Experiencias en un modelo centrado en el aprendizaje, con material instruccional en línea y casas universitarias: el caso del Centro Universitario de los Valles de la Universidad de Guadalajara

Experiences in a model-centered learning, instructional materials online and residence halls: the case of the University Center of the Valleys of the University of Guadalajara

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Resumen

Por su misma naturaleza, el éxito en la formación universitaria depende de varios actores y factores, cuyo desempeño facilita o inhibe el aprendizaje. La relación pedagógica en los cursos presenciales optimizados que se apoyan en las tecnologías-modelo desarrollado en el Centro Universitario de los Valles (en adelante CU Valles)- es afectada por el medio y el contexto de la institución. La calidad de la interacción no solo de los actores centrales del proceso de aprendizaje, estudiantes y profesores, sino también de la misma tecnología, el dispositivo pedagógico utilizado, el apoyo recibido (técnico, académico y social) así como el tiempo dedicado, el lugar y el equipo de trabajo, es decisiva para el buen desarrollo de un curso en línea en este trabajo.

La propuesta contempla la implementación de espacios de gestión de la información y del aprendizaje en línea (Material Instruccional en Línea, en adelante MIEL) y la instalación de espacios equipados con equipo de cómputo y con acceso a Internet en las localidades de la región denominados Comunidades de Aprendizaje y Servicios Académicos (en adelante CASAS Universitarias).

Palabras clave: Sociedad del conocimiento, ambientes virtuales, aprendizaje modelo, tecnologías de la información, comunicación, programas educativos, recursos electrónicos, material Instruccional, CASAS Universitarias.

Abstract

By its very nature, the success in university education depends on various actors and factors, whose performance facilitates or inhibits learning. The pedagogical relationship in the optimized courses that rely on technologies -model developed in Los Valles University Center (hereinafter Valles UC)- is affected by the environment and the context of the institution. The quality of interaction, not only of the central actors in the process of learning, students and teachers, but also of the same technology, the pedagogic device used, received support (technical, academic and social) as well as dedicated time, place and the team, is crucial to the successful development of a course online in this work. The proposal envisages the implementation of management areas of information and online learning (Online Instructional Material, hereinafter MIEL) and installation of spaces equipped with computers and Internet access in the towns of the region referred to as Learning Communities and Academic Services (hereinafter CASAS).

Key Words: knowledge society, virtual environments, learning model, information technologies, communication, educational programs, electronic resources, instructional material, CASAS, University.

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Introduction

The transformation of the student in the perspective of a more effective learning requires changes in cognitive structure and access to technological resources that facilitate you access not only to information but to media and collaborative work and self-managed, which implies one sufficient knowledge of the skills, strategies and techniques that can be used, both the generic as those associated directly to fields of knowledge and subject matter. Learn more effectively and how to learn, are fundamental purposes of training systems in higher education, in their pursuit of a higher quality of education; to do this, students require:

 Acquire and use cognitive strategies.

 Acquire and use Metacognitive strategies.

Utilizing strategies more than knowledge and the use of techniques or study habits, supposed trend that is observed in a large number of institutions of higher education. Strategies can be taught, and can be learned. Education, intervention, cognitive training, different models of teaching and learning support in greater or lesser extent the acquisition and use of cognitive strategies. The role of the teacher is essential, since explicit objectives and decide on activities, but, especially, to provide students with certain pedagogical aid mechanisms, you can encourage or limit the learning of such strategies. In addition to this point education institutions are incorporating computer and communication tools to establish a link between the contained academics, students and teachers

(Siordia, 2011) identifies three models of vocational training which involves the use of information and communications technology. These modes are:

• Under Model

• Mixed Model

• Model network

Attachment Model making as further support the use of tools, although it is not part of the curriculum, improving the experience of higher education using some elements that

encourage work outside the school or curriculum schedule, the classroom schedule students in the classroom.

The mixed model considers the incorporation of digital technologies as part of the training, the curriculum includes activities both in person at the premises of the educational institution as well as online activities for which it is very important that students have access computer equipment connected to the network.

The network model is characterized by relying on electronic media for all of their homework, administrative and communication, he held virtual activities for student interaction with their advisors, supporting materials, the learning dynamics, evaluation mechanisms are supported by electronic environments.

Given these scenarios the importance of incorporating the computer equipment and the Internet in schools for use in educational activities is evident, but not just simply the fact to include these tools include, but providing them to those involved in the scheme teaching and learning: teachers and students.

Institutions of Higher Education have the task of establishing strategies that bring learning technologies and access to information for all those who lack them from their homes and avoid the educational gap by simply partake in any of the 3 models aforementioned

There are many reasons exist for universities to participate in change, among other issues are the following:

- The need to do more for less.
- Changing learning needs of society.
- The impact of new technologies for learning.

Along with the growth of online education have emerged different operations to create online courses or design; this is distance learning, face or both.

(McAnally-Salas & Pérez Fragoso, 2000) propose that the characteristics for an online course support must have the following:

- Transmission and access.
- Control.
- Interaction.
- Environmental Features symbolic.
- The social presence created through the middle.
- The interface between the user and the machine.

The current need for learning led to use different forms and models of learning, the article says about one of the world declaration on education for all.

"At one end of the fully virtual courses that depend for everything from Internet are located, and another fully-face courses, which rely for everything from attendance; however, both the presence can be enhanced with Internet resources, such as virtuality can be strengthened by personal meetings. "

The classroom courses are offered in a conventional manner, the assistance of the teacher and the student in accordance with the schedule established at the beginning of each semester is required. The teacher develops the course and is supported by the resources it considers relevant, its main feature is that all classes are mandatory assists.

Enriched courses are classroom courses that are strengthened with some major resources from the Internet. Online educational resources (using the Internet) can be curricula, lectures, articles, virtual collections, glossaries, etc. They are selected or prepared by the teacher to support their classroom course. It is possible that in this mode is convenient (at the discretion of the teacher) replace some face session for consultation activities online resources without it being a policy of general application which can be reached without the pedagogical seek necessary support.

Mixed courses are a combination of classroom activities online activities. The number of sessions depends presence of planning and purposes of the course. So you can think, for example, that the theory can be reviewed online and practices conducted in face session. Another possibility is to develop, rather than four-hour session, one to two hours in exchange for some activities via the Internet.

The course plan may also include making available all the information students as targets, readings, activities guide, etc. And put a first session of introduction to the

course, set evaluation criteria and other details agreed jointly between teacher and student, other sessions can be scheduled at certain intervals, without falling in the form of classroom course.

1. Approach problem

The main challenges involve identifying the factors required to achieve 100% in the relationship between subject, access to technology and access to means HONEY, in a face-centered learning model, at the same time the elements that promote diversity are rescued online spaces in this process, the implications of it in virtual environments in a public institution and leaving aside the common denominator for meeting spaces in line with instructional materials, as well as those factors that affect or influence directly or indirectly the level of spaces in line with instructional materials to support the learning process.

The University of Guadalajara, from the 1995 reform, if a centralized university in the metropolitan area of Guadalajara, becomes a decentralized university and located in different regions of the state of Jalisco, with a departmental and matrix model, where a department offers courses at various educational programs in each of the regional centers.

The CU Valles is located in the Valles region of Jalisco Mexico, a region with few roads, most of which are in poor condition; in which 80% of the population is poor and has a great demand for training. In this context, the University of Guadalajara opened the decentralization project in the state of Jalisco, creating regional centers like CU in Ameca Jalisco valleys, the Centro Universitario del Sur (South hereinafter CU) located in Ciudad Guzman System Virtual University (hereinafter SUV) and four more regional centers, located in the high, lakes and coast, seeking to create conditions of equity and considering the maximum possible population with available resources.

In response to the separation of the student population, relocation costs and economic conditions in the pedagogical model CU Valles was restructured. One of the important elements in this restructuring is the time the student invests in learning process in the classroom, reducing this time to 50% and 50% in extra-courtly distributing supported

HONEY activities through management platforms and learning information providing students in their respective localities residence halls to reduce the digital divide.

1. Development

The academic model of CU Valles requires the support of self-instructional materials, with this we mean all those instructional resources and teaching that enable the student privately and personally advance his learning process, and in that sense electronic resources acquired great importance. In 2004, the amount of electronic resources increased by 96% compared to 2003, but between 2010 and 2011 it lost 59.50% of existing courses to 2010 (610) and currently offer 508, equivalent to 83 % peak reached in 2010. Based on the results obtained from the diagnostic made semiannually to all spaces with honey, a wide variety of structures and organization in the electronic resources available per course, from those who only use to communicate, to sketching a duly organized and structured instructional design teaching materials.

A strategy is required to facilitate the transition from student and academic society of knowledge community, through the use of information technology and communication (ICT), in modernizing and improving the quality of the education system through design instructional and teaching materials online and the ability to have access to technological resources for offers on the information in the knowledge society. They have to analyze the processes involved, parameters, compares the electronic resources, organizational structures, assessable elements, schemes of work, and according to the planning and the topics for each subject proposed an operating framework that ensures quality and good monitoring of activities by the active participants in each course, to guide to an objective assessment of academic supervision, care and achievements through these resources.

Against this background the CUValles through its Coordination of Learning Technologies (hereafter CTA) and the Coordination of Extension (hereafter EC) have established the program of the residence halls as a strategy to facilitate access to information resources and Internet access to students and the general public requiring connectivity and do not count on it from their own homes.

According to statistics provided by CTA, in August 2013 only 56% of students CUValles have access to the Internet, which facilitates the establish mechanisms to facilitate access to technological equipment for students who require and this will help your learning platforms support information management is not affected. (See Figure 3.1)

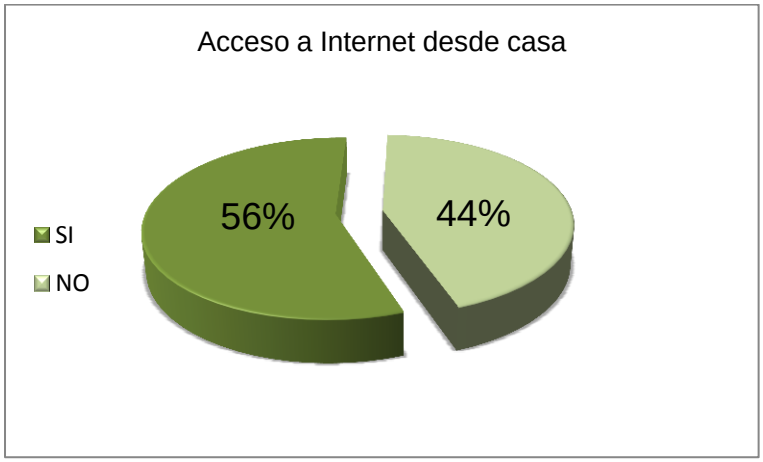

Gráfico 3.1 Porcentaje de Estudiantes de CU Valles con acceso a Internet desde sus hogares
FUENTE: Estadísticas de la Coordinación de Tecnologías para el Aprendizaje, Agosto de 2013.

Thus the residence halls are emerging as a strategy to reduce the gap between those with and those without access to the network; The houses are learning labs that are located outside the CUValles and from which they can access educational resources and materials that are hosted on the campus computing platforms itself. The houses are spaces that offer community information and communication services.

Communities of Learning and Academic Services work in cooperation between the University Center of Valleys and the Municipal Government in which each house be located. The Municipal Government provides physical, local or address space as well as a person who serves as the head of administration and cleaning it. The University Center provides technological equipment and support necessary to provide functional services provided. This makes it possible to extend the services outside the university campus facilities, leading to communities the same substantive functions of the university such as research, teaching, extension, and links through various programs such as: (See Figure 3.2)

- Tutoring
- Law Advisories
- Business Consulting
- Workshops and Continuing Education Diploma
- Advice on issues and computing
- Library Services
- Materials for Learning Languages
- Advice on Tourist Services

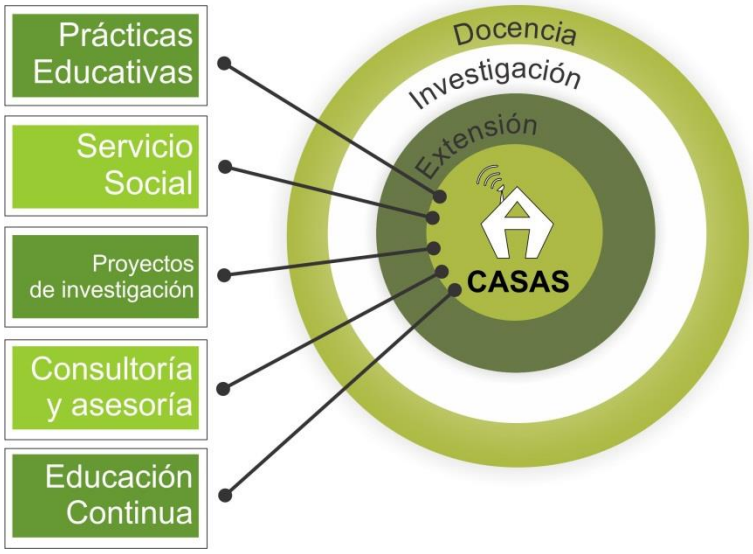

Gráfico 3.2 Funciones de Extensión de las CASAS hacia las comunidades de la región Valles del Estado de Jalisco

The residence halls started their activities in six municipalities in the state of Jalisco, the latter being those recorded higher enrollment and the most geographically remote, incidence municipalities belonging to the Valles region of Jalisco. These municipalities are: Ameca, Talpa de Allende, Tala, San Martin de Hidalgo, Ahualulco Etzatlán Market and Jalisco. (See Figure 3.3)

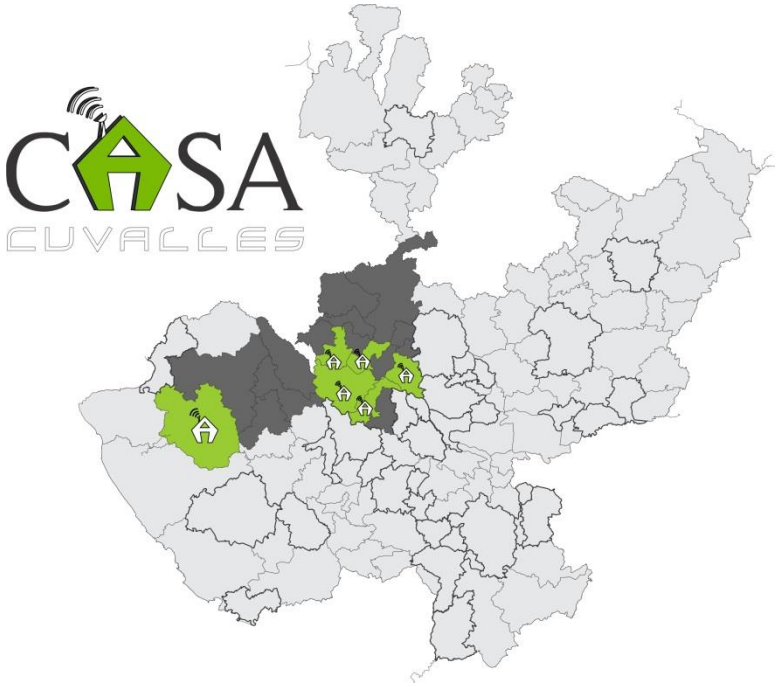

Gráfico 3.3 Comunidades de Aprendizaje y Servicios Académicos (CASA) en seis municipios de la región Valles del Estado de Jalisco.

Each house has 10 computer equipment connected to the Internet, also have wireless so that if a user chooses to bring their own laptop can be connected via WiFi. We also have teams of photocopying, document scanner and some of them videoconferentes to establish audio and video meetings with academics from the University Center and even other universities.

Staff CTA is who provides support to these computer equipment both in hardware and software, visits are made you schedule event at 6 municipalities that has a house and preventive and corrective service is provided to the teams that require taking a log of what was done in each.

In the medium term, CUValles look to extend the CASA program to the 19 municipalities of influence, the goal is that all of the Valleys region has a space equipped with computer technology and network access that allow bring most students the scheme of teaching - learning supported by the Information Technology and Communication. (See Figure 3.4)

Gráfico 3.4 Municipios del Estado de Jalisco que contarán con una CASA a mediano plazo.

1. Results

CU Valles currently has 4,313 students, 1,202 of which provides computer equipment of which 68% is intended for use by students, 6 residence halls which feature 10 teams from each computing infrastructure.

Gráfico 4.1 Estudiantes Matriculados por Ciclo Escolar en CU Valles
FUENTE: Estadísticas de la Coordinación de Control Escolar, Enero de 2013.

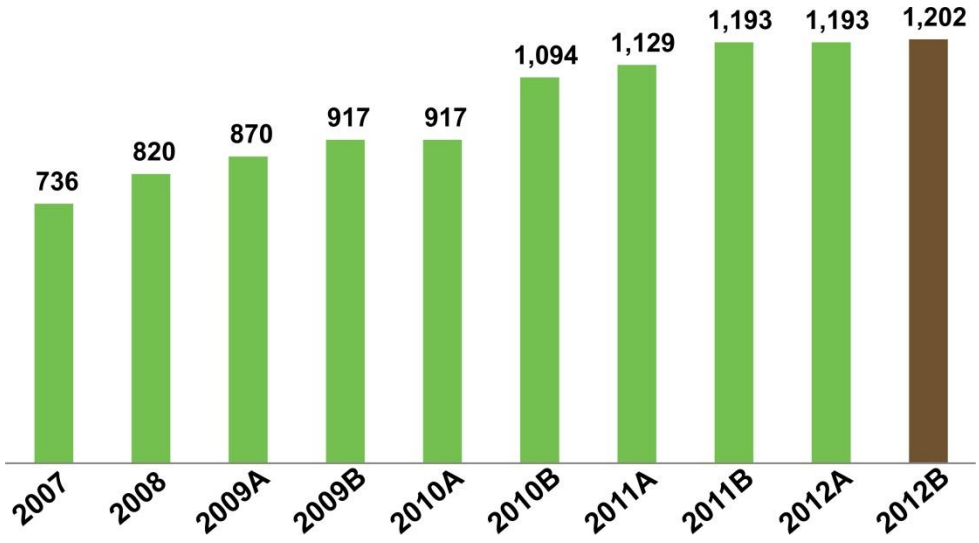

Gráfico 4.2 Equipo de Cómputo en CU Valles
FUENTE: Estadísticas de la Coordinación de Tecnologías para el Aprendizaje, Enero de 2013.

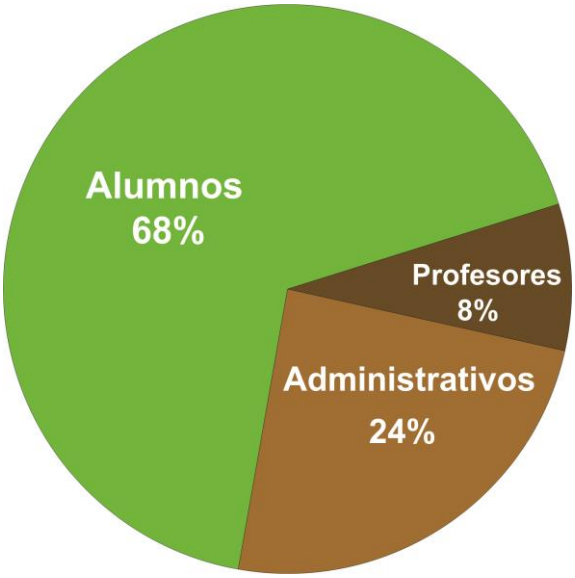

Gráfico 4.3 Distribución del Equipo de Cómputo en CU Valles
FUENTE: Estadísticas de la Coordinación de Tecnologías para el Aprendizaje, Enero de 2013.

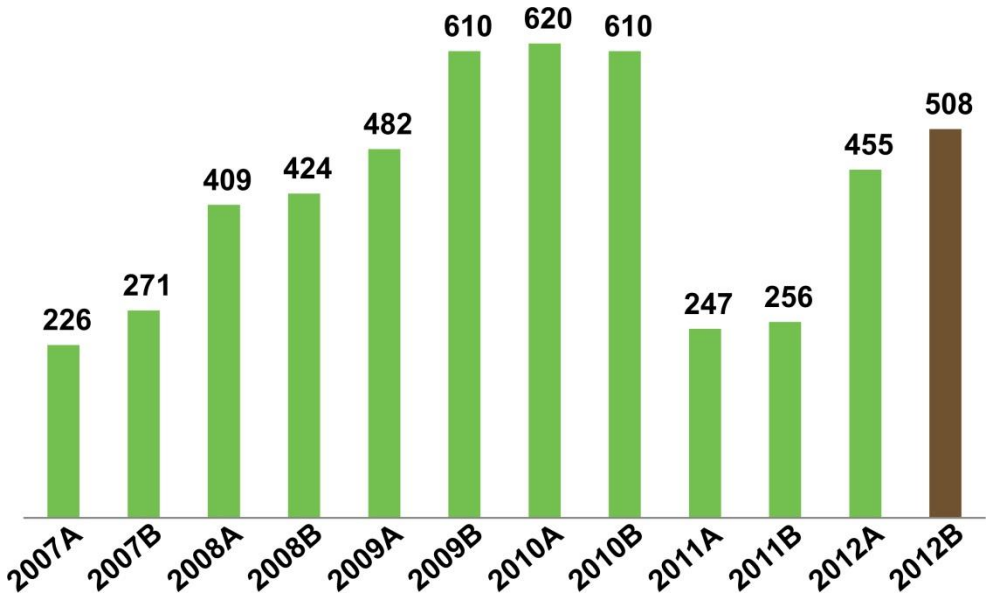

Gráfico 4.4 Cursos con MIEL
FUENTE: Estadísticas de la Coordinación de Tecnologías para el Aprendizaje, Enero de 2013.

According to the discipline affecting electronic resources, there is a clear difference in the use thereof.

It is essential instructional design approved by the academies through the collegial work, ensuring continuous improvement in student-student and learning itself interaction, since it is the main factor that shows an efficient measurement in courses

with honey, not were affected but, on the contrary, they have a positive impact on the academic model, even if the change is continuous instructor, semester to semester.

Currently, the CU Valles has a strategy to support teachers in the construction and renovation of HONEY as shown in figure 4.5 and 4.6.

Gráfico 4.5 Diseño, construcción y mantenimiento de MIEL

The model of institutional operation, provides the basis for interaction between the academic units responsible for programs and subject content, responsible for academic programs and course content is essential unity of design, maintenance and construction of spaces online with instructional design and educational material, a continuous training program in the area to ensure the proper profile, both students, as advisors, and also the unit for evaluation and monitoring of academic interactions through these resources, without forgetting the need to recognize the personal and individual of those who run the spaces with HONEY effort. (See figure 4.6).

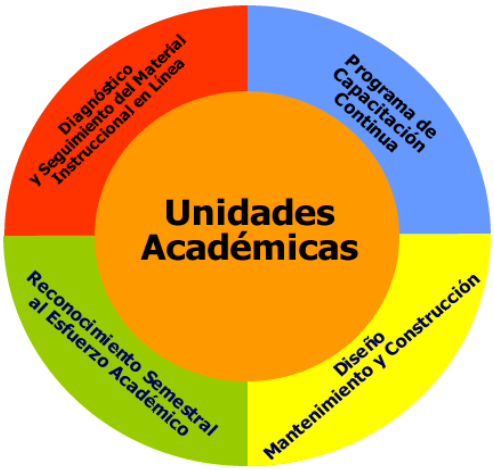

Gráfico 4.6 Modelo de operación institucional del Centro Universitario de los Valles para el mantenimiento, construcción y evaluación de los recursos en línea, para optimizar la actividad presencial con MIEL

With the participation and opinions of academics, students and administrators, discarding the differences that may exist between such practical or theoretical subjects or their own differences between the area of social and natural sciences, the common denominator for the spaces was in line with layout instructional spaces necessary to line a classroom model enriched with information and communication technologies, among which highlights the importance of: the presentation of the course and adviser, program, goals, evaluation criteria, accreditation and qualification, planning of activities inside and outside the classroom for meetings of the school year, communication tools, mailboxes with instructions, schedule of activities, lectures, assessment tools and practices and feedback activities.

Conclusion

In this paper we show that the effects of electronic appeals and developed in the CU Valles are closely related to academic performance optimized focused on classroom learning model.

CU electronic resources Valles seek to promote and ensure communication between the advisor and the student in order to save the trouble of not being in person at all times of the related educational work. For this we have resorted to the use of different technologies that facilitate communication between students and advisor delivering

activities, academic programming, presentation of the results. The emphasis on current use of technology focuses on the support or facilitation may be granted to achieve learning through them.

Under the results and electronic resources to be a strength of academic work in the CU Valles, a strategy that ensures the continuous development of online instructional resources, using a model of dynamic learning environment that advocate, it was implemented to evaluate and monitor the dependence of the variables involved in supporting the academic model Figure 4.6.

Currently the CU Valles has a large variety of spaces in line with resources found depending on the particular needs in each subject.

If there is no clear mechanism of evaluation, if not defended in agreement and justifying what is expected and what are the elements required are, diversity emerges as a whole as an effort to make optimal use of information technology and communication to address particular needs.

The diversity of strategies, resources and diverse use of them is good but leads to different contexts if you do not fall clearly the benefits expected with the use thereof; if we look for quality and tangible results, it is wise to join forces and not segment them, defining the operational framework, assessment and benefits for both instructors and students that it brings.

Factors affecting the level of honey are: the training of teachers and students in the use and conviction of the contributions of ICT, culture, lack of specialized technical support in instructional design and construction of online resources, technological resources; and factors that influence community use and exploitation of these resources by students are directly influenced by the educational principles as foster care, adequacy, methodological flexibility, metocognición, motivation, interaction, proximity, efficiency, participation and significant construction knowledge.

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