefer someone to explain to me how to do it.	When learning a new skill, I prefer to watch someone else show me how to do it.
When the adverts come on the telly – I like to watch them.	When the adverts come on the telly – I get up and do something.	When the adverts come on the telly – I like to sing along with them.
I would prefer to listen to a story.	I would prefer to see a comic strip of a story	I would prefer to act out a story.
I am good at learning physical skills.	I have a good memory for people's names.	I have a good memory for faces.
I prefer teachers who use diagrams to show us things.	I prefer teachers who get us to do something.	I prefer teachers who explain things to us.
If I get in trouble in class, it's for talking.	If I get in trouble in class, it's for drawing on the desk or all over my books.	If I get in trouble in class it's for fidgeting.
On a long journey I like to look at the scenery or read a book	On a long journey I can't wait until we stop so I can walk around.	On a long journey I like to listen to music or talk to the other travellers.
I use my hands a lot when I am talking.	When I am discussing something, I sometimes use words my friends don't know.	When I am discussing something, I like to doodle.

If I could be famous, I would be a sports-person (or dancer).	If I could be famous, I would be a film-star.	If I could be famous, I would be a singer.
I would rather go outside and play.	I would rather watch my favorite TV program.	I would rather listen to my favorite music.
I get distracted in class if I can see something outside the window.	I get distracted in class if I can hear something happening outside.	I lose concentration if I have to sit still for a long time.
I am good at drawing.	I am good at making things.	I am a good listener.
Out of these 3 jobs - I would prefer to be a radio DJ (or presenter)	Out of these 3 jobs - I would prefer to be a mechanic.	Out of these 3 jobs - I would prefer to be an artist (or designer).
In my spare time I would prefer to do something physical, such as sport or dancing.	In my spare time I would prefer to watch TV or a video.	In my spare time I would prefer to listen to music or chat with friends.
The type of puzzle I would prefer is "Spot the difference".	The type of puzzle I would prefer is "Name that tune".	The type of puzzle I would prefer is "Rubik's cube".
If I needed to build a Lego model, I would get someone to explain how or to read the instructions to me.	If I needed to build a Lego model, I would try to work out which bits fit together.	If I needed to build a Lego model, I would follow the diagram or the picture on the packet.

Key to Learning Styles inventory (A=Aural, V=Visual K = Kinesthetic)

1. AVK	7. VKA	13. VAK
2. KAV	8. AVK	14. VKA
3. KAV	9. VKA	15. AKV
4. VKA	10. KAV	16. KVA
5. AVK	11. KVA	17. VAK
6. KAV	12. KVA	18. AKV

Appendix 2: Graduate Attributes (GAs)

A table showing the achievement of GAs through the use of appropriate teaching methods for specific learning styles

No.	Method	Learning Style	GA 1	GA 2	GA 3	GA 4	GA 5	GA 6	GA 7	GA 8	GA 9	GA 10
1	Assignments	V K	X	X	X	X	X	X	X			X
2	Cooperative learning	V A K	X	X	X	X			X		X	X
3	Demonstration	V A K	X				X	X				
4	Discovery	V A K	X	X	X	X	X	X	X			X
5	Discussion	V A K	X	X		X	X	X				
6	Field visit	V A K	X	X	X	X	X		X			X
7	Independent learning	V K	X				X					
8	Lab practical	V K	X	X		X						
9	Lecture	V A	X				X					
10	Presentation	V A	X	X		X	X	X				
11	Problem solving	V A K	X	X	X	X			X		X	X
12	Projects	V A K	X	X	X	X			X		X	X
13	Reports	V	X	X	X	X	X	X				X
14	Role plays	V A K		X	X				X	X	X	
15	Seminar	V A K	X				X					
16	Tutorial	V A K	X				X					
17	Videos	V A					X		X			
18	Workshop	V A K	X	X	X	X			X		X	X

Appendix 3

Self-Assessment Instrument: A sample of questions for students' perception on achievement of GA's

No.	**Assessments**
1	I learned to identify and analyze issues and problems and formulate solutions to solve them. لقد تعلمت تحديد وتحليل القضايا والمشكلات، وكيفية وضع الحلول المناسبة لمعالجتها.
2	I understand and able to evaluate my current knowledge to improve my personal learning strategies. أنا مدرك وقادر على تقويم معرفتي الحالية؛ لتحسين استراتيجيات التعلم اللازمه لتطوير مهاراتي الشخصية .
3	I have acquired, organized and presented up-to-date information through various activities in my field of specialization. اكتسبت وشاركت في تقديم كل ما هو جديد من خلال المشاركة في العديد من الانشطه في مجال تخصصي.
4	I have learned new skills and apply them to real situations. تعلمت مهارات جديدة وعرفت طرق تطبيقها في مواقف حقيقية.
5	The course helped me develop my ability to work as a leader and as team member. ساعدني المقرر في تطوير مهاراتي القيادية والعمل بروح الفريق الواحد .
6	I have improved myself by learning independently and cooperatively with others. لقد ساعدني التعلم بشكل مستقل وبالتعاون مع الآخرين على تطوير ذاتي.
7	I have learned to think and analyse situations before solving the case/problem. لقد تعلمت أن علي أن أفكر واحلل قبل حل أي قضية / مشكلة.
8	I have known the appropriate methods and ways in solving real and practical case/problems. تعلّمت الطرق المناسبة في حل المشكلات العملية.
9	The course helped me communicate more effectively . ساعدني المقرر على التواصل مع الآخرين بطريقة أكثر فاعلة.
10	The course guided me to develop entrepreneurial skills. ساعدني هذا المقرر في تطوير مهارة ريادية الأعمال.
11	During my study, I have learned the implications of my actions towards my classmates and Lecturers. خلال فترة دراستي أدركت تأثير سلوكياتي على زملائي و أســـاتذتي.
12	I have known my responsibility to the community and to organization I will join in the future. لقد عرفت مسؤوليتي تجاه المجتمع والمؤسسة التي سوف أنضم إليها مستقبلًا.

Appendix 4

Teaching Methods, Strategies, and Approaches
(synthesized from PFs of the CoTs)

1. SCL (Student Centered Learning)
2. Experiential learning
3. Case Study
4. CL (Cooperative Learning)
5. Group Work
6. PPP (Presentation, Practice and Production) Approach
7. TBA (Task-Based Approach)
8. Realia
9. Lecture
10. Active learning
11. CLL (Communicative Language Learning) Approach
12. Field Trips
13. On-the-Job Training
14. Use of visuals
15. E-learning activities
16. In-class Practical Training
17. Brainstorming
18. Role Play
19. Project- based Learning
20. Critical thinking
21. PBL (Problem-Based Learning)
22. GDL (Guided Discovery Learning)
23. Drawing
24. Dialogues
25. Miming
26. Games
27. CLL (Communicative Language Learning
28. Design Model
29. Laboratory – hands-on activities
30. Imagination
31. Forums / Discussion points