



The Autonomous University of Guadalajara, Mexico

**A CASE STUDY IN OPEN EDUCATIONAL RESOURCES PRODUCTION
AND USE IN HIGHER EDUCATION**

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BACKGROUND

1. The Autonomous University of Guadalajara (AUG) in Mexico was founded in 1935 as a private, non-profit institution. It was created by a group of academics, students and local leaders that fought for a higher education institution with real autonomy from central government, that they considered was strongly influenced by political interests and socialist ideology.

2. Today the AUG it is one of the most important universities in the country. It encompasses eight campuses, seven in the Mexican states of Jalisco, Nayarit and Tabasco and one in San Antonio, Texas, USA. At graduate and postgraduate level, the University offers 52 degrees, 27 specialised programmes, 17 masters degrees and 3 doctorates in the areas of Design and Architecture, Sciences and Technology, Economy and Management, Humanities and Social Sciences, Education and Medicine. In addition to this, the AUG runs, in collaboration with other education partners, an elementary school, two lower secondary centres and three upper secondary institutions. The AUG also has an area of continuing education (EDUCON), that includes around 50 programmes, mainly for professionals already in the work force.

3. In an effort to respond to its commitment to community development, the AUG recently launched another school of graduate studies: the University of the Community, (Universidad de la Comunidad) widely known as UNICO. Today there are three UNICOs in Mexico. These institutions are inspired by US community college's structures and goals, and try to offer the tools and knowledge the labour market immediately needs.

4. Around 20% of the students are from countries from around the world, since the AUG has around 100 cooperation and student exchange agreements with universities in over 40 nations. These agreements are with academic institutions mainly from North-America (USA, Canada), Latin-America (Chile, Colombia, etc.) and Europe (Spain). The University is also well linked to higher education associations and NGOs in the Americas, including the USA University Continuing Education Association (which has around 420 affiliated universities in more than 15 countries including Australia, Canada, Japan, New Zealand, USA) and the World Bank Global Distance Learning Network for Latin-America and the Caribbean.

5. The AUG has built around itself a University Corporative (Corporativo Universitario), which is a group of lucrative companies and institutes that offer products and services to the AUG, but above all, to other clients outside the University. As stated in its official electronic portal the Corporative has been created in order to finance technology innovations and projects development that will allow the AUG to achieve its goals. This corporative structure seeks to strength the links between the academic and productive sectors, offering a real field where "classroom" theory could becomes "commercial and productive" practices. The UAG Corporative includes: several hospitals and clinics, six hotels, a newspaper (Ocho Columnas), three professional sport teams (football, basketball and cycling), a TV chain, a publishing house, a real state company, legal services consultancy, various research centres, training programmes, a travel agency, etc. This is without doubt a particular and creative financing strategy for a higher education institution.

6. The case study visits took place at the main AUG Campus in Guadalajara on the 6 and 7 February 2006. The interviews were kindly organised by Terrence Karran, AUG Corporate Director of the Virtual Campus and Jose Alberto Chávez, Head of Distance Learning AUG Department. The interviewees participated actively and voluntarily in this exercise¹. All of them showed a lot of interest in the CERI Open Educational Resources project and how its results will be able to help them to improve their activities at the AUG. CERI expresses its gratitude for their time and their assistance in improving this report.

¹ Please refer to annex 1, for a full list of people interviewed.

WHY THE AUG WAS CHOSEN

7. The AUG was chosen as one of the cases to study, above all, for the following reasons:
 1. The institution fulfils at least three of the guidelines criteria of this study: i) use open educational resources (OER), ii) produce OER and, iii) use open source (OSS) and free software.
 2. The AUG is a prestigious academic institution in Mexico that proposes different types of higher education programmes (traditional face-to-face courses, distance/on-line studies, continuing education, community colleges). CERI considered that the OER study would benefit, if the scope of case studies include universities as diverse as the AUG.
 3. Having its own “business community”, the AUG has built a unique strategy to financing its academic, development and research goals. The strong interconnection between higher education institute and the productive sector, and its impact in innovation and technology, is an issue OECD wants to explore and better understand. For this project, OER team thought that the business/academic relationship may influence the way OER are conceived.

STATE OF THE ART

Open Content Production

8. In recent years the academic and student communities at the AUG have become increasingly active in the creation of digital learning resources. This production has been mainly for internal use and until now the University has not developed a formal institutional policy regulating the production and/or use of open educational resources.

9. Some of the digital resources produced are shared with partners outside of the University. However, as in other institutions, this is done neither on a regular basis nor to respond to an institutional strategy. Most of these initiatives are incipient and isolated acts, conducted by a teacher, a student, or a small group of these, mainly because of individual interest.

10. Among the learning digital tools developed at the AUG are: a) course content resources such as thematic presentations or case studies samples; b) video filmed lectures, c) on-line courses; d) teleconference and events (e.g. surgical operations); and e) a variety of digital thematic tutorials (e.g. clinic cases or health phenomenon) and guidelines on how to use different ICT tools (homepage construction, building on-line courses, use of Internet).

11. Today, the open contents production at the AUG could be classified in two strands: first, those learning resources used mainly internally and included, in the year to come, in the internal University new learning platform; and second, those learning objects freely offered to the community, through some university electronic portals or services.

Course material development

12. It is the decision of the teachers and students at the AUG, whether they share the digital course material they develop to external partners or not. It is known that some teachers and students do it, but they are not the majority. This may be because: a) they are afraid the resources will not be used to achieve the goal they were created for, b) the material will be used without recognising their authorship, or c) because they are unaware of the potential benefits this could bring to them.

13. Those who decide to share their content production, do it mainly through three different paths: a) uploading the material in the web, b) sending it to colleagues, civil associations and even journalist and politicians who ask for it; and c) the author sends it to those s/he considers would be interested in it. This operation is done mainly with some “traditional” tools like: a) professional or personal e-mail and homepages, b) during academic seminars and congresses, or c) academic department, project and seminar electronic homepages.

14. It is difficult to calculate the volume of the resources produced and shared by the AUG academic community. However, a new learning platform (Plataforma UAG) is under construction within the AUG, and one of its goals is to become a “repository” for digital learning resources used by teachers and students. Through this platform (which would include learning resources produced at the AUG but also open and non open resources from abroad) to university managers expect to have a better inventory of the digital learning resources used by the AUG academic community and shared with other stakeholders.

Open resources for the community

15. The AUG offers through its portal **Genesis** few learning resources that are open to everyone. Genesis is the academic portal of the AUG, accessible from the main webpage, and it offers the main on-line information related with: i) the academic departments, units and services, ii) extra-curricula activities; and iii) general administrative services.

16. The few open resources included in Genesis are traditional electronic or html presentation of different themes related with the culture, religion and arts (e.g. Cubism, Christianity, Olmecs civilization). They are now a marginal component of the Genesis portal. These resources were first created to be used mainly internally, but today they are free and anyone can use them. However, these resources are UAG property and they cannot be modified by external users.

17. The Faculty of Medicine has a programme called **Telemedicine** (Telemedicina) which has as goal to offer medical consultations through videoconference and on-line services to people in remote area in Mexico. This mechanism allows the patients in the field, to contact by e-mail or video experts at the AUG hospitals and others specialist from other hospitals linked from the AUG team, to learn more about their diseases and the way they can heal, without leaving their communities. Some new digital learning tools are on development within the Health Area at the AUG. Among these, real time chirurgical operation broadcasted in the internet.

Open Content Use

18. As well as with the production of open content resources, the AUG does not have a particular institutional policy regarding the use of open digital content in general. It seems that open resources are not used broadly within the academic community, with perhaps the main exception being the Area of Science and Technology².

19. The main arguments mentioned during the interviews were the following:

- Most of the academics and AUG staff interviewed affirm that using excellent and high **quality** learning material is one of the University priorities. Most of the time, open resources are perceived as low quality tools or they find difficult to warranty that these resources have the quality level the AUG expect from all its teachers.
- Some times, they prefer to avoid using resources “from the Internet” simply because they do not want to deal with **copyright issues**. The AUG have a strict policy of respect of legal rights procedures when using different learning materials (buying the licences, etc.). This is normally done through the University Legal Department. Thus teachers and instructors chose not to use other resources than those produced by themselves or acquired formally through the institutional channels.
- Teachers do not use open sources, just because “they **do not need them**”. According to some of the interviews, several academics feel they no not need to use other resources from someone else, either because i) they consider the ones they produce are better and are adapted to its programme or ii) they use the additional content tools offered by the author of the book or software they buy. This last point will be explained further in the following section of this report on *open source software use*.

² The academic activities at the AUG are divided in Areas (Sciences and Technology, Business, Humanities and Social Sciences, etc.). In other institutions this Areas are called Departments, Faculties or Divisions.

- It seems that there is a **lack of awareness** of the possible benefits of using open resources and the existence of legal tools, such as Creative Commons, that may facilitate the adaptation to their needs and quality standards.

20. A minority of teachers and instructors seem to use some of these resources. However, it appears to be, again, an individual practice and it is difficult to measure the phenomena, or to give specific examples. When asked, the DAPA staff (Support Division for Teaching and Learning) estimated that 10% of the Area of Sciences and Technology uses open source content and software. It seems that this division is, by far, the area that uses open sources the most.

OSS use

21. There is no institutional policy that promotes or discourages the use of OSS. In practice, some teachers and many students use some kind of free and open source software within their daily work. The use of free software in general and of open source software in particular within the AUG can be classified as follows: a) the “commercial” free software, b) the “classical” open source software c) the free governmental software.

22. Many of the students and teachers use some **free commercial software** that they can download directly from the Internet. Some of the AUG portals, such as the AUG Design Center (Centro de Diseño), facilitate this search by linking its own homepage to web pages specialized on downloading resources (e.g. www.tucows.com, www.softonic.com, etc.). It is difficult to estimate all the type of tools and the frequency of use, however, it is well known that the scope of software goes from very user friendly and well spread communication (MSN, Hotmail, Yahoo, Skype...) and stockage tools (WinZip) to more sophisticated design and management tools.

23. **Open source software** use at the AUG seems to be in frequent. Nevertheless, it appears that in some departments such as the Sciences and Technology OSS are used and encouraged by specific teachers and instructors. Some teachers and instructors from this area consider that it is important for students to be aware about these tools and to use them. One specific recommendation is Open Office. It seems that Open Office is used already in some sciences labs and personal computers and teachers encourage students to consider this software during its daily work. They also exhort them to include other open source tools in their daily tasks, such as some operative systems (Lynux), development tools (Java, PHP) and learning management systems (Moodle).

24. As in other institutions, the convenience of using OSS is not shared by all academic departments within the AUG. Some of the people interviewed underlined the risk of using “no commercial” software during their lessons. In areas such as Business, Tourism, Economy or Management it was revealed that training students with software that are not “normally” used by the companies, could put them outside of the labour market.

25. Another free software used at the AUG, are those provided by government units. An example of this is the **Government software** produced by the Ministry of Finance (through the unit called Service Tax Administration, SAT) in order to facilitate the tax calculation and payment of moral and physical persons. This software is used by teachers and students during their courses and it is possible to be downloaded for free from the main page of the Faculty of Accounting at AUG.

OSS production

26. There is not a significant production of OSS at the AUG. It has been mentioned that some efforts has been done at the Sciences and Technology Department, again mainly because of personal interest of teacher and students. The results have been limited, and constrains have mainly been of budgetary order.

CONCLUDING REMARKS

27. The AUG does not have a formal policy on the use and production of OER and it seems that decisions are mainly being taken on an ad-hoc basis. Some discussions within different departments and individually among teachers or instructors have already taken place, but no official and homogenous strategy has been defined so far. However, the creation and launch of the new learning platform may proof the existence of a good momentum within the AUG to discuss these issues and it seems that the creation of an internal repository of learning objects is already a good beginning.

28. Deliberated and organised information sessions about OER, including open licences, open software and the implication of open content may be of great benefit for directors, teachers and the rest of the academic community. Special emphasis needs to be given to quality and authorship rights since this appears to be the main barrier for teachers to use OER and share their own learning resources.

29. Several indicators suggest that AUG may continue and strength its development through technological and innovative strategies. This might also be done in parallel with the University current commitment to strength local community development. Thus, it seems “naturally”, that in the near future, the AUG may be need to consider OER as an option to achieve these goals.

ANNEXES

List of interviewees³

Dr. Nestor Velasco-Pérez, Academic Vice- Rector

Dr. Ricardo Beltrán-Rojas, Academic Director

Humberto Gutiérrez-Zamorano, Head of Telecommunication Department

Amador de la Torre, Head of Systems Department

Bernardo Mota-Velasco, Systems Project Leader

Arturo Jara-Torres, Systems Programmer

Manuel Muro-Martínez, Coordinator of the Business Area

Juan Carlos Arámbula, Director of the Accounting BA programme

Celina Gallegos, Director of the Tourism BA programme

Atala Sosa-Hernández, Director of the International Business BA programme

Samuel Bernal-Lara, Director of the Economy BA programme

Santos Magaña-Mayo, Director of the Management BA programme

Jaime Hernández-Ortiz, Coordinator of the Sciences and Technology Area

Marco Burgoin-García, Computer Systems Engineering

Helios Mier-Castillo, Engineering professor

José Nuñez, Sciences and Technology Area

Bernardo Mota, Sciences and Technology Area

Arturo Jara-Torres, Sciences and Technology Area

Humberto Gutierrez, Sciences and Technology Area

Julietta Becerra-Juárez, Coordinator of the Design Centre

³ This list follows the order of the interviews.

Dr. José Saavadrea-Sánchez, SECS

Dr. Gabriela Garibay-Bagnis, Director of the Support Division for Teaching and Learning

José Alberto-Chávez, Head of the Department of Distance Education

Yadira Esparza-Rodríguez, Head of Department of Education Technology

Francisco Fraire-Maldonado, Educative Technology Project Leader

Useful links

www.uag.mx

<http://corporativo.uag.mx>

<http://genesis.uag.mx>

<http://genesis.uag.mx/material/material.cfm>

www.uag.mx/negocios/contaduria.htm

www.telemedicina.uag.mx

<http://genesis.uag.mx/centrodiseño/ligas.cfm>