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#### **ORIGINAL**

# Internationalization of the curriculum: Connectivism approach supported by relational leadership. A case study

Internacionalización del plan de estudios: Enfoque de conectivismo apoyado en el liderazgo relacional. Un caso de estudio

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#### **ABSTRACT**

**Introduction:** previous to the world pandemic covid-19, professors from a Mexican Public HEIs, located in the south of the country, had been implementing educative platforms as an internationalization of the curriculum strategy to include technology in their teaching, specifically in DACEA division. The first institutional platform implemented in 2004 was Moodle, Socrative, and Edmodo was the second step by a group of 20 out of 250 professors until 2020 when Microsoft Teams became the institutional educative platform.

**Method:** the objective of this qualitative article is to characterize the roles and responsibilities of educational actors in the new digital management derived from the covid-19 pandemic in a Mexican Public HEI.

**Results:** The findings indicate that the institution homologated the use of an educative platform at an institutional level, a training on the use of this new platform was given only covering the technical aspects, but there was still the pedagogical training missing for Flipped Classroom Methodology. The Syndicate leader with the aid of a small group of active professors, provided an online training course oriented towards the certification of digital competences with the participation of 120 professors from the 12 areas of the university. This work between the main educative actors: the institution and the syndicate leaders along with the professors has created the foundations for university engagement and a new administrative culture of collaboration.

**Conclusion:** it is concluded that all educative parties when properly engaged can lead to the completion of objectives avoiding change resistance that sometimes arises specially when professors migrate from present mode to a distance mode.

**Keywords:** Internationalization of the Curriculum; Connectivism Approach; Relational Leadership; Higher Education.

## **RESUMEN**

Introducción: previo a la pandemia mundial Covid-19, profesores de una IES Pública mexicana, ubicada en el sur del país, venían implementando plataformas educativas como estrategia de internacionalización del currículo para incluir la tecnología en su enseñanza, específicamente en la división DACEA. La primera plataforma institucional implementada en 2004 fue Moodle, Socrative y Edmodo fue el segundo paso de un grupo de 20 de 250 profesores hasta 2020 cuando Microsoft Teams se convirtió en la plataforma educativa institucional.

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**Método:** el objetivo de este artículo cualitativo es caracterizar los roles y responsabilidades de los actores educativos en la nueva gestión digital derivada de la pandemia de covid-19 en una IES Pública mexicana. **Resultados:** Los hallazgos indican que la institución homologó el uso de una plataforma educativa a nivel institucional, se impartió una capacitación sobre el uso de esta nueva plataforma cubriendo solo los aspectos técnicos, pero aún faltaba la capacitación pedagógica para la Metodología de Aula Invertida. El líder del Sindicato con la ayuda de un pequeño grupo de profesores activos, impartió un curso de capacitación en línea orientado a la certificación de competencias digitales con la participación de 120 profesores de las 12 áreas de la universidad. Este trabajo entre los principales actores educativos: la institución y los líderes sindicales junto con los profesores ha creado las bases para el compromiso universitario y una nueva cultura administrativa de colaboración.

**Conclusión:** se concluye que todos los actores educativos cuando se involucran adecuadamente pueden conducir al cumplimiento de los objetivos evitando la resistencia al cambio que a veces surge especialmente cuando los profesores migran de la modalidad presencial a la modalidad a distancia.

Palabras clave: Internacionalización del Currículo; Enfoque Conectivista; Liderazgo Relacional; Educación Superior.

### **INTRODUCTION**

A new management model of internationalization from the educational institution has emerged, which is responsible for managing academic programs and virtual learning environments. This paradigm allows, both in the internal nodes of the organization and in external networks, the interaction between educational actors and the production of knowledge to occur as a global community. With a connectivist approach, this approach is known as internationalization of the curriculum (IdC).<sup>(1)</sup>

A connectivism-based IdC views the university as a system whose goals, strategies, and methods must be redefined in order to establish networks designed for learning and communication with the rest of society. The curriculum is constructed through analog and digital access to knowledge in multiple ways; dynamic, cooperative, intelligent, and on the web.<sup>(2)</sup>

In this regard, Aponte & Jordan(1) are concerned with this internationalization strategy proposed 24 criteria for the Internationalization of the Curriculum from which the following points are recovered.

- a) Culture: defined as lives, values, and the better comprehension of an international and intercultural culture.
  - b) Educational model: the design of training process aimed to develop global competencies.
- c) Strategic plan: priority issue for the development of the institution and cutting-edge training for students.
- d) Internationalization policy: the review of mobility and agreements for the definition of curricular issues.
  - e) Curriculum policy, purposes of training global students with global competencies.
  - f) Virtuality policy: incorporation of technology based on international standards.
- g) Leadership: understood as the vision of the rector to promote and establish self-sufficient teams with competencies for collaborative work, self-regulation, and co-responsibility.

Leadership is a concept that agreeing with Robbins & Judge, (3) and is reflected on the ability to impact a group functioning in order to achieve shared objectives, which allowed to identify four types of leadership: charismatic, transactional, transformational, and authentic.

These four types of leaderships are present in any organization but are executed according to the needs identified by any leader, Madrigal Torres<sup>(4)</sup> also states a list of skills a leader must show in order to guide effective team works: communicate, organize, integrate, direct, control, motivate, delegate, and mediate.

Leadership is also about people where feelings, interests, aspirations, values, attitudes, and any other human emotion is involved, therefore is necessary for leaders to identify the types of groups of people that are under his guidance to know when to pressure, when to let people do their activities in a freer way, and also when to consider opinions or be open to proposals.<sup>(5,6)</sup>

Transformational leadership refers to providing people the opportunity to solve problems through a new way of thinking, to having high expectations, to emulate a character and behavior through performance. (7)

Whereas transactional leadership refers to two types of approaches, one the reward or punishment procedure implemented in organizations in order to motivate work teams, and the other is the implementation of micromanaging their followers. (8) In the educational arena, two types of leadership are present in Mexicans leaders: transactional and transformational.

Branson and Marra<sup>(9)</sup> argues that leadership relations should count and be studied, therefore a new concept

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arises relational leadership which is oriented to the processes and its dynamics when a relationship is produced withing the interaction of the appointed leader and those that should be led, and that is constituted by the following phases:



Note: Adapted from Branson Figure 1. Phases for developing relational leadership.

In phase 1, the leader must create mutual beneficial relationships, this requires to be sincere with others, and to become an active member of the group in order to understand the group members strengths, culture, and values.

In phase 2, the leader must be an accepted member at this point, be able to recognize the works of others, be ready for the group's right to accept or reject any additional activities to previous committed and be willing to protect the group from any external problems.

In phase 3, the leader is a model of emulation, but also the one who fosters curiosity, innovation, and possibility. (10) Making the team works feel the workplace is shared, celebrated, and fully supported.

In the last phase, the leader must express where the organization must go by making everyone feel what is relevant, when to start working on a specific activity, using their knowledge and skills, without telling explicitly and avoiding controversy, a consensus must be generated so it feels as if it were everyone's contribution and work together to the completion of the preplanned goals.

According to Richardson et al.<sup>(11)</sup> it is possible to engage university communities through technology in the several activities that facilitates ICT integration and the building of a technology oriented collaboration and communication.<sup>(12)</sup> In this process leadership is essential as being required for most organizational transformation efforts;<sup>(13)</sup> especially on those fueled by ICT innovation, but this approach demands engagement.<sup>(14,15,16,17)</sup>

It is in moments of crisis, when administrators have to adapt and solve any problem presented in their institutions. The covid-19 pandemic is one of those that forced school leaders to research about remote teaching systems, its implementation, the selected format, and also the new responsibilities for their communities, thus changing the administration form of higher education institutions [HEIs] and their leaders' which implied a 9-stage procedure for including educational platforms as an alternative for remote teaching. (18,19)

The authors also mention a new term called digital management which is defined as the modifications in the management approach which is taken place in an organization as a result of this digital transformation, which according to school administrators allowed cost and time reductions as opposed to having face-to-face management and meetings. (18,20,21)

## **METHODS**

For this qualitative study, the research method used was case study, (22,23) which it is used when the case is a relevant, revelatory, or an extreme story. This case study consists of eight elements: context, goals, obstacles, solution, results, benefits and call to action.

The qualitative techniques used were documentary review, (24) which was carried out first in order to analyze the recent literature on topics related to relational leadership and technology engagement from the leader's responsibility.

Secondly, the literature review of primary and secondary sources which are documents or sections of a document that collects key sources on the topic in a synthesized way. (25,26) This review was about the technological implementation generated by the institution being studied and synthesized in a chronological order, but in comparison with the current mainlines in the international literature. (27,28,29,30)

The third technique implemented was participant observation with moderated degree of observation when the researcher is a non-committed investigator but an active member of the social group in study scenario. (31,32) The study was carried out from March 23rd. 2020 to December 16th, 2022.

The objective of the study is to characterize the roles and responsibilities of educational actors in the new digital management derived from the covid-19 pandemic in a Mexican Public HEI.

#### **RESULTS**

#### Context

Universidad Juárez Autónoma de Tabasco is a Higher Education Institution located in the southeast of Mexico. It is a public university with the mission of contributing in a significant manner to the transformation of society and the development of the country, especially in the state of Tabasco. Equipped with the necessary technological, infrastructure, and human talent to teach ethically and responsibly to future citizens and professionals. (33)

Present mode courses and programs are offered since 1958 and it is formed by 12 divisions to the present. Online courses and programs are also offered via Moodle Platform called Sistema de Educación a Distancia (Distance Mode Education), program which began in 2004 and is still operational. The rector's vision since he began activities in January 2020 is to lead the university to becoming self-sufficient and offer sufficient coverage to all its programs.

For the acceptance of new candidates in March, the calling is made in the months of September or October from the previous year, by the beginning of the new school term, the university rector encountered himself with the COVID-19 pandemic obstacle. News all over the world and the nation announced its beginning in December in Wuhan, China. The leading administrator concerned with this situation and with the idea of offering virtual programs, signed an agreement with Microsoft Company and the implementation of the educational platform: Microsoft Teams.

#### Goals

The main goal was to keep operations running normally for both administrative and educative. On March 23rd, 2020, operations began in the Microsoft Teams Platform denominated Virtual Classroom after the mandatory confinement from the presidency on March 19th, 2020, five days after the official mandate.

The second goal was to overcome the resistance to use the platform from the part of the community. At first, there was resistance from professors arguing the lack of training, from students arguing the lack of connectivity, and the parents the lack of technical equipment. The third goal was to provide a system that could be used without connectivity and of friendly use on computers, smartphones, and tablets. The company allowed the use without connectivity and provided an App that could easily be installed in Smartphones, but also the possibility of having access as a web page from a smartphone or tablet.

The fourth goal was to provide a series of trainings for administrative, faculty and students on the use of the platform, and the series of Apps that can be integrated. Each course or training was designed for specific features of the platform. For administrative users, how to monitor classes without interrupting, how to verify the openings and closings of sessions, the length of the sessions, and attendances. For professors on how to create announcements, assignments, sessions in Calendar, gradings, rubrics, boards, monitor and control of students. For the case of students how to have access to each group, upload assignments, verify grades, send messages, and the options for access.

## **Obstacles**

The first obstacle encountered was the resistance to change which is a very common problem in organizations. Professors mentioned in several university virtual spaces their discomfort to three situations:

- 1) their contract was for present mode classes in a limited schedule, so receiving assignments, questions, or sessions outside their designated timing was out of the question.
- 2) some senior professors had no computers/laptops in their residences, therefore no need for connectivity. Junior professors had the initiative but not the means for virtual teaching.
- 3) some other professors had previously been working on specific platforms (Google Classroom, Edmodo, Socrative for exams, Social Media, such as WhatsApp, Facebook or Twitter) and did not migrate for the fear of confusing students with a new one, and losing them in the process.

The second obstacle to tackle was, in the case of faculty, and the teaching methodology. The problems observed with virtual classrooms were:

- 1) senior professors turned their virtual sessions into a conference or lecture, where there was no interaction from the student and they were the providers of knowledge even though the educational model is student-based centered, where the student is responsible for building knowledge and sharing in the classroom.
- 2) junior professors followed the senior methodology due to the lack of training or knowledge about virtual teaching.
- 3) a small group of senior and junior professors asked for help to a particular group of colleagues with short tutorials shared via WhatsApp in the university groups.

## Solution

Considering the situation around the world and in the country, the rector with the aid of Microsoft, opened 7, 606 virtual classrooms for 2,868 subjects to cover the 59 degrees distributed along the 12 divisions of the institution for the semester February-August 2020. Being the only institution in the southeast region with this virtual infrastructure and support.

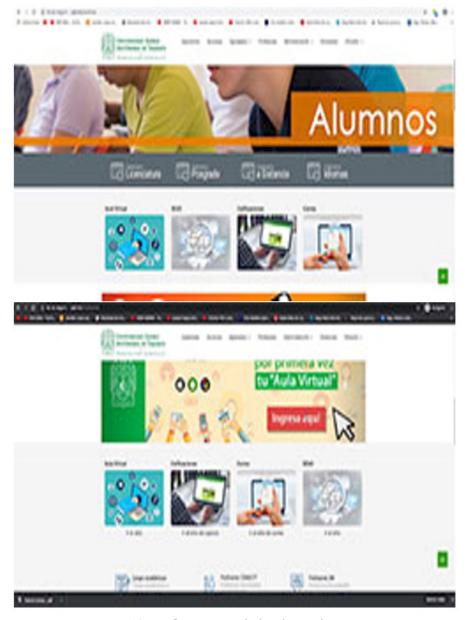


Figure 3. Entry sections from the university web page

Note: Capture made by the authors.

On May 13th, 2020, there was the first international professional exam via Virtual Classroom, and at that moment, Virtual Classroom- UJAT had:

- 8,032 virtual groups
- 2,096 online professors
- 34,083 benefited students
- More than 500 active administrative workers

Virtual Classroom- UJAT - Languages Center had:

- 191 teachers
- 20,120 enrolled students
- 5,557 new accounts

- 14,545 degree students enrolled at least in one language course
- 959 virtual groups

By the end of 2021, when it was announced a possible return to present mode lessons, the university had already been prepared classrooms with the necessary equipment for what it called a hybrid mode. Some days the lessons were going to be virtual, and some others were going to be face-to-face, which arose another question related to the spaces and the amount of people allowed to be in each classroom.

Because of the need detected by a group of professors, an initiative was presented to the leader of the Syndicate, then the initiative to the rector by the leader and the group of professors, and the proposal was accepted: the use of the Flipped Classroom methodology, a training for professors on Digital Competences, the publication of a book, and a certification with ICDL Examination Center.

For virtual teaching and environments Flipped Classroom was the proper approach for this institution in the event of returning to present mode. It is an approach where students watch a professor's explanation on video either synchronous or asynchronous during class or at home, then practice what was learned when they come back to class.<sup>(34)</sup>

The reasons for flipping were aligned to what was needed:

- a) Personalization: self-paced, help with learning difficulties, specific study material, individual support if needed.
  - b) Active Learning: focus on higher order skills, facilitate interaction, provide useful feedback.
- c) Engagement and attitudes: encourage learner's own learning, promote close contact school/parents, and manage specific classroom issues.
- d) What to flip: communication skills, curiosity, first approach to topics, brainstorming, small collaborative groups, supervision, and an effective learning process.

The training took place from November 2021 to May 2022 with the participation of 120 professors belonging to the 12 divisions of the university. The virtual mode training covered topics related to the Flipped Classroom methodology as well as other aspects closely related to the topics to be evaluated in the upcoming certification. The group of facilitators is formed by 5 multidisciplinary professors and researchers, who also hold a Flipped Classroom Certification by Edmodo, the same group who presented the initiative.

In the same month, the Digital Competences Book was published and shared with all the participants, then it was available on the Syndicate web page for download, later on in March 2022, the presentation of the book was held during the highest celebration of the university: La Semana de Juárez. This is the first time an academic collaboration happens between a university, its syndicate, and engaged faculty members.



Figure 4. Official presentation of the book at Juarez Institute

Figure 5. Front cover of the book: Digital Competences for the 21st. century professor



Note: Capture made by the authors.

These joint efforts have created a positive impact in the relation among the faculty members, the students, and the parents, thus building trust in the community and in the society. Going back to present mode was a swift transition with the implementation of Flipped Classroom.

#### **RESULT**

From the administrative view, the rector proudly announced that the university was awarded with a recognition from ANUIES TIC 2022, in two categories. ANUIES, which is a national organism, that supervises and monitors all the Mexican HEIs. The award was given for 2 projects: "Statistics System of Virtual Classroom" and "Hybrid Classroom", First Place and Special Mention respectively, competing with other 83 projects from 42 Mexican HEIs.

As for the faculty, at the moment, participants of the Digital Competences diplomat are being prepared in aspects related to timing, type of questions, and a brief review of topics so they can succeed in the evaluation and obtain their certification. Unlike other certifications, this one has no expiration date, it is an international renowned certification from a company with 22 year-experience and recognized by the Malta Further and Higher Education Authority. The certification evaluates the following aspects:

- -Use and application
- -Key concepts
- -Planning
- -Resource selection of ICTs
- -Management of the learning environment

Regarding the students learning processes, they could read in advance materials, view short videos, and investigate previous their lessons and attended prepared and eager to participate actively, as they felt secure about topics, they were not going in blind, and showed interest in their learning process.

**Benefits** 

It is relevant not only to mention but to highlight the benefits from the three educational actors' derived from the efforts carried out with the support of the relational leadership of the rector of this institution:

Administrators: The use of an institutional educational platform, a transparent process for supervision, control and follow-up of responsibilities, a direct communication channel to all levels or directions of the organization, and a virtual identity to create engagement, and trust making the human talent feel needed, recognized, and valued so they are ready to support their institution whenever they are needed.

Professors: From the institutional trainings, from the Syndicate training, and especially for those close to being certified: the understanding of key concepts and the best use of ICTs to support teaching, learning, and evaluation in the virtual classroom through a better planning of lessons, sharing planning, materials, resources, activities with other colleagues and their students prior to lessons, is part of the new digital culture that has to be aware of the security considerations for an educational platform.

Students: A sense of empathy from and for faculty, better interactions between professors, building of trust, transparent assignments, examinations and evaluations, clarification of grades with evaluation rubrics, feedback in their assignments, the development of global skills to become a better citizen and a skilled professional.

#### Call to action

The sense of being heard, being considered, or even valued when decisions are made and taken into action in moment of crisis, is the premise for building trust inside an educational organization, and it becomes key especially when trying to avoid resistance to change.

Crisis can happen any moment, which is why leaders must develop relational leadership, to understand first-hand what could happen, how to prevent it, and how decisions will impact in its human talent or a community.

This new digital management requires leaders, faculty, administrative, students, and parents to be ready to adapt and to the call whenever is needed. To understand some decisions come by the force of external agents or certain situations out of the control of people, and every decision is made based on the benefit of all the educational actors involved.

#### CONCLUSIONS

This endeavor carried out by the main educative actors: the institution and the syndicate leaders along with the faculty, has created the foundations for university engagement and a new administrative culture of collaboration. It is concluded that all educative parties when properly engaged can lead to the completion of objectives avoiding change resistance that sometimes arises specially when administrative, professors or students migrate from present mode to a distance mode.

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## **CONFLICT OF INTEREST**

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