## Experiential Education Booklet کتیب التعلیم التجریبی

This document is part of a series that defines, explains, and demonstrates Qatar University's five Education Excellence Themes.



التعليـــم الريـــادي ENTREPRENEURIAL EDUCATION



التعليم القائم على البحث العلـمي RESEARCH-INFORMED EDUCATION



التعلــم المعـزز بالرقمنـة DIGITALLY ENRICHED EDUCATION



التعليم المتمركز حول المتعلم LEARNER-CENTRIC EDUCATION



التعليـــم التــجريـبي EXPERIENTIAL EDUCATION

Qatar University

Center for Excellence in Teaching and Learning

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#### Version 1.1

This a preliminary version, which will be subject to periodic review. Subsequent versions will be issued via the CETL



#### Introduction

Qatar University's mission is "to equip current and future citizens of Qatar with the skills, expertise and competencies they need to be able to contribute to, and lead, Qatar's development for the benefit of future generations" (Qatar University Strategy 2018–2022, p. 20). To achieve this, the university has rigorously pursued educational excellence. Having developed and implemented its Education Excellence Framework, the university aspires to be regionally recognized for the provision of holistic education. The five main themes of the Education Excellence Framework are: learner-centric, experiential, research-informed, digitally enriched, and entrepreneurial education. These five aspects of a holistic education will yield graduates who are well-rounded and who have attributes, competencies, and values that will enable them to maximize their future impact locally and internationally (Qatar University Strategy 2018-2022). This document is part of a series that defines, explains, and demonstrates Qatar University's five themes for education excellence. This document focuses on experiential education. The objectives of the document are to:

- 1. Motivate readers to relate the experiential education theme to their educational backgrounds, professional practices and characteristics as instructors at Qatar University.
- 2. Familiarize readers with theory and research on experiential education.
- 3. Demonstrate some of the teaching and learning skills required to implement experiential education.
- 4. Introduce strategies for applying experiential education in higher education.
- 5. Introduce methods of assessment appropriate for experiential education in higher education.

This document was created for Qatar University educators and attempts to distill, organize, and highlight key elements from the vast amount of research, literature, and information on experiential education that already exists in academia. This document references a wide variety of educational resources in order to identify critical points, perspectives, practices, and definitions of experiential education and attempts to guide the reader through some of the steps necessary to structure and implement experiential learning practices in Qatar University contexts.



#### Overview of Experiential Education

According to the Association for Experiential Education (AEE), experiential education is: "a philosophy that informs many methodologies in which educators purposefully engage with learners in direct experience and focused reflection in order to increase knowledge, develop skills, clarify values, and develop people's capacity to contribute to their communities" (cited in Roberts, 2016, p. 21). Instructors need to differentiate between two terms: "experiential education" and "experiential learning." Although, at many times, these two terms are used interchangeably, they differ. According to the Oxford English Dictionary, learning is the "acquisition of knowledge or skills through experience, study, or by being taught." One can easily note that this definition includes the phrase "through experience." Hence, much of what individuals learn is through experience. If this is the case, then universities are already infusing experiential education into the curriculum. However, this is not necessarily the case. Universities are typically described as "higher education institutions" because they provide structured and systematic learning experiences, that is: education. According to the Oxford English Dictionary, education is defined as "the process of receiving or giving systematic instruction, especially at a school or university." Hence, experiential learning is informal, that is, individuals can learn through experience in any number of contexts and curriculum situations. Experiential education, on the other hand, involves a broader and more systematic pedagogical process. It involves questions about the structure and function of knowledge and the purposes to which learning ought to adhere. Experiential education necessitates new thinking and techniques. More crucially, it demands some shedding of old habits. Roberts (2016) argued that certain dominant paradigms must be left behind for applying the experiential model of learning: (1) The Instruction Paradigm, (2) The Seat Paradigm, (3) The Teacher as Expert Paradigm, and (4) The Primacy of Content Paradigm. These paradigms are explained below, and each are paired with an experiential principle to consider in contrast.



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Barr and Tagg noted, "A college is an institution that exists to provide instruction"	
(1995, p. 1). For them, the Instruction Paradigm in higher education can be identified	To be left behind
by (1) teacher-centred content delivery; (2) a one-way transfer of knowledge from	
instructors to students; (3) a focus on end-of-course assessments; and (4) instructors	
and students working both independently and in isolation.	

#### Experiential Principle #1: Teach People, Not Content

The Instruction Paradigm

Instructors must prioritise learners, not content. Doing so leads to the design of learner-centred educational experiences that provide learners with opportunities to discover new knowledge and build on it. Teaching people and not only content means focusing less on what instructors know and more on the learning that they can facilitate with students.

To be embraced

#### The Seat Paradigm

Roberts (2016) argued, "The seat paradigm is pervasive in the K-12 world, but also holds sway in higher education" (p. 69). By this logic, students learn heavy content, while they are predominantly seated in fixed places and taught for a set period of time. Moving away from this paradigm requires building social and collaborative learning environments.

To be left behind

#### Experiential Principle #2: Less is More

On one hand, experiential approaches involve a lesser focus on instructions and content. On the other hand, they necessitate more time for students to explore, and more time for instructors and students to interact; and more time for students to develop and present independently developed learning projects.

To be embraced



#### The Teacher as Expert Paradigm

Instructors are usually seen as the central source of expertise. Therefore, it is through the teaching process that some of their expertise transfers to students. Freire (2006) referred to this transference as the "banking method"; that is, knowledge is viewed as something stored within the instructor and subsequently "deposited" into the student.

To be left behind

#### Experiential Principle #3: Learning Alongside

Experiential education demands that instructors be comfortable with the idea of learning alongside students. It involves allowing students to spend more time constructing knowledge and less time passively receiving it. Palmer (1998) went beyond the simplistic dichotomies of either the "teacher-centred classroom" or the "student-centred classroom." He proposed a third way that combines the benefits of both teacher and student -centred classrooms. Effectively, "subject-centred classroom," where the subject is the important "third thing" that collapses the false dichotomy of the teacher—student relationship.

To be embraced

#### The Primacy of Content Paradigm

Many instructors argue that "hands-on" experience is secondary to content delivery. Students enter the classroom knowing exactly what to expect because their instructors follow the routine of controlling the content, assignments, and assessments. Students then "experience" these routines. Bowen (2012) notes that "faculty want students to master the content of the course and to learn how to use that content in some way. Most of them wish they had more time to spend on the latter; however, class time gets taken up with the former, and higher-end processing of the content gets sacrificed" (p. 103).

To be left behind

#### Experiential Principle #4: Students' Experience before Routine

The purpose of experiential education is, as Bowen (2012) points out, to find more ways for students to use, test, question, and explore content that displays their inherent curiosity. The "flipped classroom" approach is one of many approaches that respond to this paradigm.

To be embraced



#### Theory Related to Experiential Education

Experiential education adheres to Kolb's (2006) experiential learning theory (ELT). The ELT draws on the work of prominent 20th century scholars who gave "experience" a central role in their theories of human learning and development (e.g., John Dewey, Jean Piaget, William James, Paulo Freire, Carl Rogers, among others). The ELT is built on the following six propositions that are shared by these scholars:

- 1. "Learning is best conceived as a process, not in terms of outcomes" (Kolb & Kolb, 2012, p. 194). Hence, in higher education, the focus should be on engaging students in a process that best enhances their learning and includes feedback on the effectiveness of their learning efforts.
- 2. "All learning is relearning" (Kolb & Kolb, 2012, p. 194). Thus, learning is best facilitated by a process that draws out the students' beliefs and ideas about a given topic. Students then should be encouraged to examine, test, and integrate these beliefs with new and more refined ideas.
- "Conflict, differences, and disagreement are what drive the learning process" (Kolb & Kolb, 2012, p. 194). For students to learn, they should move back and forth between opposing modes of reflection, action, feeling and thinking.
- 4. "Learning is a holistic process of adaptation to the world" (Kolb & Kolb, 2012, p. 194). That is learning involves the integrated functioning of student's thinking, feeling, perceiving, and behaving.
- 5. "Learning results from synergetic transactions between the person and the environment" Kolb & Kolb, 2012, p. 194).
- 6. "Learning is the process of creating knowledge" (Kolb & Kolb, 2012, p. 194). This contradicts the "transmission" teaching models which focus on transmitting preexisting fixed ideas from the teacher to the learner.



Effective learning, according to Kolb's ELT, is seen when a student progresses through a cycle of four stages. These are:

(1) Having a concrete experience followed by (2) observation of and reflection on that experience which leads to (3) the formation of abstract concepts (analysis) and generalizations (conclusions) which are then (4) used to test a hypothesis in future situations, resulting in new experiences.

Retrieved from: https://www.bsynchro.com/woman-of-jxspbhn/c5b1f3-kolb%27s-experiential-learning-theory#

#### Active Experimentation -Concrete Experience testing new ideas; honing Concrete engaging directly in skills in a new experience Experience authentic situation Reflective Observation Reflective Observation -Abstract Conceptualization noticing what happened distilling perceptions into and relating to past abstract concepts experience and conceptual understandings

Kolb's Cycle of Experiential Learning

Figure (1): Kolb's Cycle of Experiential Learning



#### The Application of Experiential Education in University

Roberts (2016) noted "if experiential education is the pedagogical common denominator, it sits at the center of the system (not unlike the sun in our solar system). Orbiting around this center are several broad conceptual categories" (p. 44). An array of terminology has been used to describe experiential learning approaches in higher education. Figure (2) presents the most commonly used approaches.

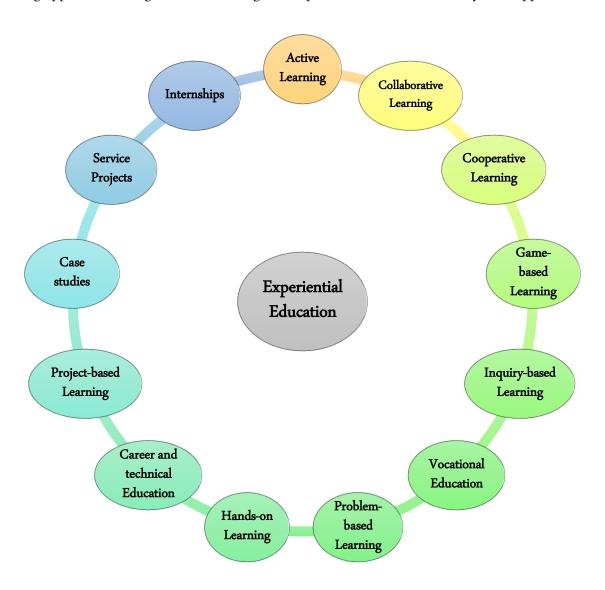


Figure (2): Experiential learning approaches

Terms mentioned in figure (2) represent highly varied approaches. However, they are all defined by their relationship with the central pedagogical core, that is, experiential education. These approaches can be categorized into four main experiential learning categories, which are described in table (1).



Category #1 Active Learning	Category #2 Community-based Learning	Category #3 Integrative Learning	Category #4 Inquiry-based Learning
- Cooperative Learning	- Internships	- Vocational Education	- Problem-based Learning
- Collaborative Learning	- Fieldwork	- Career Education	- Project-based Learning
- Game-based Learning	- Fieldtrips	- Simulation-based	- Discovery-based
- Flipped Classroom	- Clinical Placement	education	Learning
	- Volunteerism		

Table (1): Experiential Learning Categories

#### Category #1: Active Learning

"Active learning is an umbrella term for a range of instructional strategies aimed at increasing student involvement and ownership of their learning" (Roberts, 2016, p. 47). Techniques such as think-pair shares, Socratic questioning, writing prompts, debates, role-plays and peer-to-peer teaching are all staples of active learning-teaching strategies.

#### Case Example: Flipping the classroom at the College of Business and Economics, Qatar University.

In an Intermediate Accounting course taught in the College of Business and Economics at Qatar University, the instructor flipped his classroom. He wanted to address basic learning deficiencies related to solving accounting problems by having out-of-class and in-class learning experiences. He implemented a flipped classroom approach through a number of sequential steps: (1) recording lecture videos for each of the topics covered in the course; (2) applying just-in-time-teaching (JiTT) at the start of class meetings, which involved giving students a diagnostic quiz composed of rudimentary questions from the recorded videos to ensure that they grasped the basic concepts; (3) engaging students via in-class problem-solving activities, most commonly peer-assisted learning (PAL), where students took on the role of the instructor and taught each other; and (4) delivering formative feedback and detailed individualised reports. For more information see Aldamen (2020) from in the references list.



#### - Category #2: Community-based Learning

Community-based learning is a pedagogical strategy that integrates students' learning into community engagement, based on reciprocal and mutually beneficial partnerships between instructors, students and community groups. The goal is to address community-identified needs and ultimately create positive social change. Critical reflection is a key element in community-based learning, as it enhances students' learning of course content, understanding of the community and sense of civic agency.

#### Case Example #1: Clinical placements at the College of Medicine (CMED), Qatar University

The CMED has a variety of affiliated clinical sites where students receive their clinical placements (e.g., Hamad Medical Corporation, Primary HealthCare Centers and Sidra Medicine). Through clinical placements, students are exposed to a wide spectrum of health care issues. Students' clinical placement begins during their first week at the college, before they even begin courses. Students join a 3-day Student Boot Camp, where they meet faculty and their peers. A field trip is then organized to clinical sites, where practitioners meet students and present their work within the real clinical setting, talk about their daily routines and professional values, and engage students in an open discussion about their expectations. In a late stage, work-ready students validate their accumulated learning through other rounds of clinical placement. For more information see: <a href="http://www.qu.edu.qa/medicine/academic-programs/general-medicine/clinical-placements">http://www.qu.edu.qa/medicine/academic-programs/general-medicine/clinical-placements</a>

#### Case Example #2: The Zones of Conflict and Peace (ZCZP) program at Georgetown University-Qatar

The ZCZP program is designed to enable students to study conflict management and resolution in its real-life application. This award-winning program takes students to zones of ethnic, political, religious and social conflict, with the goal of enabling them to better understand both the causes of the conflict and the difficult process of reconciliation. The instructor teaching the course chooses the topic and region of focus, to which students then travel in order to bridge their academic learning with the current reality. During the trip, students meet with politicians, journalists, community organizers and other changemakers in the destination zone. The program is equivalent to a 3-credit course, including a travel component. For more information see: <a href="https://www.qatar.georgetown.edu/academics/experiential-learning/zones-conflict-zones-peace/">https://www.qatar.georgetown.edu/academics/experiential-learning/zones-conflict-zones-peace/</a>

#### Category #3: Integrative Learning

Integrative learning refers to the variety of approaches that connect students' learning and curriculum to their careers. It involves the process of linking academic concepts with experiences, so that students' skills can be applied to novel and complex issues or challenges. Integrative learning occurs when learners address real-world problems.



#### Case Example: International Negotiation and Crisis Simulation at Georgetown University-Qatar

Georgetown University-Qatar trains students in negotiations, decision-making and crisis management through a one-day simulation that offers students the hands-on opportunity to practice diplomacy through complex international negotiations and real-time crisis decision-making activities. The simulation exercises are hypothetical situations based on a current international problem. Students are assigned to teams and introduced to special guests. Each team is then required to read a background paper and scenario and absorb short "confidential" negotiating instructions. Instructors oversee the exercise and mentor the students. The learning objective of the simulation activity is to understand different perspectives, motivations and challenges in grappling with foreign policy issues. For more see information:

https://www.qatar.georgetown.edu/academics/experiential-learning/international-negotiation-and-crisis-simulation/

#### - Category #4: Inquiry-based Learning

Inquiry-based learning includes pedagogical approaches such as "problem-based," "project-based" and "discovery-based" education. In these approaches, "students learn content, strategies, and self-directed learning skills through collaboratively solving problems and reflecting on their experiences (Hmelo-Silver et al., 2007). Duch et al. (2001) state that complex, real-world problems are used to motivate students to identify and research the concepts and principles they need to know in order to work through those problems. Students work in small learning teams, bringing together collective skill at acquiring, communicating, and integrating information.

# Case Example: Implementing Project-based Learning (PBL) in a Civil Engineering Course at Qatar University.

PBL was implemented in a third/fourth-year engineering design course in the Civil Engineering program at the College of Engineering. A total of 33 engineering students were expected to work in a team to formulate and provide a solution to a real-life problem, as well as create a professional report and present outcomes. The course instructor designed the overall theme of the project and provided a list of suggested materials on the course platform via Blackboard. The course lasted 16 weeks, consisting of three 50-minute contact hours per week. During these contact hours, students worked in groups on the project. The instructor and a teaching assistant served as facilitators to provide advice and discuss work with the students. Alternative assessment methods were designed, shifting from 100% individual written exams to a method consisting of 60% group project assessment, 15% individual oral presentation and 25% individual written exam. Rubrics were provided to students to guide their projects from the start. For more information see Du et. al (2018) in the references list.



#### Assessing Experiential Education

Finley (2013) maintained that the assessment of experiential learning can be quite a challenge. One could ask, how should an instructor assess students' learning outcomes from an internship experience? Learning outcomes from an internship could, for example, be to "observe professional organization and culture", "clarify one's calling through reflection on the internship experience" or "understand the skills required for success in the workplace." Such learning outcomes can be challenging to assess, as there are no right or wrong answers. Moreover, while rubrics can be used in evaluating traditional essays and composition assignments, one could question how a rubric can demonstrate students' "recalling through reflection on the internship experience". Perhaps more importantly, how can instructors assess students' understanding? Experiential learning approaches, such as community-based, inquiry-based, integrative, and active learning are oriented around subjective learning goals as opposed to "correctness". As a result, both instructors and students may feel uncomfortable in such situations. Since experiential approaches are relatively new, there is little in the literature concerning methods of assessing them, especially in higher education. However, some recent work has been done on the components of various best practices in assessing experiential learning (Roberts, 2016). These components are as follows:

- 1. Component #1: Authentic learning products and performance.
- 2. Component #2: Criteria and rubrics
- 3. Component #3: Learning portfolios

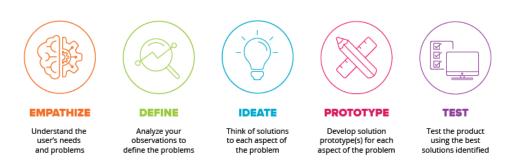
Each of the components is, in many respects, connected to the other. To put this into context, one of the most vital principles of experiential learning is "authenticity." That is, connecting real world problems to student learning. Authentic performance simply means a student's ability to do things that are valued in the adult world. Instructors need to develop authentic problems that increase students' engagement and are challenged to design experiential contexts where students' understanding can be revealed through performances. However, as instructors attempt to create such authentic experiences for their students, they immediately feel the need to use more than traditional tests and quizzes. This is where rubrics enter the picture. Yet, as the principle of holistic learning is also central to experiential education, learning portfolios are often needed as well. Next section presents a case example.



#### Case example: Assessing experiential learning in Classroom Management Course at Qatar University

In a Classroom Management course taught at the College of Education, the instructor wanted to familiarize pre-service teachers with classroom management challenges. Although detailed literature and well-defined pedagogical practices exist, the instructor believed that the local context had its own specificities and particularities that pre-service teachers should work to identify before starting their teaching careers. The aim was that the pre-service teachers would not only learn from books and theories, but also from practice and reality. Thus, the instructor designed an eight-week experiential learning task based on the concept of Design Thinking. The learning sequence in Design Thinking can be represented by a cyclical process (empathize-define-ideate-prototype-test).

#### **DESIGN THINKING**



In the "empathy" component, the pre-service teachers were asked to conduct interviews with three teachers and three students at government schools in Qatar. The goal was to inquire about the challenges teachers and students face in the classroom (e.g., low motivation, getting students to cooperate, and maintaining a positive classroom climate and culture). The pre-service teachers were then required to submit a transcript of the interviews. The interviewing task was assessed based on a five-criteria rubric (introduction, question quality, effort, format, and closing the interview) (10 marks were assigned to this task). This led to defining a set of classroom management challenges in the government schools. Next, in the ideate stage, pre-service teachers were asked to write a "consultancy report" describing these challenges and proposing ways to address them. The pre-service teachers then exchanged the consultancy reports with each other to gain a more comprehensive understanding of the issue(s) under investigation. The consultancy reports were assessed based on a five-criteria rubric (organization, writing mechanics, persuasive writing, figures/ tables, and references) (10 marks were assigned to this task). Afterwards, in



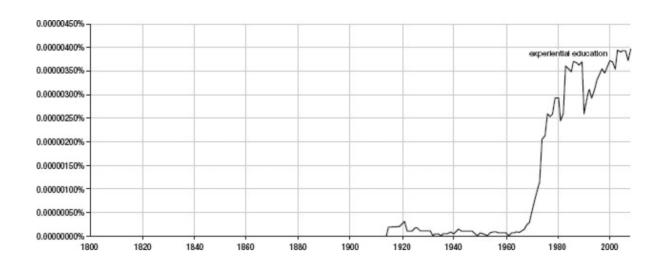
the prototype stage, the pre-service teachers were asked to use a 3D interior design application called PaletteHome to design a physical space (i.e., classroom) in ways that minimized the classroom management challenges they identified. The design was assessed based on a on a five-criteria rubric (understanding the challenge, generating ideas, representing ideas, creativity, and effort) (10 marks were assigned to this task). In the final "test" component, the pre-service teachers sent their consultancy reports to the teachers they interviewed and were asked to construct an online portfolio that contained a description of the project, the interview scripts, the written reports, the prototype, and a one-page reflection. Portfolio assessment was based on analytic rating scales (20 marks were assigned to this task). It should be noted here that the instructor provided constructive feedback after the define, ideate, and prototype stages. Students also were given the rubrics prior to their tasks.

#### Other assessment methods for experiential education include:

- Reflective journal or a portfolio
- Essay, report, or presentation (could be arts-based, multimedia or oral) on what has been learnt (preferably with references to excerpts from reflective writing)
- Self-awareness tools and exercises (e.g., questionnaires about learning patterns)
- Short answers questions of a 'why' or 'explain' nature (e.g., "What did you learn during this assignment? What did you not learn that you would like to?")
- One-on-one oral assessments with the instructor.
- Self-evaluation and/or group evaluation of a task performed.



### A Google Ngram Reader Search of the Term Experiential Education





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