UPC EDUCATIONAL MODEL

2015

Contents

1. Introduction

The modern world is marked by constant change and growing social, cultural, political, economic and environmental connections. This new historical situation brings with it different challenges and new learning and human development opportunities (UNESCO, 2015). As a space for the development of society, it is the role of higher education to create the competencies necessary to tackle the complex nature of new situations, to understand and deal with problems and to implement change (UNESCO, 2009).

Created in 1994, Universidad Peruana de Ciencias Aplicadas (UPC) is an innovative, private and independent educational institution, which educates, researches and promotes knowledge, culture and development (UPC, 2015), carrying out its functions with clarity, modernity, efficiency and international competitiveness. Due to its academic excellence and ability to innovate, it aspires to be a leader in higher education, contributing to the transformation of Peru by training upstanding and innovating leaders with a global vision. To achieve this aim it is guided by its values - innovation, leadership, teamwork, service and quality - all of which constitute a vital part of the institutional culture.

Mission	To educate upstanding and innovating leaders to transform Peru with their global vision.
Vision	To be a leader in higher education based on academic excellence and its capacity for innovation.

On the understanding that the well-rounded training of people is an essential part of the aim of higher education (Peru, 2003; UNESCO IESALC, 2008; UNESCO, 2009), the commitment assumed by UPC is to train professionals to a high standard of quality, with the skills, knowledge, attitudes and values that they require to transform the country. The basis of this training is humanist, scientific and technological, aimed at entrepreneurship, innovation and sustainable development.

UPC's academic programs are designed based on the principles of meaning, quality and integrity recommended by *WASC Senior College and University Commission*[1], which ensure that the educational experience is rich, coherent and challenging, that students achieve learning standards established by the university and graduate with the competencies of a program graduate's profile.

Having meaningful programs involves designing and offering programs that are in line and consistent with UPC's mission and values. These programs are revised on an ongoing basis by a range of different internal and external stakeholders, to ensure that they are in line with expectations and needs in professional fields and in a social context.

The educational experience is high quality, because UPC ensures that the learning outcomes of its programs are defined in a rigorous graduate profile. All of the university's decisions, plans and efforts are aimed at ensuring that, by the end of their university experience, students demonstrate skills, knowledge, attitudes and values described in the learning outcomes set out in the graduate profile.

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[1] *WASC Senior College and University Commission* is a North American accreditation body, responsible for accrediting public and private universities in the western United States (California, Hawaii and the Pacific), as well as universities from other countries. UPC has been undergoing an accreditation process with the aforementioned organization since 2012, and in 2014 was qualified as eligible to continue with its application as a candidate for International Accreditation.

UPC demonstrates the integrity of its programs and graduate programs, which represent a commitment to society and students. It also has a learning outcome assessment process involving the entire university community; these results are continuously disclosed to promote a culture of continuous improvement (WSCUC, 2013)

To meet this commitment, UPC defines its educational model, which is a set of guidelines that summarize its academic philosophy and set the educational process of in a direction leading to the personal and professional development of graduates, in accordance with the demands of the country and the world.

2. Pedagogical principles

The UPC's Educational Model is expressed in the university's primordial functions - teaching and research - and is based on give pedagogical principles that support the educational activities and processes. These principles are: competency based learning, student-centered learning, independent and self-reflective learning, learning in diversity with a global vision, and learning towards sustainability.

Competency based learning

Accelerated change, globalization and the progressive rate of development of science and technology all require the university to clearly define the knowledge, skills and attitudes that students will effectively develop and apply in their personal and professional lives (UNESCO, 2015). In this sense, UPC opts for a competency based educational model, which forms the basis for curriculum design and provides guidance for teaching-learning processes.

Competencies are the set of cognitive (knowledge, skills, capacity and behavior) and non-cognitive (values and attitudes) resources that allow a person to efficiently carry out a task, meet a goal, develop a project or solve a problem in different contexts. (UNESCO OIE, 2013a).

Furthermore, a competency based educational model facilitates the development of integral education because it encompasses all dimensions of the human being: knowing, knowing what to do, and knowing how to act (Blanco, 2009).

Based on this principle, UPC recognizes that successfully completing a university program is more than just a simple accumulation of courses and credits; it involves students being able to demonstrate competencies in line with the expectations and needs of society and the jobs market, to transform their environment.

Student-centered learning

There is currently convincing evidence that there are notable differences in the minds of individuals and that, as a result, people learn in different ways. The education system has the responsibility to respond to each of these differences and, in turn, to ensure that everyone receives an education that maximizes their own intellectual potential (Gardner, 1993).

Therefore, at UPC value is placed on student-centered learning as one of the main cornerstones for meeting high standards and the real needs of students. Student-centered education is an active learning approach where students have an influence over the content, activities, materials and rate of the learning process (Collins & O'Brien, 2003). They talk

about what they are learning; they write about it, discuss it, justify it, relate it to their experiences and apply it to their lives (Chickering & Camson, 1987). In this way, students are placed in the center of the learning process, as they participate actively and have access to a range of learning activities, and the faculty member acts as a facilitator (UNESCO OIE, 2013b).

Independent and self-reflective learning

Self-management ability allows us to make decisions and choose our values. In this sense, everybody deserves trust and respect towards their potential and abilities (Rogers, 1982). In the educational context, this principle applies to ensuring that learning is meaningful to the student, who will adopt a self-managed approach to learning when they can relate to it. This means fully involving the student, including their affective and cognitive process (Rogers, 1982).

Independent learning refers to the ability to make decisions to regulate one's own learning to move it towards a certain goal (Monereo, 2001). Students decide the topics they want to study, the strategies that they will use and the time and place of study. Self-reflective learning occurs in turn, where students put meta-cognition into practice upon consciously making decisions, acquiring knowledge and implementing strategies to overcome difficulties. Self-regulation processes are therefore employed; students use these processes to systematically direct their thoughts, feelings and actions towards achieving their goals (Zimmerman, 2000).

UPC seeks to provide students with the tools they need to achieve a certain purpose in learning, through self-reflection and the self-assessment of their role and their results in this process. Furthermore, they have the strategic ability of knowing when and how to use these tools beyond the academic environment, with the aims of learning more throughout their life, preparing for the world of work, meeting obligations in their life as citizens and in their private life, and enriching their free time (Aebli, 1988).

Learning in diversity with a global vision

University is a space for pluralism, tolerance, inter-cultural dialog and inclusion. Cultural diversity is taking on increasing importance as a source of invention and innovation. It is currently a valuable resource at the service of sustainable human development (UNESCO IESALC, 2008).

The inter-cultural dimension is part of the higher education internationalization process which, among other definitions, comprises the integration of an international, inter-cultural and/or global dimension into the goal of teaching-learning functions or processes (Knight, 2004).

One of UPC's principles is the promotion of learning through the recognition, appreciation and respect for all aspects of diversity. It takes this as a cornerstone that supports the university's activities and as a central part of the professional and personal training of upstanding and innovative leaders. It recognizes the fundamental value of internationalization and inter-cultural aspects in this training, by offering different experiences that allow the student to enrich their vision of the country and the world.

Learning towards sustainability

Sustainable development is defined as meeting "the needs of the present generation, without compromising the ability of future generations to meeting their own needs" (UN, 1987), applying a balanced and integrated approach to economic, social and environmental dimensions of sustainable development for this purpose (UNESCO, 2014). Sustainability is defined as responsible actions of individuals and companies with a view to a better future for everybody, at a local and worldwide level (UNESCO, 2015).

Education, as a process whereby human beings and societies can realize their maximum potential, is decisive for promoting sustainability development (UNESCO, 2015). UPC aims to train people and professionals who, as leaders, are able to transform their environment, through innovative processes and methods towards sustainability, thereby contributing to the sustainable development of the country. The relationship between the university and stakeholders in its different processes allows it to ensure that its academic proposals respond to economic development, social well-being and environmental protection.

3. Academic Programs

Undergraduate

Social, environmental and technological challenges require a new supply of knowledge and occupational competencies (Ruiz, 2013). UPC offers a wide range of professional training programs that meet current occupational and social demands. There is an open and direct dialog with a range of *stakeholders,* allowing market information to be used to anticipate, design and permanently enrich the academic programs, taking into account the requirements and standards of Peruvian and international accreditation bodies.

Based on this, UPC offers undergraduate studies aimed at students who have completed secondary education studies, and Professional Studies for Executives (EPE) aimed at those with work experience.

Graduate

The UPC Graduate School provides knowledge, culture and development for professionals and executives interested in achieving superior performance and competitiveness in their field through master's programs. It proposes a change to traditional paradigms in professional training and education, training leaders capable of adapting themselves and efficiently keeping ahead of ongoing changes in the environment.

4. Curricular Plan

The UPC's academic programs are designed to allow students, through a meaningful, rigorous, consistent and flexible curricular plan, to achieve learning outcomes that contribute to the development of competitive professional competencies in line with the needs and expectations of society and of the local and global jobs market. These competencies make up the profile of a UPC graduate.

Graduate profile

The UPC graduate profile is made up of general and specific competencies developed throughout the curricular plan. The courses and their organization allow students to progressively achieve the defined level for each competency.

General competencies are developed in UPC's academic programs. These competencies, which empower the student to be capable of transforming their environment as an upstanding and innovative leader, are: innovative thinking, citizenship, critical thinking, written communication, oral communication, information literacy and quantitative reasoning.

Innovative thinking	Ability to detect needs and opportunities for the generation of innovative, viable, and profitable projects or proposals. Efficient planning and decision-making oriented toward the project's objective.
Citizenship	Ability to value human coexistence in plural societies, reflecting on the moral aspects of their own actions and decisions, and taking responsibility for the consequences thereof, within a framework of respect for citizens' rights and duties.
Critical thinking	Ability to exhaustively explore problems, ideas, or events in order to formulate well-founded conclusions or opinions.
Written communication	Ability to construct messages with relevant content, solid and clearly connected arguments adapted to different purposes and publics.
Oral communication	Ability to effectively transmit messages orally, aimed at different audiences, using different tools to facilitate their understanding and achievement of the purpose.
Information literacy	Ability to identify the necessary information, as well as seeking it out, selecting it, evaluating it, and using it ethically, in order to solve a problem.
Quantitative reasoning	Ability to interpret, represent, communicate, and use a range of quantitative information in real-world circumstances. This includes calculating, reasoning, and making judgments and decisions based on this quantitative information.

Specific competencies, defined in each academic program, are developed through specialty courses. These competencies bring together the abilities, knowledge, attitudes and values related to the profession, which must be achieved by students upon completion of their studies.

With the aim of putting into practice competencies that they acquire during their professional training, students carry out internships under real working conditions at institutions or companies related to their respective professional programs. Furthermore, prior to graduation these internships allow the achievement of general and specific competencies to be verified, so that actions can be taken to improve student training.

The curricular plan for each of UPC's academic programs is designed based on the graduate's profile; it comprises mandatory courses (general and specialty), and elective courses, in line with the competencies achievement level.

General courses

General courses are aimed at students from different programs and schools and are, in general, found in the initial terms of training. They are characterized for covering topics in general, as they are aimed at the development of general competencies and the integral training of the student that will prepare them for work, citizenship and life-long learning.

The purpose of the General Education Courses is to provide basic tools, knowledge and culture to allow students to successfully complete their university training. They provide general frameworks of reference for subsequently taking courses at a higher level of specialization with a solid base of knowledge, allowing students to manage a range of different contexts and scenarios such as cultural, aesthetic, social, political, scientific and technical.

Specialty courses

Specialty courses contribute to the development of competencies specific to the program and prepare students for the demands and competitiveness in their field of professional knowledge. At UPC students have the opportunity to start their professional training during the initial terms, when they familiarize themselves with, and develop specific competences for dealing with academic challenges.

Elective courses

Elective courses offer students the flexibility to explore other professional fields, fine-tune certain competencies or become specialists in specific aspects of the program, thereby adding value to their personal or professional development.

Modalities

UPC aims to give students the best possible learning experience, which includes a digital component in student-teacher interactions and in the development of competencies.

Courses are taught on-site and in blended and virtual environments in response to our students' diverse needs, meaning that access to higher education is expanded and the teaching-learning process made more flexible, without sacrificing quality.

An on-site course involves interaction between faculty and students in a real-life classroom. A blended course combines on-site teaching with virtual resources in a coordinated manner. Blended and virtual methods create a space in which the use of technological tools is fundamental, along with faculty-monitored independent work done by students.

5. Academic experience

In addition to that described in the curricular plans, UPC gives students opportunities to complement their academic experience by developing four co-curricular competences that are Leadership, Global Vision, Self-development and Community involvement.

Research

As part of their function, UPC encourages the development of a consistent culture of research in which faculty and students actively participate, coordinating scientific research with proposals to solve real problems. There is an institutional commitment to promote scientific research, in line with the highest Peruvian and international standards in all of the university's programs, meeting the most important requirements of the environment (UPC, 2014).

University Life

Learning at UPC is aimed at the integral development of students, so it is not limited to classroom activities. It goes above and beyond to provide spaces for student necessities and interests, while contributing to the development of university graduate competencies by expanding their vision of the world and participation in society.

University life programs include cultural, sporting, social responsibility and entrepreneurial activities, as well as international experiences.

International experience

Taking into account the global vision that students graduating from UPC must gain, international experiences are designed to contribute to the development of graduate profile competencies. They include academic missions, exchange terms and online courses with students from other countries, as well as dual degrees. Furthermore, the university promotes "internationalization at home", including exchange terms at the university for overseas students, welcoming study missions, internships, classes taught by faculty from other universities and videoconferences.

Counseling

As part of their function, this area seeks to promote and intervene to student wellbeing and their successful adaptation to the university system. In this way, it provides and coordinates workshops that work as support to meet the demands of the university environment.

Careers Office

In order to allow students to achieve successful insertion in the professional world, the Careers Office promotes and manages various actions, such as professional development workshops, counseling at seeking internships and support in the process of integration into the labor market. In this way, students have facilities to put in practice the competencies developed throughout their career in the real working world as competitive professionals.

6. Teaching-Learning process

University education has traditionally prioritized teaching processes over and above learning processes, with teaching aimed at transferring knowledge from the faculty to the student. Conversely, evidence is currently coming to light for the importance of students playing a leading role, and the impact of this on the teaching-learning process.

UPC has accepted that its responsibility is not limited to transmitting knowledge, as it also involves integral training based on the development of competencies, starting with a teaching-learning process in which students recognize their active role in their own learning and where the faculty member, taking into account and respecting the integral diversity of each of their students, leads them to independently and in a self-reflecting manner develop and respond to current social, environmental and economic needs.

In this way, at UPC all teaching-learning processes reflect the development of competencies based on a process aimed at allowing students to progressively achieve learning, understood as the group of abilities, knowledge, attitudes and values that will allow the student to effectively perform in a range of real situations in their personal and professional life.

Directing efforts towards achieving learning involves ensuring that experiences are designed to offer students a range of different ways to acquire new knowledge, connect learning to their prior experiences and recognize their value to professional and personal development, as well as giving students' opportunities to put everything they learn into practice through different strategies and methodologies. At UPC, there is an integral approach to assessment aimed at providing students and faculty members with appropriate and continuous information to allow them to make decisions that allow them to ensure constant learning progress.

This process requires faculty to take strategic decisions aimed at creating opportunities to allow students to learn about the needs of modern day society, to allow them to exercise leadership of different projects to generate sustainable change; to recognize and respect the integral diversity of each student, taking into account their different learning styles when designing and implementing each part of the process, and the use of strategies that develop in students the ability to reflect on their own learning, so that they can decide when and how to learn.

Throughout the entire teaching-learning process, students construct their learning based on reflection, analysis, discussion, assessment, presentation and interaction with their peers, during which they make connections between their prior knowledge and experience.

Use of technology in the physical and virtual classrooms supplements, facilitates and brings flexibility to the teaching-learning process, allows the formulation of a response to student diversity, encourages independent learning, expands access to higher education and responds to the progress of the knowledge society.

7. Academic Quality Management

Increased access to education brings with it the challenge of guaranteeing the quality of services provided by the university, with particularly emphasis on ensuring that student learning and success expectations are met (Tremblay, Lalancette & Roseveare, 2012).

To achieve the reference standards, UPC implements an academic quality management model with two main cornerstones: the standards cornerstone and the educational cornerstone (Pereyra, 2013).

The standards cornerstone is developed through an Integrated Academic Quality System, which develops, implements, supervises and promotes continuous improvement in the academic results and in the processes that govern them. These are the underlying standards

behind UPC's culture of academic quality and generate spaces for reflection and continuous improvement in which the entire university community participates. The educational cornerstone has been designed with the institutional objective of giving graduates proven general and specific competencies that are valued by the jobs market.

With a commitment to innovation, quality and demands, UPC develops two main principles that seek to guarantee that its programs and processes are valid and effective: *assessment and the program review*

The *program review* rigorously and impartially assesses the quality of academic and co-curricular programs. *Assessment* provides evidence for the development of general and specific competencies acquired by the students during their professional training. This consolidates an assessment and continuous improvement process, striving for the effectiveness and quality of processes involved in ensuring that students acquire competences.

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