



**THE INTEGRATION OF TECHNOLOGICAL SOURCES THROUGH
ONLINE ACTIVITIES USED FOR EDUCATIONAL PURPOSES IN ORDER
TO PROMOTE CRITICAL THINKING SKILLS AMONG STUDENTS IN
HIGH SCHOOL**

ESTUDIANTE

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The Integration of Technological Sources Through Online Activities Used for Educational Purposes in Order to Promote Critical Thinking Skills Among Students in High School

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Abstract

Education is an essential pillar that is constantly changing and evolving according to society's needs. Therefore, teachers need to be learning new strategies and methods to help students acquire the knowledge and skills they will eventually need once they become adults and look for a job. An example of a skill that needs to be mastered nowadays by the students is critical thinking. In other words, students need to improve their ability to analyze, synthesize, judge, and debate the information they come across in order to set connections between ideas and facts. Therefore, teachers have the challenging duty to find out ways to foster critical thinking among students and that is where technology takes place as a tool to lighten the load. Hence, the use of technology can help teachers catch students' attention and make the classes more appealing for them, not to mention that their participation can be boosted which will also contribute to foster critical thinking. Lastly, some proposals that incorporate the use of technology and can be used to foster critical thinking are online discussion forums, Online PBIs (Project based learning), WebQuest as well as the use of YouTube and Web based learning software such as Blackboard.

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Keywords: critical thinking, education, proposals, technological tools

Resumen

La educación es un pilar esencial que está en constante cambio y evolucionando de acuerdo con las necesidades de la sociedad. Por lo tanto, los educadores deben aprender nuevas estrategias y métodos, con el fin de ayudar a los estudiantes a adquirir el conocimiento y las habilidades que ellos eventualmente necesitarán cuando lleguen a ser adultos y busquen un empleo. Un ejemplo de estas habilidades que necesita ser dominada hoy en día por los estudiantes es el pensamiento crítico. En otras palabras, los estudiantes necesitan mejorar su habilidad para analizar, sintetizar, juzgar y debatir la información que encuentran, con el fin de establecer conexiones entre sí. Por lo tanto, los educadores tienen la complicada tarea de encontrar formas para promover pensamiento crítico entre los estudiantes y es ahí donde la tecnología toma un papel importante como herramienta para aliviar dicha carga. Es así como el uso de la tecnología puede ayudar al profesor a captar la atención de sus estudiantes al igual que hacer sus clases más entretenidas y agradables para ellos, sin mencionar que la participación puede también ser estimulada y así contribuir igualmente a promover el pensamiento crítico. Por último, algunas propuestas que incorporan el uso de tecnología y fomentan el pensamiento crítico son los foros de discusión en línea, PBL en línea, WebQuest y finalmente el uso de YouTube y Software como el Blackboard.

Palabras clave: educación, herramientas tecnológicas, pensamiento crítico, propuestas

Introduction

Education is undoubtedly a key element in a society because it provides people with knowledge and tools to grow intellectually, morally, and creatively in order to become fully

capable of contributing positively to it. It is a teacher's duty to promote content and material that can help the students foster the necessary skills for them to succeed in society as well as in life. As a matter of fact, it is imperative to highlight that nowadays, we live in a globalized society that demands people to master new abilities (21st Century Skills) that encompass critical thinking, creativity, teamwork, among others.

Therefore, considering that each student will hopefully become a professional at some point of their lives, it is highly valuable for them to have an integral formation in order to stimulate and promote critical thinking skills that will eventually become mandatory to operate and fit into this modern society. Therefore, teachers need to rethink new strategies and methodologies that can trigger such skill in the classroom because the traditional strategies and approaches seem not to be working efficiently to promote critical thinking skills since they are usually teacher-centered. June et al. (2014) highlighted how when classes are teacher-centered, students tend to depend a great deal on their teachers because they are usually guided closely not to mention that the teacher is the one who provides the answer and/or solution to the problems, which limits the students' self-discovery and ability to be independent and able to think critically.

Masduqi (2006) also emphasized the problem of the teacher-centered approach since it is the reason why students in Indonesia are often ineffective when exchanging ideas and writing in English critically due to the lack of meaningful activities that limit the use of critical thinking skills among the students. On the other hand, Masduki (2006) also mentioned how students tend to accept opinions, especially on the current news of politics, corruption, and education, without an appropriate evaluation. Therefore, there is no doubt that it is extremely important to find ways to foster critical thinking skills due to its importance in the students' learning process, and a way to achieve it can be if teachers incorporate collaborative activities, pair work and group work (Masduki, 2006).

However, before promoting such skills through those activities, teachers need to tackle a problem faced in the classroom which is clearly stated by Mandernach (2006), when he mentioned how teachers usually have a limited amount of contact time with students since groups are large and diverse; thus, teachers are forced to come up with activities and strategies that only guide the students through pre-arranged content material that does not foster opportunities for individual interaction nor critical analysis. Hence, finding good strategies that can avoid this problem is a challenging task that requires a lot of work, research, and time from the teachers.

According to Mandernach (2006), the use of online instructional technology can help teachers in the pursuit of fostering critical thinking skills by providing a means of moving lower-level learning activities outside of the classroom, and that way, the student contact which is limited can be invested and used more effectively to higher-order critical thinking activities. In other words, teachers will have the possibility to distribute the activities more wisely and prioritize in the classroom the ones that can foster critical thinking skills to a large degree. Moreover, another benefit of using online instructional technology is that it promotes the use of constructivist teaching philosophies since the teachers will have more sources to implement activities apart from the traditional that can not only be more individualized but also suitable to promote in-depth interaction with the course material.

On the other hand, Mwalongo (2018) conducted a study in which he was able to demonstrate how the interaction between students, teachers and resources is significant in order to promote critical thinking since it facilitates students to share their ideas which can lead to a more open-minded mindset. In addition, this interaction can also help students review their beliefs, discover new ones, and even accommodate different points of view while acknowledging and appreciating their peers' ideas. Lastly the combination of authentic and up-to-date online resources, interaction, and the use of clear and simple language is potentially

appropriate when fostering critical thinking skills. Therefore, this paper aims to propose that technological sources used for educational purposes can be a good alternative to foster critical thinking skills not only for its advantages and benefits but also for the array of possibilities teachers can have through online activities to make classes more appealing and meaningful for the students.

Online Discussion Forums

An activity that incorporates the advantages of technology is discussion forums. Arend (2019) conducted a study in which students highlighted how beneficial online discussions had been since they helped them not only learn from their peers but also reflect on the value of learning to tolerate different opinions. In addition, Arend (2019) mentioned how the discussions were a place in which words, such as *debate*, *justify*, and *defend* were frequently used when challenging their peer ideas as well as when supporting theirs. Moreover, the students from his research also stated how the discussion provided an in-depth perspective since they had to think carefully about what to say due to the nature of online discussions in which everybody will be eager and ready to challenge your thoughts and ideas. Lastly, another benefit of online discussions is that “the informal and asynchronous nature of online discussions means students have the time and space to reflect and think about their ideas and contributions” (Arend, 2010, p. 16). Thus, students will eventually reinforce their critical thinking skills by analyzing carefully and deeply what and how to respond towards certain topics and ideas.

Similarly, Chung et al. (2011) also conducted a study to determine the levels of critical thinking promoted during online discussion. However, in their study, students were the ones in charge of facilitating the space to carry out the online discussions. As a matter of fact, their online discussions were carried out through forums using the platform Blackboard. Also, the

students had to create some instructional multimedia source and then upload it to their discussion forum. Regarding the findings, it was concluded that to fully foster critical thinking in online discussion, the facilitators must focus especially on intellectual types of facilitation techniques, such as questioning, providing explanation as well as opinions and expressing agreements instead of just providing appreciation, acknowledgement, feedback or just mere comments. Lasty, Chung et al. (2011) reinforced the idea that “challenging or aggressive questioning by participants should draw more critical response from the online participants”(p. 62)

On the other hand, Afify (2019) conducted a study to prove the importance of the number of students that take part in an online discussion. He said that the group size is a variable that might affect not only the participation of the students but also their interaction with each other. According to his findings, students tended to be more interested in small and medium sized online discussion forums. In addition, when the size is bigger, students’ responses are more superficial and not deep enough to foster critical thinking skills. Moreover, the author highlighted that when group size is small “there is a certain need for teachers’ participation in small groups to enhance the discussion” (p. 149). Thus, there is no doubt that teachers need to take into account the group size when deciding whether or not online discussions are the most suitable activity to foster critical thinking skills.

Finally, Macknight (2000) reinforced the idea that online discussions allow not only giving feedback but also accepting it and thus, boosting reflection among the students. Hence, she said that it is crucial for participants to understand the importance of their responses and also to learn how to ask proper questions to elicit such responses. However, Macknight (2000) also highlighted that in order to achieve those goals and “to escape the superficiality of classroom talk” (p.41), teachers must provide the proper modeling, questioning ,coaching and task structuring before carrying out the online discussions.

Web-Based Software and Tools

Another way in which technology can be used for educational purposes is by incorporating online web-based software that can undoubtedly foster students' interest that will eventually have a positive impact on their critical thinking skills. As a matter of fact, there is no doubt that students have raised a significant interest in technology and how they are increasingly attached to multimedia. Therefore, Bailey (2014) acknowledged that teachers need to be creative when coming up with methods in order to "to lead our media connected students into engaging with literature in useful and meaningful ways that can assure their literacy in this technology driven global society" (p. 18). Hence, teachers have a challenging job of finding ways to make students feel engaged to the point in which they can not only be interested in learning and as a result; they will start thinking critically and reflectively which will be evidenced in the quality and depth of their work.

In relation to this, there is no doubt that teachers in charge of courses such as literature, have to face the challenge of such courses that because of its nature, students might perceive it as boring and tedious. For this reason, multimedia sources could be the key to more meaningful classes for students that will boost their interest. Bailey (2014) proposed three technological activities that can boost students; critical thinking and reflection which are *The Critical Reading Log*, *Exploring the Novel*, and *Post It*.

In regard to *The Critical Reading Log* activity, Bailey (2014) explained how the purpose of such activity was to encourage to keep record of their reactions, interpretations and analysis when reading literacy through Blackboard, which is a virtual learning resource that allows to add online elements to be used in a face to face class. As a matter of fact, by using it, students who are not used to working with technological tools can have the possibility to reinforce such skills through being exposed. Moreover, this activity collects students' responses based on questions

that go from the basic ones to deeper ones in order for them to boost their level of understanding and allow them “ to practice their critical analysis skills while simultaneously reflecting on the learning process” (Bailey, 2014, p. 22). Finally, the application of this activity through a technological resource (Blackboard) facilitates teachers’ duties since it is more practical for them to provide feedback and comments electronically, and thus, the time-consuming element is addressed properly.

Another strategy stated by Bailey (2014) is *Exploring the Novel*, which is an activity where students are required to incorporate visual aids through online tools in order to present certain parts of a novel in a creative way. Students are encouraged to use tools such as YouTube or more elaborated ones such as the web-based site Prezi in which they can incorporate several multimedia sources such as images and music hyperlinks. However, the author pointed out some students went the extra mile and utilized multimedia tools to create poetry and even short videos to act out some scenes of the novel. Therefore, “this activity encourages both critical thinking and reflective writing while also drawing from the technological intelligence that students already possess” (Bailey, 2014, p. 24). In other words, this activity is suitable in the pursuit of promoting critical thinking since students are able not only to feel more engaged but also appreciate the connection between the piece of literature and the work they carried out.

Finally, the last activity suggested by Bailey (2014) is *Post it*, which is basically using social media (Twitter, Instagram) to share what they have learned through a collage that reflects a part of a novel, theme, characters, or symbol. In order to do this, students must have been able to read carefully, think critically, and analyze deeply the information they are given. Thus, it is evident that students can foster their critical thinking skills when carrying out tasks that raise their interest and incorporate technology they usually use in non-academic ways.

On the other hand, Pattanapichet and Wichadee (2015) also emphasized the importance social media such as Facebook can have in learning. They explained how this platform promotes collaborative learning, not to mention that it also allows students to express their thoughts. In addition, by promoting collaborative learning and interaction, students will broaden their viewpoints. As a matter of fact, they stated that students feel comfortable when using such platforms, and thus, that creates a more active and engaging learning environment that will foster critical thinking skills among the students. Lastly, Pattanapichet and Wichadee (2015) ensured that using this kind of website “ is the best way to encourage expressing opinions and thoughts which enable them to develop deeper critical thinking skills” (p. 46).

Video-Based Learning and Reflection

Another way to foster critical thinking skills is through Video-Based Learning. Budiarti et al. (2020) mentioned the impact learning videos can have in students' interest and understanding of certain topics due to its facility to be displayed at other places and times. In regard to this, Budiarti et al. (2020) conducted a study in which students from Microbiology were introduced to Video-based learning to foster critical thinking skills. They mentioned how the use of such videos helped students construct meaning, dialogue, and discourse, which lead to a better connection between their experiences and what they have learned. Also, when students have the opportunity to learn by watching videos that display work procedures, they can reflect on them and thus the knowledge that is constructed will be easy to remember and long lasting.

On the other hand, Video-based Learning can also be used through AIEVM (Autobiography of Intercultural Encounters through Visual Media), which is designed to promote learners' critical engagement through countless images from all over the world that reflect what they encounter every day. In addition, AIEVM follows a structure of questions and prompts

related to a sequence of videos that allow participants to deeply analyze aspects of the images and the cultural context of the people that are shown in them. Lindner and Mendez (2014) explained how the participants who are exposed to AIEVM are guided through a process of critical reflection towards a sequence of images that portray people from a certain culture. Moreover, the participants were required to record their reflections which helped them become aware of the implicit messages that are transmitted through visuals. As mentioned before, those visuals portrayed people from other cultures whose main goal is to influence the participants' thoughts as well as to make them reflect about their own cultural identity (Lindner & Méndez, 2014).

In regard to this tool, Erdem (2020) also conducted a study in which students were exposed to AIEVM to reflect on their intercultural encounters. Therefore, the main purpose was to prove whether critical thinking skills can be fostered through this tool. As a matter of fact, during this study, students were exposed to five videos in order for them to reflect on the themes mentioned before and then, answer some prompts and questions online. Moreover, the author highlighted how the last three videos were more focused on triggering deeper cognitive analysis since they enabled discussions that address issues such as essentialism, discrimination, and racism. To conclude, the author found out that the selection of sensitive topics that help students relate to their own lives as well as the use of videos as a powerful type of visual media, had an impact on the fostering of affective and cognitive dimension of critical cultural awareness. Likewise, this result is also supported by Lindner and Mendez (2014) since they emphasized that the use of AIEVM provides students with an opportunity to reflect on the relationship between visual media and perspectives of culture.

YouTube

As mentioned in the previous section, the use of visual media material can be beneficial in the pursuit of fostering critical thinking skills, and thus, it is important to address another tool that is famous for hosting a countless number of videos which is YouTube. Regardless of what people might consider a place only for entertainment and fun, YouTube can be a great academic one for its number of sources that can help teachers in their classes.

According to Clifton and Mann (2010), in order to foster deeper learning, the first step is to change students' role from passive to active since they need to be actively comparing, analyzing, and relating ideas. Therefore, the use of YouTube can help address this goal since it is an alternative that provides countless viewpoints to be compared and analyzed in a lecture environment, and thus, "it opens the door to find alternative representations of anything you might want to say" (p. 312). In addition, they stated the importance of this source when keeping students focused in the classroom because; unlike traditional materials, the use of visual methods such as videos on YouTube can be beneficial for students since it is easier to remember something you have seen than something you have only heard and thus, the content can be more memorable and long-lasting.

On the other hand, June et al. (2014) conducted a study in which they found out that students tended to participate more actively and show more interest when the use of video and supporting activities were implemented during classes. As a matter of fact, the researchers also mentioned how the use of YouTube "can somewhat induce the formation of critical thinking abilities among the students" (p. 62). Thus, teachers can rely on YouTube as a tool to encourage students to provide more critical as well as constructive comments during classes. As a matter of fact, the researchers found out that students like the idea of using YouTube since

the use of technological resources in learning is exciting, not to mention that it helps reduce the element of boredom that lectures in class usually have.

Similarly, Bastos and Ramos (2009) were able to find out that by incorporating the use of YouTube in the classroom, students began to feel more encouraged to participate and thus, discuss the subjects and provide their viewpoints. Also, they stated that after using YouTube “students were better informed, ideas were clearer, and the contents introduced seemed more meaningful” (p. 2090). Another benefit of using YouTube in the classroom and highlighted by them is that its videos incorporate sounds, animations, graphics and images that display more advantages towards worksheets and textbooks (Bastos & Ramos, 2009). There is no doubt that students feel more engaged and interested. Nevertheless, Bastos and Ramos (2009) emphasized that “the potential of YouTube as an effective pedagogic resource lies in the way it is used rather than in itself as a technological tool” (p. 2089). Therefore, it is important for teachers to understand the success of using YouTube depends on the activities that are implemented along with the videos.

Finally, it is relevant to note that achieving the goal is not that simple and that is why there are some good techniques that can be considered such as “presenting alternative sides or arguments and allowing discussions about the appropriateness of choices” (Clifton & Mann, 2010, p. 312). Therefore, critical thinking skills can be fostered among the students through YouTube videos and supporting activities that will elicit not only discussions and debates but also deep analysis and evaluation among the students.

Online PBL

Another way to promote critical thinking skills among the students is through activities that are based on Project Based Learning. Duch et al. (2001) claimed how with the use of a Project-Based Approach, students are encouraged to investigate and identify concepts they need to know in order to solve real -world problems. Moreover, they mentioned how this can help address skills, such as thinking critically since they have to analyze and solve complex problems, finding out, by evaluating and using correctly learning resources, among others. As a matter of fact, they highlighted how the use of PBL helps students fosters their skills not only to spot the information they need but also to identify where and how to do it to end up organizing it meaningfully and then share it with others.

Likewise, Sulaiman (2013) highlighted how in PBL, students are required to determine their learning issues and thus, find out their own approach to solve it. As a matter of fact, the members of the team get to learn how to distribute tasks, not to mention that they have to develop peer teaching as well as organizational abilities. In addition, students acquire skills in analyzing their own learning process while being engaged in real life problems. Therefore, it can be concluded that PBL is suitable to foster key skills such as team work , problem- solving, critical thinking and self-directing learning.

After exploring the advantages of PBL, it is time to tackle the use of technology when using PBL, and thus, understand how online PBL can provide even more benefits than the PBL by itself. Watson (2002) stated that the use of a website can help organize and display the PBL in a better way because it allows teachers to keep control and order of the syllabus, the group members and students' projects and reports. Besides the organization of the PBL, Watson (2002) also highlighted the availability websites can provide as well as the chance to adapt and incorporate any material found on the internet with the appropriate recognition to the original

authors. Finally, he stated the use of online resources can support PBL by providing not only teachers with inspiration for a problem design but also students with information for solving such problems. In other words, teachers and students can rely on sources such as newspapers available online, encyclopedias, journals, films, web sites or even networked databases from Universities databases.

On the other hand, Hsu et al. (2011) conducted a study in which students were introduced to some problem solving activities with the use of both open-resource network and selected-resource network. They found out that "either the open-resource network or the selected-resource network, low-achievement students made remarkable progress" (p. 1). However, they claimed that students who use open resources spent more time since they needed to browse and determine which web pages to use in order to get the information they needed. Therefore, they stated an alternative which is the prepared Web-quest libraries that "can be viewed as a treasure hunt trial, especially for novices" (Kun Hsu et al., 2011, p. 15). Hence, students who are not used to locating precise information through the websites can rely on this alternative to achieve their learning goals.

Web Quest

As stated in the previous section, websites are a great place full of information and sources for the students. But there is no doubt that there are many risks when letting our students access it. However, there is an alternative that might be the solution for teachers who are afraid of the risks students may face and it is Webquests. This resource is teacher-constructed and not only fosters critical thinking skills but also incorporates the benefits of technology. According to Vidoni and Maddux (2002), there are two types of them which are short term and long term. They mentioned how the short term takes around one and three days

which its main purpose is to expose students to new ideas whereas the long term WebQuests rely on students' background knowledge to add and build knowledge and may take longer.

Moreover, Vidoni and Maddux (2002) explained how web quests are divided in sections in which the first one aims to catch students' attention. The second one 's purpose is to let students know what the task will be as well as the guidelines that include the expected result. Moreover, in this section, teachers provide students with some advice and tips for students to organize their ideas. The third section is to provide students with the links to the sources they will need to use to carry out the task. To conclude, the last section includes the evaluation criteria that can be a matrix for students to know they will be assessed.

On the other hand, a great advantage of web quests is that the web sites are already determined by the teacher or the designer which avoids certain problems students can stumble onto such as countless results for a single research that could lead them to frustration due to the overwhelming amount of information or even worse, websites that can lead to inappropriate content. Summerville (2000) stated that the advantage of using this tool is that unlike using print materials that might be old and outdated, web quest provides information that is updated and relevant. Therefore, students can have the possibility to encounter interesting facts and events as they happen. Likewise, another advantage of web quest is that they require students to synthesize information from several sources and then come up with their own analysis and conclusions which then, will be shared with their classmates through projects and activities that they will have to carry out.

As a matter of fact, Averkieva et al. (2015) stated how crucial the creation of interdisciplinary links is when fostering critical thinking skills. Such links are easily addressed through web quests when students are required to establish logical subject links as well as transfer their knowledge through different contexts. In order to achieve this, teachers need to

provide students with hyperlinks to different kinds of sources that might include information that is barely related. Hence, students need to critically analyze the sources in order to connect ideas and establish bonds.

Finally, Vidoni and Maddux (2002) stated how web quests can be a useful tool for teachers who feel skeptical and scared about letting their students browse the Website due to the fact that web quests make the Web an environment that can be meaningful and structured as well as a safe place for students to explore. Hence, there is no excuse for teachers to stay away from technology since they are useful tools such as web quests that not only incorporate the assets of technology but also reduce the risks involved in using the internet and technology.

Conclusion and Recommendations

Undoubtedly, Education has changed through time, and teachers have had to adapt to new methodologies and strategies to fit into today's society needs. As a matter of fact, with the emergence of technology, students have become more independent and autonomous, not to mention their strong interest towards technological gadgets and apps. Therefore, teachers are currently facing the challenge to come up with strategies and ideas to make classes more engaging and interesting for their students that seem to reject everything that is not related to technology. Therefore, teachers need to come up with new strategies to catch students' attention and make the class more engaging as well as more meaningful.

On the other hand, teachers also need to struggle with the fact that their students need to master more than academic content. Companies are requiring their professionals to master skills such as teamwork, problem-solving and critical thinking. Hence, it is evident that teaching has become more challenging than ever before. However, as it was proved in the previous

sections, teachers can take advantage of technology and use it for their benefit not only to boost students' interest but also to foster skills such as critical thinking. Little and Feldhaus (2015) mentioned that since students are daily exposed to multimedia such as images and videos through their phones, computers, and other gadgets; teachers must consider the impact that using multimedia might have on their students' learning when promoting critical thinking.

Moreover, Wang et al. (2005) claimed how Information and Communication Technology (ICT) "has the potential to engage students in a range of activities that contribute to critical thinking development and collaborative knowledge construction" (p. 95). For that reason, teachers who are struggling to come up with activities that are engaging and appealing for students, can rely on technology as a tool not only to incorporate variety in their classes but also to contribute in fostering critical thinking skills among the students. Likewise, activities implemented with the use of technology are more likely to boost interaction and collaboration among the students and thus, students can not only help but also learn from each other.

Likewise, Little and Feldhaus (2015) highlighted the fact that there are a countless number of technological sources available for instructors not to be limited in their instructional framework when aiming to foster critical thinking skills in their course. In addition, they mentioned some ideas which can be the use of blogs and wikis that can be used promote interaction among the students, online journals for them to do research as well as contrast ideas, and social media which can surprisingly be used as an academic source to encourage students share critically their ideas and opinions towards certain topics. Thus, technology enables an array of possibilities for teachers to incorporate in their classes according to the goals they want to achieve with their students and the skills they want to focus on.

To sum up, teachers need understand that technology has come to stay and even though it might be hard for some teachers to leave their comfort zone, once they take the risk,

they will encounter with new possibilities to improve their praxis and make it more attractive for students who are increasingly more attached to technology as well as more demanding towards their learning process. As a matter of fact, the incorporation of technological sources in online activities can help teachers who are struggling with fostering critical thinking skills can rely on technological sources as a tool to boost it due to its variety and versatility they have. Lastly, this analysis proves that there is no reason for teachers to be scared and avoid using technology in their classes and thus, they are encouraged to embrace technology and discover the array of assets they can benefit from when using it properly along with academic activities.

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DECLARACIÓN JURADA

Yo, Wendel Araya Córdoba, cédula de identidad 304540266, estudiante de la Universidad Nacional, declaro bajo fe de juramento y consciente de la responsabilidades penales de este acto, que soy autor intelectual del Trabajo Final de Graduación Titulado **"The Integration of Technological Sources Through Online Activities Used for Educational Purposes in Order to Promote Critical Thinking Skills Among Students in High School"**, para optar por el grado de Maestría en Educación con énfasis en Aprendizaje del Ingles


Firma

Heredia, a los 14 días del mes de Setiembre del año 2021

Refrendo

Los abajo firmantes avalamos el Trabajo de Graduación del estudiante Wendel Araya Córdoba, cédula 3 0454 0266, que lleva como título **The Integration of Technological Sources Through Online Activities Used for Educational Purposes in Order to Promote Critical Thinking Skills Among Students in High School**, dado que cumple con las disposiciones vigentes y la calidad académica requerida por el posgrado.

Firmado por JUAN PABLO ZUÑIGA VARGAS (FIRMA)
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