Leveraging Incremental Online Learning with Leaderful Practices – A Perspective on Achieving Perfect Process Safety Competency

Kristin A. Robbins
ioMosaic Corporation
1900 St. James Place Suite 700, Houston, TX 77056
robbins.k.tx@iomosaic.com

Lisa Ruth, CPSM
ioMosaic Corporation
1900 St. James Place Suite 700, Houston, TX 77056
ruth.l.tx@iomosaic.com

Prepared for Presentation at
American Institute of Chemical Engineers
2022 Spring Meeting and 18th Global Congress on Process Safety
San Antonio, TX
April 10 – April 14, 2022

Leveraging Incremental Online Learning with Leaderful Practices – A Perspective on Achieving Perfect Process Safety Competency

Kristin A. Robbins
ioMosaic Corporation
1900 St. James Place Suite 700, Houston, TX 77056
robbins.k.tx@iomosaic.com

Lisa Ruth, CPSM
ioMosaic Corporation

Keywords: Process Safety Competency, Training & Performance Assurance, Leadership Skills

Abstract

Online learning, commonly referred to as eLearning, is uniquely primed to train and deepen individual and organizational competency more efficiently than traditional training methods. The COVID-19 pandemic created a surge in organizations adopting online learning to substitute for traditional, in-classroom training. The question now becomes how this rapid shift to online learning will continue to change the future of education and training. What impact can we expect this to have long-term on continued process safety training and how we teach the next generation of leaders?

This paper examines the role and impact of eLearning on the process safety community and why it can foster a stronger generation of new process safety leaders. Our experience suggests that this shift will facilitate a new model where process safety professionals are empowered by the ability to set their own pace and learn incrementally, accelerating competency levels individually and professionally. A learning management system (LMS) case study demonstrates how incremental online learning promotes competency and leaderful development to strengthen safety culture and performance. This approach complements the Vision 20/20 (as proposed by the Center for Chemical Process Safety (CCPS) in 2011) to reach perfect process safety.

1 Introduction

In 2011, the Center for Chemical Process Safety (CCPS) set forth an ambitious vision for the global process safety industry to "demonstrate what perfect process safety will look like when it is championed by industry".[1] Its goal was to significantly motivate our industry to impact safety performance by 2020. The framework consisted of five tenets, and one of the five tenets was intentional competency development. This competency development was defined by CCPS as "understanding competency expectations, providing educational resources, and allowing time for people to build competency".[2] In other words, this tenet called for more learning and a more substantial commitment to training and development.

Online learning, commonly referred to as eLearning, is uniquely primed to train and deepen individual and organizational competency more efficiently than traditional training methods. Although the COVID-19 pandemic is considered a catalyst for the global surge in online learning, this sector was expected to grow significantly due to telecommunications advancements that increased affordability and high adoption rates worldwide in digital services and devices. This paper examines the role and impact of eLearning on the process safety community and why it can foster a stronger generation of new process safety leaders.

With the gradual return to classrooms and to physical office locations, the question becomes how this rapid shift to online learning will continue to foster the future of education and training. What impact can we expect this to have long-term on continued process safety training and how we teach the next generation of leaders? Our experience suggests that this shift will facilitate a new model where process safety professionals are empowered by the ability to set their own pace and learn incrementally, accelerating competency levels individually and professionally. It provides an opportunity for the process safety community to embrace a leaderful organization, which develops "four Cs" of concurrent, collective, collaborative, and compassionate leaders and endorses mutual and continuous learning[3]. In short, the accessibility and adaptability of eLearning encourage competency and leadership.

A case study will explore the concepts of learning incrementally, competency development, and leaderful practices. Our case study will present how an online learning management system (LMS) with training structured as building blocks improves overall competency specific to a particular skill set. It also demonstrates scalability for large organizations, including cross-functional teams beyond the immediate scope of process safety, strengthening safety culture and performance. This approach complements the Vision 20/20 (as proposed by the Center for Chemical Process Safety (CCPS) in 2011) to reach perfect process safety.

2 Background

The outlook for training and how we learn have overgone what some experts considered a century's worth of transformation in just twenty months due to the COVID-19 pandemic. The World Economic Forum declared in 2020, the "pandemic has changed education forever".[4] Forbes remarked, "online training has become more centric in people's lives" since the pandemic as companies and academia were forced to embrace online learning but also presented the opportunity to learn new skills.[5] Its impact has altered learning environments, workplace realities, and shifted mentalities. This shift may be permanent for corporations a market report in published in 2017 indicated that 77% of US companies were using online for training[6] and according to a 2021 study, approximately 73% of companies include online training as part of their programs.[7]

Contrary to popular belief presented by mainstream international media, the pandemic was not the cause but rather a catalyst to the online learning's surge and popularization. Due to telecommunications advancements that increased affordability and high global adoption rates in digital services and devices, online learning grew. The eLearning market beginnings can be dated back to the 1960s. Its adaptation began in academia initially for extension learning programs and professional development, followed by growing interest from corporations during the late 1990s. Its market worth was reported at an impressive $165 billion USD in 2015.[8] By 2017, 77% of US

companies were already using online learning to support employee training[9] – which was two years before the pandemic.

Instead, this surge had resulted in vast attention into online learning effectiveness and more research. Statistics confirming the so-called advantages of online learning are proven benefits and will be presented throughout this paper to support our positioning.

3 Not All Online Learning is Equal

There are various interpretations of what constitutes online learning. A consistent definition has not been agreed upon since this concept and its landscape are evolving. Online learning is commonly referred to as any acquisition of knowledge or educational development that occurs through the internet. Learning in real-time online such as a "live" instructor, is more appropriately defined as virtual, remote, or distance learning. The term eLearning is distinguished from virtual learning and is used to brand this type of online learning.

It is important to understand this distinction. eLearning is specific to learning through an internet browser or application where the learner controls the pace and duration of learning. This learning flexibility is possible due to the technical framework that supports eLearning, which is called a Learning Management System or LMS. An LMS creates, manages, and delivers training programs, and is used in both industry and academia. It has two components: an admin interface and a learner interface. This dual functionality impacts learning experiences and results. It is more learner-focused, which has additional benefits than other forms of online learning that will be explored via our case study.

4 eLearning Benefits

The advantages and disadvantages of online learning have been debated with varying degrees of merit. The surge of eLearning in 2020 has prompted more dialogue into its effectiveness. Our experience has been that eLearning is effective and can be more impactful for corporate training than traditional classroom or in-person training. The two themes that are central to how it can create a stronger generation of leaders are rooted in accessibility and adaptation and will be summarized in this section.

4.1 eLearning is accessible

Barriers to accessibility are eliminated due to the cost-effectiveness of eLearning. eLearning can support the training of a wide range of diverse individuals, groups, departments, or entire company previously restrained to budget constraints. Learning for teams globally becomes much easier as training content can be circulated and absorbed simultaneously, and the need to travel is eliminated. eLearning results in 50% reduction in training costs[10], which confirms that training and upskilling is more accessible to corporations with online learning. The volume or scalability of training large groups of professionals is far more feasible online when compared to traditional training. As more professionals can participate in eLearning due to ease of accessibility, it creates more safety awareness, resulting in more robust safety performance.

Another unique advantage to eLearning versus classroom is that the learning environment is dynamic. Learning can be accessed from the office or home and is not confined to a static environment or confined to a certain date or time of year. Mobile devices mean learning can take place on-the-go at any time on any given day, which will be highlighted by the case study. This form of accessibility reportedly can boost employee engagement by 18%.[11] Overall, the result for process safety is with the accessibility of online training, the ability to build and resolve competencies would yield more robust leadership; a greater number of individuals who are more engaged and empowered with the same arsenal of knowledge.

4.2 eLearning is adaptable

eLearning is proven to accelerate development because of its adaptability. Recent research indicates that, on average, eLearning increases the speed at which learning and competency can be developed by up to 60% quicker when compared to in-classroom training.[12] This significant reduction is associated with the lack of travel, the absence of traditional in-classroom breaks or meals, and with eLearning in particular, this is an outcome of the learner setting the training pace. Learning is then adaptable to a learner's needs and preferences. It can occur when and where the learner chooses. The transfer of knowledge for all online training modes is quicker than traditional forms of training. With the capability for the learner to determine to adapt the learning environment to his or her preference combined with adapting the learning pace, acceleration of competencies is magnified. This requires further examination, which will be explored in the case study. The key takeaway with accessibility and adaptability offered by eLearning, is that there are no constraints for our next generation of leaders to learn more efficiently and effectively if they so desire and provides corporations a "value add" for their organization should they adopt an eLearning corporate culture.

5 Case Study: Process Safety Learning®

An LMS provides a comprehensive ecosystem for training and development for organizations. While this powerful tool can be used for recruiting, onboarding, training, record keeping and other means for professional development, this case study focuses solely on process safety training. Learner empowerment is central to the LMS and specific to eLearning. We believe that integrating LMS for process safety training will foster a new model that strengthens safety competency and culture to elevate performance from our next generation of process safety leaders.

It has been discussed and supported by statistics that eLearning is more accessible and adaptable than traditional, in-classroom learning and in theory can enhance competency development and leadership. This case study applies it to practice demonstrating why an LMS accelerates competency and promotes leadership. This is achieved through an examination of the following concepts:

1. Learning module structure
2. Effects of incremental learning
3. Role of Content Creators
4. Competency development framework

Our case study will demonstrate these concepts using Process Safety Learning® (PSL), an LMS developed by and for process safety professionals by highlighting experience with two clients.

5.1 Learning Modules are the building blocks for competency

The concept of incremental learning typically applies to computer science when new information is adapted into an existing learning model. The aim is for the learning model to integrate the input data to extend its knowledge and not forget it. In other words, it's about continual learning. This has become a popular topic within the field of cognitive science. Dating back to the 1920s, Edward Thorndike was among the first scholars to study this topic and found that "learning is incremental".[13] People learn best when information is delivered in small amounts and presented in a progressive manner. The term "best" is defined as being most engaged and successful in comprehending the material. Psychological studies continue to affirm Thorndike's findings from nearly a century ago.

Consider it similar to the notion of scaffolding, where knowledge logically builds upon itself. The learner must navigate through a series of progression; starting with building a firm foundation of a skill or competency and then advancing as each is mastered. Information is presented in intervals to avoid overloading the learner. Reinforcement is gauged by learning assessments to ensure a higher likelihood of retaining the information. This concept is ideal for process safety competency training as competencies can be developed and resolved over time. An LMS provides both a suitable framework for facilitating the development of learning continuously and over time due to the ability to self-pace and the tracking and progression of competencies.

The LMS used in our case study, PSL, is rooted in incremental learning where training is organized into a module-based structure. By dividing courses into shorter sessions – into learning modules – the premise is for the modules to build upon each other and develop competencies within any topic incrementally. Modules are focused on a single topic to help the learner retain the material, and the pace is self-regulated as the learner determines how quickly to proceed to the next module. Modules form courses and sets of modules and/or classes can be arranged into certification tracks. Successful completion of a set of building block topics earns certifications as well as accredited PDHs and CEUs.

Content is delivered via video modules to incrementally build competencies at the learner's pace and convenience. The learner can progress through the video at a preferred pace and time. Unlike classroom or virtual training where the instructor is live, the learner can pause and rewatch as needed, thus creating a dynamic learning environment managed by the learner. By design to support best learning practice, each module tends to be between 15-30 minutes in length. Empowerment derives from this ability to set the learning pace and speed, and mastery of the learning objectives.

Empowerment is not only the results of the self-paced nature of eLearning but also from the personalized learning experience that the LMS provides. Learning paths or certifications specific to a particular role or department are more relevant and personal. Assignment of specific and/or additional material to create more personalized learning is simple to scale with an LMS, enhancing learning confidence and overall experience.

Learning is reinforced by an assessment that accompanies every module. The assessments reinforce content shared in videos and use a multiple-choice format. In accordance with International Accreditors for Continuing Education and Training Accreditation (IACET), the purpose of PSL's assessments is to bolster absorption of the learning objectives. Additional reinforcement of learning is accomplished by refresher training. Content is updated annually or as information and regulations change.

5.1.1 Client Highlight #1

Client: Global leader in polymers, operating in 41 countries, employing 22,000 people worldwide

The client requested multi-geolocation training for company specific PSM training. PSL accommodated the client's specific, multi-language training for over 100 employees in several locations and time zones. This training was requested before the pandemic's full impact and accommodated the client's need to train staff on specific regulations in PSM at their convenience. When the pandemic began, this training became even more significant as the work-from-home situation intensified.

Result: eLearning enriched the accessibility to learning across site globally and sought to enhance organization's safety culture and performance. The value add was that the LMS became the learning event to continue work as usual for the employees before and after the pandemic.

5.2 The power of incremental learning

Learning and retention are maximized through PSL's unique module-based structure. Within the eLearning industry, incremental learning is gaining momentum in the industry as being known as "microlearning". According to RPS Research, up to 50% of stand-alone classroom training is forgotten, whereas microlearning supports long-term retention as much as 80%.[14] The three main contributing factors to this are:

1. Accessibility of learning means the learner is ready to train, which boosts focus and engagement
2. "Bite-sized" content is easier for the learner to comprehend and typically focuses on a few key objectives
3. Content is not absorbed with other information and makes retention easier

Retention is further reinforced by the linear progression of learning, where information builds gradually providing additional long-term comprehension. Another early psychologist, Hermann Ebbinghaus, further supports this notion, who studied the relationship between learning and memory. His findings, which are known as the Forgetting Curve, proves that people lost approximately 80% of learned knowledge within a month.[15] Hence, microlearning or incremental learning overpowers this limitation due to its individual building block, self-paced structure as opposed to a singular classroom style associated with more traditional forms of training.

Engagement is also significantly heightened. The combination of eLearning's accessibility and adaptability, and microlearning's heightened focus, and is thought to lead to a 50% increase in engagement[16] – over double the engagement levels found with other types of online learning. As

society has become digital and attention spans have become conditioned, microlearning embraces this reality by tailoring training into short segments, successfully keeping learners engaged.

Lastly, acceleration of competencies and development speed is nothing short of sheer amplification. While online learning is found to increase the learning development speed by up to 60%[17] compared to in-classroom, microlearning improves speed of learning and development by 300%.[18] This is mainly the result of self-paced learning and engagement. The effects are remarkably intensified, and this acceleration would then translate into exponential increases in development of leadership. Studies and case studies support that the transfer of knowledge is greater with an incremental LMS or microlearning approach when used for training.

5.2.1 Client Highlight #2

Client: American producer and marketer of fuels & chemicals, over 2,000 employees with more than $4 billion in sales (USD)

During the pandemic, the client was looking to fill downtime with employee upskill time. Management sought to engage local offices in a basic pressure relief course to accommodate new staff or those new to pressure relief. This training commenced during the pandemic to accommodate a client need to train staff on basic pressure relief to fortify and bolster team knowledge to support daily work responsibilities.

Result: Client's downtime was minimized due to accessibility and ease of training. One full workday (8 hours of training) was completed, and 10-20% of staff at specific locations participated. The value add for the client was win-win as downtime became an opportunity to upskill current staff, which they viewed as a bonus to their professional development, while proactively investing in the careers of new staff with this training.

5.3 Leaderful practices and knowledge sharing

A key role in the success of the learning management system in this case study, PSL, begins with "Content Creators". Learning modules are created by subject matter experts (SME) who have in-depth knowledge and experience within the industry and specific categories. External partners are continuously sought to keep learning fresh and varied. Potential partners and their portfolio of work are carefully reviewed, interviewed, and vetted before allowing contribution to our educational accredited learning library. The philosophy is that the greatest lessons learned come from professionals who have experienced 'these lessons' and are willing to share their knowledge with their community of peers. This premise is reflective of "leaderful leadership".[19,20]

In leaderful organizations or societies, each person has a role in contributing to leadership, which benefits the greater good of the community. It is based on community involvement and empowerment to grow as opposed to one-dimensional, autocratic leadership. Leadership is comprised of the four Cs: leaderful practices are concurrent, collective, collaborative, and compassionate. According to Raelin, leaderful development begins with the "self," and leaderful changes occur via "endorsement of a culture of learning".[21] Learning and training come hand-in-hand for process safety. Applying this principle into practice for our industry means that every person can make a difference and has an important role in advancing safety and reaching process

safety perfection. An LMS is a tool that promotes self-development and facilitates a learning culture to impact and foster stronger process safety and risk management leaders that can then do the same for the next generation.

By approaching training in this manner, a quality accredited LMS model encourages concurrent, collaborative, and compassionate practices through the way content is developed. The tenant of collaboration, contributing to the common good, is most evident with LMS Content Creators. This is clearly exhibited by knowledge sharing, which is indicative of compassion. The LMS provides a tool where many members of the process safety community can collaborate. Hence, having groups of individuals create courses to make a difference and allow others to benefit is also a form of concurrent. Together these concepts bring new meaning to lessons learned and cultivate a proactive, future learning environment that will advance the next generation of process safety leaders.

5.4 Competency frameworks

Building safety competency is foundational to our industry and its development is reflected in leadership. Sound competency should cultivate strong leadership, and effective leadership should value the importance of process safety competency development. The foremost international process safety professional associations advocate this position and identify the mutual relationships that competency development, training, and leadership occupy. The IChemE Safety Center (ISC) states that the following three areas can address competence development:

1. Learning through experience
2. Learning through others
3. Learning through education[22]

Competency gaps can be effectively addressed by undertaking developmental activities that include formal education such as training.[23] A quality LMS's mission should be to support all three areas forementioned as PSL does.

The module-based approach to learning inherently works toward competence development. In PSL, modules must be completed in order; a learner is not allowed to progress onto the next module until learning and the assessment are successfully completed. Furthermore, certification tracks are designed to help mastery of skills to develop competencies by progressing through gradual learning levels, developing more knowledgeable leaders. PSL training experiences begin with the LMS Content Creator as discussed. They share expertise by drafting modules, thus promoting a knowledge sharing. Lastly, the philosophy of eLearning, incremental learning, and microlearning is intended to reinforce the critical objectives better to help solidify and improve practical learning experiences. By providing the opportunity to learn several main objectives at a time on the learner's schedule and then apply them in the workplace, LMS training seeks to strengthen learning through experience to improve and expand overall process safety leadership.

Creating competency frameworks becomes feasible for management with an LMS and is easily organized and accessible by one central location. A quality LMS technology enables competency tracks to be personalized to a department or even for an individual learner. Organizations can use the learning modules and courses to form competency frameworks such as the guidance provided

by ISC, other professional associations, or specific to organizational needs. Individuals are held accountable to complete their training, which is tracked and recorded centrally in the LMS and can view their development in the dashboard function and can store and share transcripts as needed.

Another unique aspect of PSL is the competency matrix, offering an organizational-wide or at-a-glance report of the developmental health of the organization. It can be organized by teams, departments, the entire organization, or by specific batches of learners (individual employees). This matrix's goal is twofold: to show progression and help identify competency gaps. The ability to track learning progression and compare it against external safety performance reports can help provide guidance and drive dialogue for additional training or learning that teams or individual learners may need.

Raelin's concurrent and collective leadership tenants are also exhibited through the LMS's competency matrixes. The act of enabling learning to many signifies concurrency and the ability to tailor to individual learner needs is representative of being leaderful as it nurtures self-development. Moreover, the accessibility of training with a robust LMS to scale channels leaderful leadership as many professionals may train together and evolve as leaders with their respective fields. Organizations becomes more leaderful as employees are empowered to develop competency through completing training and emerge as more knowledgeable, better-prepared leaders. As an industry, we can become more leaderful by employing an LMS to improve safety performance and move closer toward achieving perfect process safety in the future.

6 Conclusion: Greater Competence, Better Outcomes

Over the past 24 months, our industry and the world have undergone profound challenges due to the COVID-19 pandemic. A highlight from the December 2020 Process Safety Progress stated that the pandemic "necessitated transformational shifts in the way organizations in the chemical process industries approach risk management and work practices".[24] The same is true for training and for learning in general, which were already heavily leaning toward online modes as contextualized at the beginning of this paper. With these challenges comes an opportunity to change and evolve into a stronger process safety community. eLearning is and has been the future for training for our digitalized world, and solid arguments have been made supporting that it is more effective for learners and efficient for organization. eTraining maximizes benefits for both learners and organizations and will advance process safety. The year 2020 brought about strong support for the forward thinking 20/20 Vision of CCPS.

Our case study presented an online learning management system (LMS) for process safety rooted in incremental learning (or microlearning) empowering learners to develop and accelerate their competencies for the advancement of safety performance. This approach to eLearning embraces Raelin's concept of leaderful leadership and will have a significantly positive impact on training and developing the next generation of process safety leaders. Hence, it gives rise to a new model of learning and development of leaders that will prove beneficial to all. As Raelin concludes, "the times now require a form of leadership that can develop the capacity to take mutual action and can ignite the natural talent in people to contribute to the productiveness and growth of their own communities."25 This paper demonstrated that the transfer of knowledge is greater with eLearning, which should equate to advancing competencies and better leadership and safety outcomes for all our communities for future generations.

7 References

[1] American Institute of Chemical Engineers. *Vision 20/20*. https://www.aiche.org/ccps/vision-2020#. Accessed January 3, 2022.

[2] American Institute of Chemical Engineers. *Vision 20/20*. https://www.aiche.org/ccps/vision-2020#. Accessed January 3, 2022.

[3] Raelin, JA, *Creating Leaderful Organizations: How to Bring Out Leadership in Everyone*. San Francisco Berrett-Koehler Publishers, Inc.; 2003.

[4] World Economic Forum. *The COVID-19 pandemic has changed education forever*. This is how. https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/. Accessed January 3, 2022.

[5] Forbes. *The Rise of Online Learning*. https://www.forbes.com/sites/ilkerkoksal/2020/05/02/the-rise-of-online-learning/?sh=e1ecd5e72f3c . Accessed January 3, 2022.

[6] eLearning Industry. *Top 20 eLearning Statistics For 2019 You Need to Know*. https://elearningindustry.com/top-elearning-statistics-2019 . Accessed January 3, 2022.

[7] Training Mag. 2021 *Training Industry Report*. https://trainingmag.com/2021-training-industry-report . Accessed January 3, 2022.

[8] Forbes Business Council. *The Rise of Online Learning in 2020*. https://www.forbes.com/sites/forbesbusinesscouncil/2020/05/26/the-rise-of-e-learning-in-2020/?sh=6425a9f67610 . Accessed January 3, 2022.

[9] eLearning Industry. *Top 20 eLearning Statistics For 2019 You Need to Know*. https://elearningindustry.com/top-elearning-statistics-2019 . Accessed January 3, 2022.

[10] Jimenez, R. *3-Minute e-Learning: Rapid Learning and Applications, Amazingly Lower Cost and Faster Speed of Development*. Mongatri Press; 2009. 25 p.

[11] Steward, J. The Ultimate List of eLearning Statistics for 2022., https://findstack.com/elearning-statistics/. Accessed January 14, 2022.

[12] Steward, J. The Ultimate List of eLearning Statistics for 2022., https://findstack.com/elearning-statistics/. Accessed January 14, 2022.

[13] Hergenhahn, BR, Olson, MH. *Introduction to the Theories of Learning*. Edition 7. Essex, U.K. Pearson; 2005.

[14] RPS Research. *Micro-Learning: A Game Changer for the Digital Age*. https://rpsblog.raytr.com/micro-learning-game-changer-digital-age/ . Accessed January 15, 2022.

[15] eLearning Industry. What Is The Forgetting Curve (And How Do You Combat It)? https://elearningindustry.com/forgetting-curve-combat . Accessed January 16, 2022.

[16] Westfall, B. *Top LMS Features to Drive Employee Engagement*. https://www.softwareadvice.com/resources/top-lms-features-employee-engagement/ . Accessed January 15, 2022.

[17] Steward, J. The Ultimate List of eLearning Statistics for 2022., https://findstack.com/elearning-statistics/. Accessed January 14, 2022.

[18] Jimenez, R. *3-Minute e-Learning: Rapid Learning and Applications, Amazingly Lower Cost and Faster Speed of Development*. Mongatri Press; 2009. 35 p.

[19] Raelin, JA, *Creating Leaderful Organizations: How to Bring Out Leadership in Everyone*. San Francisco Berrett-Koehler Publishers, Inc.; 2003.

[20] Raelin, J. *We the Leaders: In Order to Form a Leaderful Organization*. Journal of Leadership and Organizational Studies, Vol. 12, No. 2, 2005.

[21] Raelin, J. *We the Leaders: In Order to Form a Leaderful Organization*. Journal of Leadership and Organizational Studies, Vol. 12, No. 2, 2005. 26-7 p.

[22] IChemE. *ISC Process Safety Competency Guidance*. Edition 2; 2019.

[23] IChemE. *ISC Process Safety Competency Guidance*. Edition 2; 2019.

[24] AIChE. *Process Safety Progress Highlight: Managing Process Safety During COVID-19 and Beyond*. CEP. December 2020.

[25] Raelin, J. *We the Leaders: In Order to Form a Leaderful Organization*. Journal of Leadership and Organizational Studies, Vol. 12, No. 2, 2005. 27 p.