Research Article

SOCIAL CHALLENGES SUPPORTED BY TECHNOLOGY FOR LEARNING SOFT SKILLS

*Sonia Martín Gómez and Angel BartolomeMuñoz de Luna

Universidad San Pablo CEU, Madrid

Abstract

This article describes an educational innovation project carried out in the first and second courses of the Leadership Title of the San Pablo CEU University. During this academic year, a new educational project based on virtual mixed teaching (hybrid) has been launched in both courses, where the masterclass or more theoretical sessions have been complemented with a challenge based learning linked to the subjects of both courses, applying the Design methodology Sprint, for which the Teams platform has been used. The objective was to make the student participate in their training process, by seeking an experiential learning of the soft skills, typical of any leadership course, by applying agile work methods, which are increasingly used in companies. In this sense, challenge-based learning has been an experience where participants have developed solutions that require an interdisciplinary and creative approach for the development of these soft skills.

Keywords: Plataforma, Challenges, Docencia Hibrida, Liderazgo, Habilidades.

INTRODUCTION

The Own Title of Leadership is a transversal title to the entire San Pablo University that, until the 19-20 academic year, was taught in person by professors of the University itself trained in Leadership and was complemented by professional parallel sessions of some specific topic of the different modules. The academic year 20-21 we reconsidered making a complete transformation of the degree, without distorting its raison d'être: to train the students of our University in an integral way, complementing their studies with the acquisition of the so-called soft skills, always bearing in mind the values of our institution. The technical, mechanical and practical knowledge known as hard skills are no longer enough to succeed. Employers consider that graduates currently have sufficient technical and intellectual preparation, so they focus on hiring people who have soft skills. Although this is considered a competitive advantage in companies, the educational community, in general, gives little importance to the teaching of these skills and this is where our institution has a differentiating character. These soft skills include communication, teamwork, problem solving, critical and innovative thinking, creativity, self-confidence, ethical understanding, lifelong learning capacity, ability to cope with uncertainty, as well as willingness to accept responsibilities (Clarke, 2017; Moore and Morton, 2017).

This process of change was caused by several circumstances:

1. The results of the evaluations carried out by the students after finishing the sessions of the degree in the course 19-20, where they showed us the high degree of satisfaction with the sessions taught by professionals from different fields. Approximately 71% of respondents reported a level of 4 on a scale of 5.
2. Currently, stable environments are giving way to the so-called VUCA world, which is characterized by the presence of four factors:

Volatility, Uncertainty (Uncertainty), Complexity and Ambiguity. These VUCA environments pose the challenge for stakeholders to become agility learners who know how to adapt the way of working to the conditions and objectives of the project, achieving flexibility and immediacy in the response to adapt their development to the specific circumstances of the environment. (Kucukozyigit, Ali C., 2020; Deepika and Chitranshi, J., 2020)

In adverse and complex situations such as the one we are experiencing and which we will have to face from different areas, leaders with high emotional intelligence, with principles and values, who are able to communicate accurately and make decisions quickly, without having all the possible information due to the novelty of the situation and the uncertainty of the future. Knowing how to manage teams, working collaboratively resolving possible conflicts ethically, with agile work methodologies that allow working online, also contribute to becoming the leaders that society needs at this time. (Succi, 2019)

3. By 2030, it is estimated that the demand for technological skills will increase by 55%, the requirements for social and emotional skills (leadership, management, etc.) will increase by 24%, and the demand for highly cognitive skills (such as creativity or complex information processing) will increase by 8%, according to the Future of the Workplace report, from the consulting firm McKinsey.
4. Higher education institutions need to experiment with new teaching-learning formats and strategies that provide new forms and experiences of learning that are relevant, effective and that guarantee a high quality of education (Redecker et al. 2011).

Therefore, during the current academic year, the Degree is being taught under a new prism more in line with the demands of our students, the changing environment and the labor market itself. During the first semester, the sessions corresponding to the first and second courses have already been taught, and for the second semester those of the third and fourth courses are planned.

*Corresponding Author: *Sonia Martín Gómez*
Universidad San Pablo CEU, Madrid.

These sessions have been formed for both courses in two blocks:

1. Training block, with a series of master classes of professionals on communication skills and influence in the case of first and team leadership and futures design for the second course.
2. Block of solving challenges in a collaborative way, using the Design Sprint methodology and mentored by a professor of the University's Own Degree.

The challenges for the first are linked to communication, and during this course challenges have been launched as diverse as communication with customers in the digital age, responsible communication and Big Data, communication in older age groups, improving social networks from responsibility, effective communication of business values, communication with storytelling, ...

The challenges for the second have been related to the 17 UN Sustainable Development Goals, so the students have worked on issues on the eradication of poverty, how to end hunger, achieve quality education, gender equality, economic growth and employment, among others.

In the student's intranet in the part corresponding to Leadership, students have detailed information of all sessions, along with their respective links to the zoom platform and, later, once they have been made, the videos of all of them. In this way, the student has a schedule of sessions on his own intranet and can choose to view them synchronously or asynchronously.

Source: Authors.

Illustration. 1. Vision intranet of the student with webmaster.

For the master class the zoom platform is used through its option Zoom Video Webinars since us Offers host live events, real-time meetings, and conferences over the Internet with greater control over the audience. Instead of interacting through video and audio, attendees interact with the host and each other using chat and a Q&A panel. It is for simple useo and economico, and With it it is possible to gather up to 1,000 participants simultaneously in the same transmission.

b. Innovations provided by the methodological model

The innovations that have been proposed represent improvements with respect to the previous methodology. The mere fact of separating the masterclasses, in webinar format, from the mentoring sessions for solving the challenges has already had positive effects, since the students knew how to perfectly discern their most passive or active role depending on the session they attended and have been aware that the plenary

sessions were essential to be able to correctly solve the challenges. In addition, through webinars, participants learn how to incorporate this tool into their collaborative learning system. It should not be forgotten that virtual education (accelerated by the pandemic caused by COVID-19) requires the use of methodologies that allow achieving the level of quality not only of the contents but also of access to resources, their availability and their pedagogical level (Campo *et al.,* 2011). On the other hand, the Challenge Based Learning or Challenge-Based Learning (ABR) has been a huge motivation for students, since being an active methodology they have taken the reins of their learning, allowing them, in addition, to be participants in the possible solution of a real challenge important for the whole society, which has also generated a commitment to reach the solution even having to dedicate extra time.

The ABR was an Apple initiative aimed at primary and secondary education. It emerged from the project "Apple Classrooms of Tomorrow - Today" (2010) and the purpose was to identify the essential design principles for schools of the XXI century, focusing on the relationship between students, teachers and curriculum. Subsequently, in 2017, the Instituto Tecnológico de Estudios Superiores de Monterrey published the Radar 2017, whose objective was to identify the most relevant innovative pedagogies and technological trends, for which 145 professors from all the schools belonging to this university intervened, highlighting and n regarding the pedagogical trends that were going to have more importance in the future, Challenge-based Learning, Competency-Based Education, Flexible Learning, Gamification and Project-Based Learning. Of all these trends, it was concluded that the one that will have the most use in the future will be the first. (Educational Innovation Radar, 2017)

The ABR is based on addressing learning from a generic topic and posing a series of challenges, related to that topic, that students must achieve. These challenges involve the contribution of concrete solutions from which society or a part of it can benefit. For this, students have technological tools, resources (internal and external to the subject) and, of course, experts who help them in the process (teachers) (Cordray, Harris and Klein, 2009). Therefore, this methodology is inserted under the umbrella of Experiential Learning, seeks to learn by doing, putting into practice theoretical knowledge and seeking the acquisition of those that are needed to solve the problem at hand, while developing numerous skills, including teamwork, time management and planning and autonomy, among others (Fidalgo-Blanco *et al.,* 2017).

This pedagogical approach is also closely related to Problem-Based Learning (PBL), but is a learning effort in which the student is involved in the real solution of a relevant problem linked to his environment; PBL also poses a problematic situation related to the physical or social environment, but often uses fictitious case scenarios, In addition, its main objective is not to stir up the problem itself, but to use it for the development of learning, (Larmer, 2015), while the ABR s e focuses on the acquisition of new knowledge and the development of skills (soft skills) and competencies from the emergence of the challenge. It also has similarities with Project-Based Learning (PBL) in involving students in existing problems in society by developing solutions to that problem. However, the main difference between the two would be that the ABR offers open problems that the student has to decide

which challenge to address (Gaskins, Johnson, Maltbie and Kukreti, 2015). Another fundamental difference between the previous methodologies and the ABR is that the latter includes technology that is generally used by students in the process of finding the solution. As for the Design Sprints, they have allowed teams to isolate a complex problem and turn it into a concrete and focused objective, encourage collaboration and participation of people with different backgrounds and points of view and test innovative solutions by evaluating the response of real users. The Design Sprint is an agile work methodology that students must handle. In the Horizon Report 2015 (Johnson, Adams, Estrada, and Freeman, 2015), which collected the main current and future trends in the educational field, it was already highlighted as one of the key aspects for Higher Education the implementation of agile change strategies and provide students with innovative quality content that allows them to learn first and then apply what they have learned.

METHODOLOGICAL DEVELOPMENT

Detailed description of the model

The methodology of the project has been the same for the two affected courses, the only difference being the content of the sessions and challenges proposed. The professional sessions have had a masterclass format and have been taught weekly since the beginning of the semester, using the online platform zoom, and making students participants in the chat. These sessions are recorded and uploaded to the student's intranet to be viewed asynchronously if necessary. Subsequently, to complement the more theoretical sessions, the methodology of challenge based learning has been applied, considered a new learning method based on the use of challenges as the focus of educational activity (Boud and Feletti, 1998). This methodology, in the Own Title of Leadership has been carried out in different stages: firstly, the students of any degree of
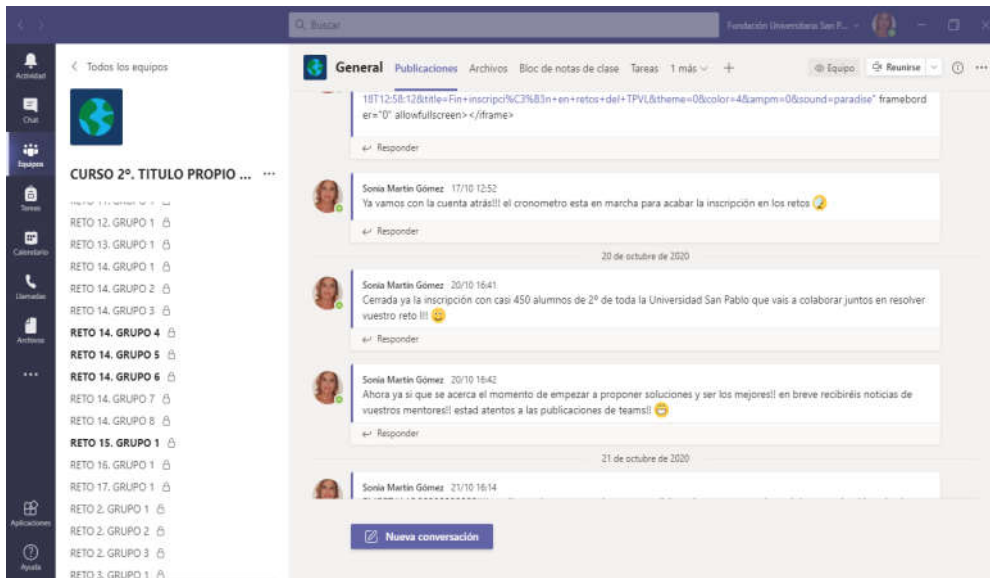
Source: Authors.

Illustration. 2. Set up Teams channels for different challenges.
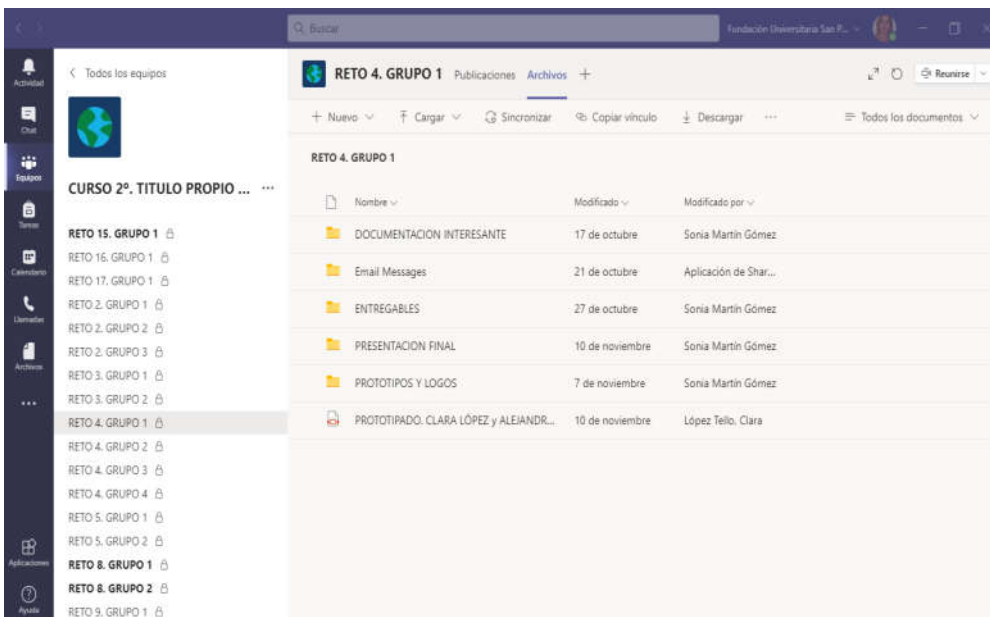
Source: Authors.

Illustration. 3. Documentation for each of the channels

the University have chosen through Google Forms the challenge on which they wanted to work, then groups have been formed with the choices made, which has allowed students to also learn to manage diversity by forming groups made up of students from different specialties and campus. In the first, almost 282 students have registered, which have been distributed in 20 groups, while in the second, 478 students have been enrolled, who have been divided into 30 groups, using the channels offered by the online collaborative work platform Teams. In lustration 2 appears as an example how the channels have been configured for the second year students, and in illustration 3 how they have worked within each channel, where several folders were created: interesting documentation, where all members of the group and the mentor can upload articles, reports, news,..., related to the challenge; deliverables, in the form of minutes of each meeting; final presentation, where the video that will be evaluated as the final result of the proposal is uploaded; and prototype folder, where students upload ideas on the minimum viable product. The chat publications have been used by the mentor to remember hours of future mentoring sessions tasks to be carried out, resolution of doubts, ..., but above all the mentors have used this chat to encourage and encourage students in this sprint. On the part of the students, the publications have been aimed at resolving doubts, but it has also served as a communication link within the group.

To achieve the challenge and solve the chosen problem, students will have to perform various actions that will help them to a satisfactory solution. Among them they will have to investigate about the subject, either by web pages or interviewing experts and related people, they will carry out simulations of possible solutions that they obtain, making satisfaction questionnaires to possible users or they will have to contact other students who have dealt with similar topics to seek synergies. The challenge must be broad enough to accommodate various solutions, which must be feasible to be implemented in the context in which they are (Tecnológico de Monterrey, 2016). Once the solutions are obtained, the results of these are evaluated by the teacher and by other external evaluators or teachers who have intervened in the process. Both the final result of the solution and the process through which the student has gone throughout the project are evaluated.

In our case, the challenges to be solved have been related to the 17 Sustainable Development Goals (SDGs) set out by the UN in its 2030 Agenda (United Nations, 2018). If the Millennium Development Goals were the telescope that allowed rich countries to see the developing world and project its progress, the SDG scan be considered the mirror through which all nations are reflected in their own policies and performance (Kroll, 2015). These objectives also integrate the three dimensions of sustainable development: economic, social and environmental, which allows students who work in them to belong to different grades. Therefore, we think it is an optimal proposal to work on a leadership degree where values prevail as a form of action and thought. We must not forget that social relevance was one of the fundamental points in the UNESCO World Conference on Higher Education (Paris, 2009). Universities were encouraged to develop greater social responsibility and knowledge generation to respond to global challenges ranging from food security, climate change, water management, as well as intercultural dialogue and public health through the formation of ethical citizens committed to

peace building, the defense of human rights and the values of democracy (Tünnerman, 2010). Solving challenges has followed the Design Sprint methodology, a new problem-solving model developed by Google Ventures in 2010, which gained enormous popularity in 2016 with the publication of the book Sprint, by Jake Knapp. It consists of a process that allows validating complex ideas and problems in just five days, through the creation of rapid prototypes and testing with real users.

Before starting to apply this technique, we defined four key points:

1. The big challenges to work with: they must be clear and concise. The more concrete they are, the better the conclusions that will be obtained from the Sprint. We had them defined in advance so that the students could choose which one to work on.
2. The Sprint team: should be the more multidisciplinary the better, and be made up of 7-10 people who were assigned a mentor (professor of the University Degree). In our case the average of the teams has been 12 students. These groups correspond to Teams channels, owned by the mentor-teacher.
3. Time: The team must dedicate itself exclusively to the Sprint, and it is necessary to block five consecutive days in the calendar for the entire team. As this step was complicated with the students, we decided to do it in five sessions spread over two weeks, whose hours were discussed in the first session, unilaterally set by the mentor. The online realization of the sessions has allowed to set different hours outside the academic hours and even on holidays if the team so decided, also allowing its recording in case any member could not attend synchronously.

4. Space: generally, you have to reserve a room for the whole week, with blackboards, flipcharts and all the necessary material, where the team can move and communicate freely, in a comfortable, pleasant and relaxed atmosphere.

In our case, all this was replaced by the virtual space generated by Teams, where the students themselves shared the music they chose to concentrate better. A virtual whiteboard application called whiteboard was also used to share ideas and proposals and onedrive or sharepoint to perform the final collaborative work.

Once these points were defined, the Design Sprint process began, which includes the following steps:

1. Understand: It involves creating a map to identify the problem and choose a specific goal to solve.
2. Ideate: Includes the proposal of competitive solutions on paper.
3. Decide: Here we seek to choose the best available option and transform those ideas into testable solutions.
4. Prototyping: Create a realistic prototype.
5. Test: Test the prototype and get feedback from real users.

Each of these steps was made to coincide with a mentoring session, previously set in the schedule decided by the students themselves. The sessions ended with the formalization of a deliverable that is collected in a private folder of the channel, where the key points of the session are specified, the periodic reviews made, observations, etc. as a record or diary. One of

the group members is chosen to fill out this record so that the groups are aware that the challenge is theirs, not the mentor's, who is only a guide of the process. However, the role of the mentor is very important in the different stages, because he must periodically monitor the work done by the students to be able to make feedback for improvement, since the more frequent the feedback between the mentor and the group of students greater the help that will be can offerthem. The mentor can make use of individual or group feedback, focusing on the task rather than self-esteem, since although feedback that addresses self-esteem has positive effects on learning and can cause improvements from the increase in self-confidence and ability to achieve, they can induce an opposite effect, where the student supported by positive comments does not recognize that he needs to improve some aspects of his work (Anijovich, *et al.,* 2010). After the process, the students uploaded their final proposals in video format, poster, website wireframe ..., to a folder to which the professionals who had taught the masterclasses were given access to form a jury and choose the groups that had given the best proposals. In this way, we manageto carry out a formative evaluation that is the one that is carried out during the process of solving the challenge through the deliverables of the students and another summative evaluation that takes into account the results obtained from the resolution of the challenge. Formative assessment is carried out during the development of the teaching-learning process to locate deficiencies, introduce corrections that may take place in the educational project and make the relevant decisions to optimize the process of achieving success by the student. In our case, it would be the feedback made by the mentors throughout the Design sprint sessions. The summative evaluation aims to establish reliable balances of the results obtained at the end of a teaching-learning process. It is based on the collection of information and the development of instruments that enable reliable measures of the knowledge to be evaluated (Martinez-Melis, 2001; Escudero, 2003), which correspond to the elaboration of a final video that summarizes the solution of the challenge and that evaluates professionals outside the institution.

Finally, it should be noted that this whole process promotes the use of several technological tools, depending on the moment of learning, as shown in Figure 1, but we can also affirm that their use has contributed to a better management of all of them not only by the students but also by the teachers-mentors themselves. These tools generate communication spaces suitable for the development of some of the skills and, above all, attitudes of a new type of critical, collaborative and creative technological literacy; generating a new practical framework suitable for the socialization and acculturation of young people (Pérez Tornero, 2008).

b. Self-assessment performed for analysis and feedback

The self-assessment is carried out through the quality team in charge of writing the following surveys:

1. A first survey for external trainers of the different masterclasses (all in the same survey where the student chooses the speaker to evaluate). It launches the second week of November right in theweek of completion of the sessions.
2. A second survey of professors (mentors) of the University degree. This is launched the last week of November at the end of mentoring.
3. The third survey deals with the contents taught in the different sessions and their way of delivery, and is launched together with that of teachers.

All surveys are carried out in a simple way with QR code (system to store information in a matrix of points). and maximum five questions of simple answer between 1 and 5, since it is tried with the result of the same to make a feedback that allows a continuous improvement of the title, especially in a stage of important change in its methodology. We also intend in this way to incorporate the use of QR codes to teaching and make the response to a survey, very useful for the university, something comfortable and easy for the student. Of the results obtained in the survey,it is worth noting, as shown in figure 2, the ease that students find for access to the two platforms used, since of the respondents 94.8% confirm that they have not had problems with their accessibility and only 2.8% admit not having been able to enter the webinar.

Source: Own elaboration based on the data of the survey carried out.

**Figurea 2. Perception students about accessibility platforms**

The perception of the different webinars is also interesting, since 83% affirm their duration, frequency and content very useful while only 3% do not consider them useful and / or believe that they have been long and too frequent. The remaining 14% consider that these webinars will not be useful now, but in their professional future and agree with duration.

Source: Authors.

Figurea 1. Methodological tools used
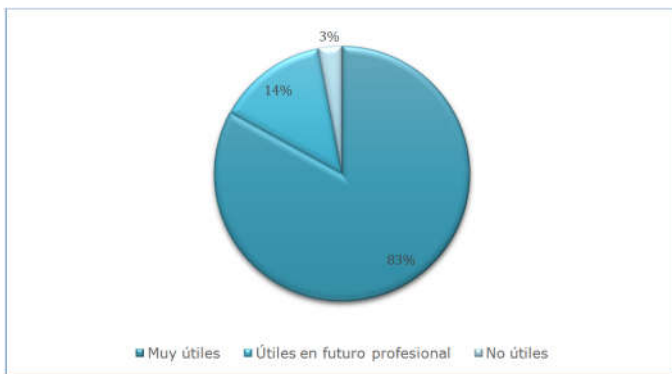
Source: Own elaboration based on the data of the survey carried out.

Figure 3. Student perception of webinars

As for the Design Sprint methodology, 91% say they have learned the use of an agile and collaborative tool that they can use in any project compared to 3% who do not find it useful, and 6% believe that it is useful for the APR but do not know if its application is useful in other projects.
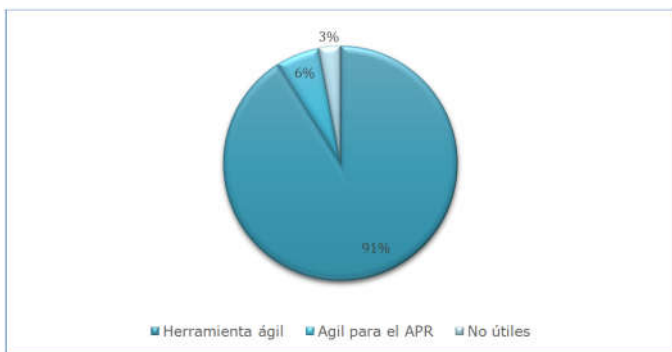
Source: Own elaboration based on the data of the survey carried out.

Figure 4. Student perception of the Design Sprint methodology

c. Results achieved after themethodological change

We proceed to distinguish the different results achieved by all the agents involved:

1. Results for the University: promote the values that are the identifying sign of our institution, making them public to other bodies, thanks to the collaboration of professionals and external companies and the participation of the projects of our students in international competitions, also aspiring to improve employability as a result of learning and experiential management of soft skills.

2. Results for teachers: learn and practice a new learning methodology that, in addition, is carried out in sprint, with the difficulties of limiting the development of a project that, under normal conditions, would be carried out in a semester. Being mentors instead of teachers has also been a real "challenge" for teachers.

3. Results for external speakers: for all of them, the results achieved are above those expected, according to data from a brief informal feedback that we made at the end of their sessions. Qualifiers such as gratifying, surprised by the reflective attitude of the students or impacted by their participation in the chat, ..., are some of the answers given in this feedback.

4. Results for the student: very satisfactory, as can be seen from some testimonies that we have put in the previous section and that are only a sample of the opinion of the almost 700 students involved. This is also reflected in the fact that approximately8-3% of students have responded that the content seen in their course has allowed them to acquire new skills and abilities for their professional future. Not only have they learned with the different masterclass but they have been able to verify it by solving real challenges, which has been a great motivation.

Conclusion

The new teaching-learning methods are feasible instruments for education in values in the curricular dimension and this is the main reason why it was decided to carry out this project in the Leadership Title; We think that challenge-based learning has not only allowed us to implement a new learning model, but also to integrate into this new way of learning, a critical, reflective attitude based on the principles and values by which our institution is governed, manifested in the ideas raised for the resolution of the different challenges, regardless of the degree studied. In addition, thanks to the use of Design Sprint in the resolution of the different challenges, students have managed and expanded social skills such as empathy, involvement, cooperation and collaboration. They have taken responsibility for finding solutions, developing autonomy and self-esteem.

The search for the best solution to challenges has also enhanced skills such as creativity or critical thinking and has allowed them to be aware that the acceptance of mistakes and / or failure are a necessary part of learning. For the mentors (teachers) the main utility has been the personalized learning that this methodology allows, since the different groups have worked on solutions to challenges of different complexity, allowing them to self-regulate the degree of difficulty they face, as demonstrated in the variety of solutions they have presented, which include from simple presentations in ppt format, to more sophisticated ones in video format or even prototypes of applications or wireframes. Finally, in terms of the usefulness for the university as a whole, this title proposes to train students following the approach of the great university institutions existing worldwide. According to The Times Higher Education-World University Rankings 2020, companies in any field of action value soft skills more than hard skills and also consider that interdisciplinary or problem-based learning is the key area for strengthening universities: 71% of respondents rated it as a very important measure to improve, more than any other problem. This report concludes that there is a substantial global shift in the employability of graduates. We see performance improving in East Asia and parts of Europe. In general terms, the best centres are those that train students with soft skills, increasingly valued in companies, such as teamwork.

Thanks

REFERENCES

Anijovich, R., De Camilloni, R. M. A., Cappelletti, G., Hoffmann, J., Katzkowics, R. y Mottier, L. 2010. *La retroalimentación en la evaluación. La evaluación significativa*. Buenos Aires: Paidós.

Apple Inc. (2010). *Apple Classrooms of Tomorrow—Today*. Recuperado de http://cbl.digitalpromise.org/wpcontent/uploads/sites/7/2017/07/ACOT2_Background.pdf

Boud, D. yFeletti, G. 1998. *The ChallengeofProblem-basedLearning*. London:Kogan Page.

Clarke, M. 2017. Repensar la empleabilidad de los graduados: el papel del capital, los atributos individuales y el contexto.*Estudios en Educación Superior*, Volumen 43 (11), pp.1923-1937.

Campo, E. y Ceballos, F. 2011. *La calidad de la formación virtual en la enseñanza superior*. Departamento de Automática, Universidad de Alcalá, I Congreso sobre Calidad de la Formación Virtual (CAFVIR2010), pp. 151-158.

Cordray, D. S., Harris, T. R., y Klein, S. A. 2009. Research Synthesis of the Effectiveness, Replicability, and Generality of the VaNTH Challenge based Instructional Modules in Bioengineering. *Journal of Engineering Education*, Volume 98 (4), pp. 335-348.

Deepika y Chitranshi, J. 2020. *Preparación del líder de la Generación Z en el entorno empresarial VUCA*, Foresight, Volumen. antes de impresión (Núm. antes de impresión). Recuperado de https://doi.org/10.1108/FS-05-2020-0048.

Escudero Escorza, T. 2003. Desde los tests hasta la investigación evaluativa actual: Un siglo, el XX, de intenso desarrollo de la evaluación en educación. *Revista Electrónica de Investigación y Evaluación Educativa*, Volumen 9 (1). Recuperado dehttp://www.uv.es/relieve/v9n1/RELIEVEv9n1_1.htm.

Fidalgo-Blanco, Á.; Sein-Echaluce, M. L. y García Peñalvo, F. J. 2017. Aprendizaje Basado en Retos en una asignatura académica universitaria. *Revista Iberoamericana de Informática Educativa*, (25), pp. 1-8.

Gaskins, W. B., Johnson, J., Maltbie, C., &Kukreti, A. (2015). Changing the Learning Environment in the College of Engineering and Applied Science Using Challenge Based Learning. *International Journal ofEngineering Pedagogo*, Volumen 5(1), pp. 34-41. Recuperado de file:///C:/Users/G%C3%A1rea/Downloads/4138- 14302-1-PB.pdf

Instituto Tecnológico y de Estudios Superiores de Monterrey. 2016. *Aprendizaje Basado en Retos*. Recuperado de http://eduteka.icesi.edu.co/pdfdir/edutrendsaprendizaje-basado-en-retos.pdf

Instituto Tecnológico y de Estudios Superiores de Monterrey. 2016. *Radar de Innovación Educativa 2017*. Recuperado de http://eduteka.icesi.edu.co/pdfdir/edutrends-radar-innovacion-educativa2017.pdf

Johnson, L., Adams Becker, S., Estrada, V., and Freeman, A. 2015. *NMC Horizon Report: Edición Educación Superior 2015*. Austin, Texas: The New Media Consortium.

Knapp, J. 2018. *Sprint. El método para resolver problemas y testar nuevas ideas en solo cinco días*. Barcelona. Editorial Conecta.

Kroll, C. 2015. Sustanaible Development Goals: Are the rich countries ready?, *Sustanaible Governance Indicators – Bertelsman. Stiftung*, Alemania: Gütersloh,

Kucukozyigit, Ali C. 2020 A Questto Identify the Emerging Leadership Skills in VUCA World and Investigation of Their Applications in Various Organizational Levels and Security Environments. *Doctor ofPhilosophy (PhD), Dissertation, Engineering Management,* Old Dominion University. Recuperado de https://digitalcommons.odu.edu/emse_etds/180.DOI: 10.25777/ y7ah-4b43.

Larmer, J. 2015. *Project-BasedLearning vs. Problem-Based Learning* vs. X-BL. Recuperado de https://www.edutopia.org/blog/pbl-vs-pbl-vs-xbl-john-larmer

Martínez-Melis, N.yHurtado, A. 2001. Assessment in TranslationStudies: Research Needs. *Meta,* Volumen46 (2), pp. 272-287.

Moore, T. y Morton, J. 2017. El mito de la preparación para el trabajo? La comunicación escrita, la empleabilidad y la 'brecha de habilidades' en la educación superior.*Estudios de Educación Superior*, Volumen 42 (3), pp.1-19.

Naciones Unidas, 2018. *La Agenda 2030 y los Objetivos de Desarrollo Sostenible: una oportunidad para América Latina y el Caribe* (LC/G.2681-P/Rev.3), Santiago: Naciones Unidas. Recuperado de https://repositorio.cepal.org/bitstream/handle/11362/40155/24/S1801141_es.pdf

Pérez Tornero, J. M. 2008. *Teacher Training Curriculafor Media and information Literacy*. International Expert Group Meeting. UNESCO Headquarters, Paris.

Przybysz-Zaremba, M., Rimkūnienė, D., Vasilienė–Vasiliauskienė, V. yButvilas, T. 2017. Project-basedlearning: thecomplexity, benefits and challenges within 21stCentury Education. *Journal of Educational Review*, Volume 10(1-2), pp. 95-99.

Redecker, C., Leis, M., Leendertse, M., Punie, Y., Gijsbers, G., Kirschner, P., Stoyanov, S. y Hoogveld, B. 2011. *The Future ofLearning: Preparingfor Change*. Recuperado de http://ipts.jrc.ec.europa.eu/publications/pub.cfm?id=4719

Succi, C. y Wieandt, M. 2019. Walkthetalk: softskills 'assessment of graduados, *European Journal of Management and Business Economic*s, Volumen28 (2), pp. 114-125. Recuperado de https://doi.org/10.1108/EJMBE-01-2019-0011

Tünnermann Bernheim, C. 2010. *Las conferencias regionales y mundiales sobre educación superior de la UNESCO y su impacto en la educación superior de América Latina.* Universidades, (47). Recuperado de https://www.redalyc.org/pdf/373/37318570005.pdf

****