

**Article Title:** Educational Technology Applied to Vocational Training

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## **1. SUMMARY**

Vocational training is the fundamental basis for the socioeconomic development of our country, Guatemala, so that there is a wide variety of technical instructors and professionals from different specialties who help train new collaborators for the Guatemalan industry.

Over the years and with the new generations of students, new methodologies, techniques and teaching strategies have emerged - learning that each instructor must adapt to achieve the transfer of the impact content applied today and the need for application for the business sector.

## **2. INTRODUCTION**

Currently with the new generations of students from the different areas of technical specialty and with the atmosphere of new information and communication technologies, the Technical Institute for Training and Productivity - INTECAP, in response to the demand for professional training and the needs training in our country, it has been detected that the majority of instructors must adopt the new information and communication technologies as essential tools to implement in the professional training process that is changing every day, both the way of teaching and the to learn from students.

## **3. DEVELOPMENT**

For fifteen years I have participated in professional training processes and in my experience as a teacher or as a technical area instructor, consultant and trainer of trainers, I have observed that both instructors and participating students from the different areas of specialty must have a high degree of constant and collaborative research and learning in a community of interest, and this is achieved accompanied by information and communication technologies.

Each instructor and student must be self-taught, in such a way that they can take advantage of digital media to their advantage, for example, we currently have telematic tools, synchronous and asynchronous platforms, collaborative tools and cloud storage. An entire ecosystem of different technologies that allow you to develop your knowledge, abilities and skills to enhance your professional training and position yourself as one of the best in your field of performance.

It should be noted that, in order to make good use of the new information and communication technologies, it is necessary to be self-motivated and to be aware that we live in a globalized world, where learning does not depend solely on a professional training institution, on a book ,

from a tutor or instructor, but the professional training goes beyond the traditional teaching-learning methods taught many years ago.

With the appearance of ICTs and aware of living in the XXI century, it is necessary that all actors dedicated to the teaching-learning process must give a mandatory turn to the way of living, teaching and learning, taking into account that the vast majority only use information and communication technologies as a means of leisure and entertainment in social communities without any purpose for educational development or research and prototyping.

At present in the field of professional training, new concepts of words have appeared that each member of the educational community is adopting and adapting to the development of the teaching - learning process. The new concepts and words most used by the tutors, instructors and students of the XXI century, allows us to emphasize the innovation of our teaching - learning systems.

Among the most used concepts, the following can be mentioned:

- Gamification: It is the teaching - learning methodology based on challenges and rewards.
- Playful learning: Learning based on play.
- Training by projects: It is the strategy in which students set an objective and base their learning on it.
- Collaborative learning: Integration of students to generate significant contributions on a certain topic.
- Flipped classroom: This learning is based on sharing audiovisual resources prior to the development of the class.
- Webinar or webinar: It is the teaching process from screen to screen in real time.
- LMS: They are platforms based on learning management systems.
- MOOC: Teaching systems based on massive open courses through the Internet.
- Social networks: It is the interaction community of different messaging platforms.
- Synchronous Training: It is the training process used in real time through an electronic device.
- Asynchronous Training: Training process that uses a resource-based learning platform, without real-time intervention of a tutor.

It is possible that we have a whole technological ecosystem, but it is not only enough to know the list of concepts and words that appeared with the internet, its browsers and unlimited information search engines, the fundamental and high-impact concept is that each educational institution, tutors, Professional training instructors and all those front-line actors that make up the role of learners must adopt the implementation of information and communication technologies as a holistic platform, which allows them to develop their specific competencies by enhancing their abilities and skills in the development of their tasks.

#### **4. CONCLUSIONS**

It is important to know a wide variety of telematic tools and technologies applied to the teaching-learning process to determine the best way to teach and learn from the different actors that are part of the process.

Each instructor or trainer must know, adopt and adapt information and communication technologies to develop their teaching work, taking as a reference that they are not only isolated tools that allow me to transfer knowledge or gamify the teaching process, what is important is the application of the technological ecosystem that invades our mobile devices today and that are already a fundamental part of everyone's life.

And finally I must mention that from my own experience I can say that our participating students of the different specialties should be trained or trained by applying most of the resources mentioned in this text, taking as a reference that it is no longer possible to use training models focused on The tutor, teacher or professional training instructor, currently the main actor is the student or participant who must interconnect each knowledge acquired and apply it to a series of related topics to form a final project of implementation of different technologies and thus be able to achieve a comprehensive knowledge.

#### **5. BIBLIOGRAPHY**

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## **AUTHOR'S CURRICULUM**

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Trainer of Trainers: Instructor Training School - INTECAP

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Certification Consultant for Labor Competence - INTECAP - 2009 - 2020

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Free Courses:

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- Training of Learning Facilitators Phase I and II. INTECAP - Guatemala
- Microsoft Office Specialist Microsoft Corporation USA.
- Discovery CCNA Network Fundamentals Cisco Academy
- IT ESSENTIALS - CISCO
- Organizational Strategic Consulting "Methodologies in Innovation Management"
- Consultants in Innovation Management "Design Thinking"
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