

Title

*The future of legal education*  
*A manifesto towards a more digitized Law School*

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## Abstract

Technological advancements have been, and most likely will be, a monumental and pivotal change in our society. The way we communicate, work, and live our daily lives has changed in the past ten years more than probably in the last fifty. Starting with the development of the personal computer and followed by the creation of the internet, the world wide web and the smartphone, technology has changed, in a broad manner of speaking, everything.

Legal education, as one would imagine, cannot remain ignorant from technological advancements. If one would look in many Law Schools, law is still being taught as it was when Universities appeared. Almost no change in pedagogy was made given technological advancements. A professor is still standing at a podium and students are still listening with their eyes wide open and their ears sharp, while taking notes on paper notebooks.

The purpose of this paper is to analyze the desirability and potential benefits that can be obtained when changing the way law is being taught, given technological advancements. While the desirability and the potential benefits should be a rather self-explanatory process, the purpose is to analyze the degree to which technology should be implemented in pedagogy. I believe it is unwise to assume that all advancements should be implemented just because they are new. The suitability of each one is as essential as the benefits of the technology itself.

In what concerns the issues that are to be tackled, *inter alia*, the use of laptops and tablets during class, the existence of electronic learning environments, the use of podcasts and video recordings, wikis, and clickers will be discussed. Both potential benefits and drawbacks will be analyzed.

Structure wise, the first part will discuss the methodology and research questions. The second will be comprised of a mission statement, in which the context of using technology in pedagogy will be presented, as well as the ongoing debate. The third part will be a reflective part, a narrative that will focus on the relationship between law and technology in teaching – a personal history of the experiences had when studying at four different Universities. The fourth part, respectively the main theoretical one, will further explain several technologies that are either used, or could be used in the future, along with the potential benefits and drawbacks. The fifth part will be the empirical piece of the paper. It will consist of a discussion with regard to the findings of a survey conducted in the least technologically savvy University that I was a student of - with regard to the advancement of different technologies in the future and to what degree. The technologies subject of the survey will be only the ones discussed in the fourth part. Finally, a conclusion will be drawn with regard to the findings.

## 1. Methodology & Research questions

In a rather short manner, the research questions and methodology will be presented. I believe that there are several research questions that are essential for the purpose of this paper. Some are normative, while others are empirical. The questions are: (1) How digitized is Law School nowadays – are new technologies adopted and integrated? (2) Are digital advancements a desirable and beneficial development in legal education? (3) What types of advancements should be implemented and why? (4) How do students view technology in Law School and is there a desire to have more technological integration?

With regards to methodology, the principle is that the choice of research questions influences the method used in researching. Given that some of the research questions are normative, while others are empirical, the methodology is constructed in a dual manner. With regard to the normative questions, given that they are not strictly legally based, the study was mainly done with regard to secondary sources. Both books and articles were consulted. The searched databases were OAIster, WorldCat, and WorldCat.org and reference has been made through the snowball sampling technique. In what concerns the empirical study, it is rather a pseudo one. Obviously, a sophisticated and well-constructed study is a desirable endeavor to be undergone with another occasion. In the paper, the purpose was to assess student feedback on implementing technology in teaching and as a resource. As such, a survey was created and disseminated through student ran groups on Facebook (being the only groups available) at the University of Babes-Bolyai. The reasons for choosing this particular University and further explanations are provided later on in the paper.

## 2. The use of technology and the ongoing debate

Technology, as it may seem apparent, has changed the way we live. The Internet, tablets, laptops, smartphones and social media in general have had a huge impact on our daily lives, on how we create and solve problems, on how we communicate. Technology has been implemented in our daily life, in leisure activities and in professions, the legal profession not being an exception. *Inter alia*, public officials, prosecutors, judges and attorneys use technology in their daily work life to solve or submit claims, to write decisions, to communicate with clients, to present their

findings, to research cases or scholarly articles, to speak to one another or just to organize their extremely busy schedule.<sup>1</sup> This being a fact, it seems odd that legal education is at least one step behind. In some Law Schools there is no implementation of technology in pedagogy or as a student service, the utmost advance being a pdf of the weekly schedule or a pop-up on the Faculty website. Students are deprived of the potential advantages of using technology so as to ease the learning process, on the one hand, and to enrich their understanding of the material, on the other. Needless to say that this is not the case in all Universities, some being at the forefront of using technology in pedagogy and learning. A good example is Duke University, which was a charter member of the Center for Computer Assisted Legal Instruction since 1982, it implemented a student local network in 1989, created personalized e-mail accounts for staff and students in 1991, instituted a computing services department in 1993, enforced a computer ownership requirement in 1996 and created an educational technologies department in 2001.<sup>2</sup>

Having this *mélange* in stages of implementation, it is obvious that some have tried it and the feedback was in some cases positive. As a consequence, a debate arose, starting with the early 90's – is the implementation of technology in legal education a positive consequence or is it a negative one? For the year 2016 it seems rather peculiar, but the debate started and in some cases, is still ongoing, and it concerns the use of laptops and PowerPoint presentations in Legal Education. Across the aisle, I believe in all Universities, there is at least one professor that uses PowerPoint presentations in his or her lectures and at least one student that, if not banned by University policies, uses a tablet or a laptop to take notes.

The debate is mainly centered around the fact that even though technology may yield some benefits, the drawbacks are far too great. The argument is that the use of technology and gadgets is interfering with the class room, it increases student passivity and destroys what should be an active learning environment. Laptops, for example, are seen as a black hole that encourages students to watch movies, play games, surf the web, send and receive e-mails, check the news, shop online and engage in social media.<sup>3</sup> One of the most preeminent legal scholars that have a negative view on using technology in teaching and learning is Douglas L. Leslie, who argued that

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<sup>1</sup> One stellar example is the creation of the Lexis Database in 1970, a database that is used by literally everyone in order to have access to cases and legal scholarship in a digital format

<sup>2</sup> Kenneth J. Hirsh & Wayne Miller, “Law School education in the 21<sup>st</sup> century: adding information technology instruction to the curriculum”, (2004) 12:3 William & Mary Bill of Rights Journal 873 at 880

<sup>3</sup> Paul L. Caron, Rafael Gely, “Taking Back the Law School Classroom: Using Technology to Foster Active Student Learning”, (2004) 54:4 Journal of Legal Education 551 at 551

PowerPoint presentations lure student in a pedagogical stupor, as they become “glued on the PowerPoint slide like a first-grader focused on Barney”, being fixated at capturing every bit of information on the slides so that they can memorize it.<sup>4</sup> In what concerns laptops, professor Ian Ayres argued that their use in the classroom is uniquely tempting and they represent not only a high-tech version of daydreaming and doodling, but something ever worse.<sup>5</sup> Other scholars have shared the views of the aforementioned, views that had led to rather hilarious incidents. For example, at a University in Texas, a law professor actually brought a ladder to class and disconnected the wireless router, the next year banning laptops altogether.<sup>6</sup> Another professor, at Georgetown University, in a rather milder approach, policed his class in order to make sure that students were not using their gadgets in an unproductive manner.<sup>7</sup> As it can be seen, at least from the critics’ perspective, technology does not enhance learning, but it obviously diminishes it, by promoting passivity. On the other side, laptops are seen as a powerful tool in order to take notes, make calculations and look for relevant information, while PowerPoints are regarded as useful for the most basic of reasons, respectively that the information that needs to be transmitted is written, everyone can have access and of course, pie charts, diagrams and other figures can be used in order to highlight an idea or a point. Some authors have gone as far as to suggest a total change of pedagogy, promoting a visual pedagogy approach to legal studies.<sup>8</sup> While the endeavor is laudable, I consider that a total shift is not required, the degree of technology implementation being the relevant question, and not the change of the entire approach.

### 3. A personal narrative – how digitized was Law School

Having seen the debate and the expressed views, I believe it to useful to observe how technology is actually used, beyond the theoretical framework. In this part, my personal experiences dealing with technology in legal education will be presented.

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<sup>4</sup> Douglas L. Leslie, “*How Not to teach Contracts, and Any Other Course: PowerPoint, Laptops, and the CaseFile Method*”, (2000) 44 St. Louis University LRev 1289 at 1304-1306

<sup>5</sup> Ian Ayres, “Lectures v. Laptops”, N.Y Times (20 March 2001) at A25

<sup>6</sup> John Schwartz, “Professors Vie with Web for Class’s Attention”, N.Y. Times (2 January 2003) at A1

<sup>7</sup> Peter Barnes, “Classroom Disconnect: Does Wireless Net Access Help of Distract Students in Class?”, ABC News (29 January 2003)

<sup>8</sup> Julian Hermida, “Teaching criminal law in a visually and technology oriented culture: a visual pedagogy approach”, (2006) 16:1/2 Legal Education Review 153

It is needless to say that studying at four Universities was, for the past 6 years, a rather different experience, both from a pedagogical perspective and from a technological point of view. The experiences have been diverse, given the places where the Universities were located, on the one hand – two in Europe and two in North America, and the level at which I have studied, one during my LLB studies (Babes-Bolyai University, Romania) and three for my LLM (Maastricht University in the Netherlands and the University of British Columbia and McGill University, in Canada).

Starting with Babes-Bolyai University (2010-2014), the story is rather short, the University having a more ‘old school’ approach. Technology was almost not present from a pedagogical standpoint. In four years of studying, I recall two broad instances when technology was used.

The first case concerns the grading system, the course review and the time table management. In this sense, the grades and course reviews were available at the end of each term, on the Faculty website. The review was simply a survey that could be submitted, while the grades were just posted. Registration was not digital, it being made through the Student Affairs Office, on paper. With regard to the time table, it was not an application, but simply a PDF.

Turning towards the second instance, technology was used in pedagogy in three main ways. The first one was by allowing students to attend courses with their laptops and tablets. The second one was by using PowerPoint presentations at lectures, and with regard to the third, two professors had their own websites. Depending on the professor, some materials and the grades were posted on the site, but besides that, nothing.

At Maastricht University (2014-2015), my experience changed radically. From a non-technologized law student, I became fairly savvy. The University had implemented technology both as a student resource and as a pedagogical tool. As a student resource and as a pedagogical tool, the most advanced technology used was the Electronic Learning Environment (ELEUM) – a Blackboard designed system. It was essentially an online platform. Not all functions will be described, since not all are relevant for the purpose of the paper (paying tuition fees and so on). From a pedagogical standpoint, students could register online for courses, they had access to all materials, PowerPoint presentations were made available before class, a student forum was created for every subject and each student had a university e-mail address. At the same time, depending on the type of course that one would take, lectures or seminars would be recorded, either as video files or audio files and published on ELEUM. Therefore, it seems redundant to state that cross

university Wi-Fi was available and that laptops and tablets were allowed and encouraged as tools for students, as well as PowerPoints and Videos as tools for professors. In what concerns eBooks, their use was allowed, but not necessarily encouraged. The reason was that professors have pointed out that an online version of the books required for the course was available, but that was that. With regard to the evaluation, it remained constricted to traditional methods for the one hundred percent final exams. For one course however, a pilot system was created in order to further implement technology in evaluation. It consisted of the opportunity to use laptops or tablets in order to consult materials at the final examination. In this context, only the consultation of the material was allowed, the paper *per se* being hand written.

At the University of British Columbia (2015), the situation was approximately the same as at Maastricht University. The main difference with regard to student resources was that another system, as an Electronic Learning Environment, was used. Concerning pedagogy, due to some unforeseen circumstances, one development occurred, respectively a video-conference class. The class was designed as such, given that the professor that taught the class was not present in British Columbia, being away on a research project. A special classroom was assigned in order for the class to take place. The structure was one similar to a seminar and the class was special, given that all students had microphones in which they could speak to the professor, all in all, being very similar to a more well-rehearsed Skype or FaceTime call. To my own surprise, except from some lag now and then, the class went rather smoothly, with no apparent drawbacks since technology was used. Apart from this last issue, the situation was shockingly similar, both from a resource perspective and from a pedagogical perspective. However, evaluation-wise, at the University of British Columbia, laptops could have been used in order to type the final exam, a special software being created for this purpose.

Finally, at McGill University (2016), the experience was mostly similar to the one at the University of British Columbia, with one major difference. The difference occurred given my personal choice to register for a post graduate course with a focus on Legal Education. The experience was atypical because one of the purposes of the course was to experience a different type of pedagogy in Law School, implementing the concept of an active learning environment, mainly student focused. A special classroom was used for this purpose, a so called Active Learning Room. The first feature of the room was the design. It was a rather small room, with one podium in the middle, four round tables positioned in every corner of the room and a projection screen in



front of the classroom. The podium was designed with two LCD screens on top and a document camera on the top left corner. Both the screens and the camera could have been used in order to project materials on the projection screen, as multiple output options. In what concerns the tables, three plasma screens were installed on each, as well as two connectors for laptops or tablets. As such, students could mirror their screen on two of the three plasmas, while one was designed for the use of the professor, if he or she would desire to project something from the podium to the third screen. As a last feature, speakers were installed and audio adjustment was available, as well as light adjustment.

To describe the experience, absolutely all features were used in one way or another, different pedagogical techniques being implemented in order to take advantage of the classroom features. It truly was an active learning experience, all students being involved, projecting materials, posting videos, organizing postcasts and presenting documents already drafted on the projection screen, by the use of the document camera.

#### 4. Technological advancements – benefits and drawbacks

Having seen the debate and a personal factual history of the implementation of technology, a more precise endeavor should occur in order to assess which technological advancements are bringing a plus to the class and which are not.

As Thomson has stated in his book, *Law School 2.0*,<sup>9</sup> the implementation of technology in legal education can be compared with the acceptance of the zipper in retail, some time ago. In quoting professor Friedel, who explained in his book why it took approximately 40 years for the zipper to overcome market resistance, Thomson believes that there are three phases of residence for technology in legal education, as it was for the zipper. The first one is that some technological advancements, such as the zipper in the first 10 years after its invention, do not work properly. The second is that the zipper was expensive when compared to buttons. Finally, the third is that, even though it worked, the benefits of replacing buttons with zippers was still not very well understood. I believe this approach to be extremely useful and as such, the technologies that are to be presented

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<sup>9</sup> David. I. C. Thomson, *Law School 2.0. Legal education for a Digital Age*, (Newark: LexisNexis Matthew Bender 2009) at 74

will be those that overcame the first two phases of resistance – they do work properly and they are not extremely expensive.

Having established the context, the use of laptops and tablets in the classroom, the electronic learning environment, wikis and clickers will be discussed. eBooks, MOOC's and the use of laptops during exams will not be discussed since, at least from my perspective, they have not overpassed the first two resistance phases in development. eBooks do not benefit from advanced software that can easily permit annotating, highlighting and other similar endeavors that are more easily done on paper, while MOOC's and the use of laptops during exams can be implemented, but only specialized IT companies can provide the software, which is still rather unreliable and relatively expensive.<sup>10</sup>

Starting with the use of laptops and tablets, this practice has been implemented since the end of the 80s. Rather few resistance is still in force in Law Schools world over, professors being conscious of the fact that students prefer taking notes on gadgets, the process being easier and faster. However, as argued before, some are still viewing laptops as potential distractions, the focus being shifted from the class to other online or media activities. As some authors have stated, cognitive research has proven that multitasking, a practice that is common when using tablets or laptops and listening to a lecture, is in fact counterproductive.<sup>11</sup> This assumption is made essentially by all that are involved in legal education, respectively that students are in fact multitasking. It may be true, but the issue is not whether students are multitasking, but rather why are they multitasking. I believe that the answers can be find when looking at pedagogical techniques. Yes, students can do different things while just listening to a professor speak. But at the same time, why is not the questions phrased as in how can other techniques be implemented so that students use the laptops not just for writing under dictation, but to annotate the material given or to somehow interact. Of course, the answer depends on the level that one studies and what pedagogical techniques are implemented. In North American Law Schools for example, the Socratic approach is still widely used in Law Schools,<sup>12</sup> especially in first and second year courses – the large classes. Given this situation, a solution to avoid unbeneficial multitasking would be to

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<sup>10</sup> For an in detail analysis of the advantages and disadvantages of MOOCs, consult Jon Billsberry, "MOOCs: Fad or Revolution?", (2013) 37:6 Journal of Management Education 739

<sup>11</sup> Kevin Yamamoto, "Banning laptops in the classroom: is it Worth the Hassles?",(2007) 57:4 Journal of Legal Education 477 at 481

<sup>12</sup> Eric E. Johnson, "A populist Manifesto for Learning the Law", (2010) 60:1 Journal of Legal Education, 41 at 43

combine the Socratic method with the use of laptops by taking advantage of the technology *per se*, or by combining it with another. One instance would be the use of wikis in collaboration with the lecture format, while another, as one author has argued<sup>13</sup>, would be just to ask students to close their laptops when their use is not required. Both would further engage students and avoid at least non useful multitasking, the process being mutually advantages – efficiently and attention combined.

With regard to Electronic learning environments, these are, from my perspective, a natural development that should be implemented in every University. There are essentially no drawbacks for the use of this technology, except perhaps the costs. However, it should be noted that the benefits far outweigh the initial investment, since a multitude of pedagogical objectives can be obtained with its use – from the availability of online course materials to the submission of papers. At the same time, the critique that by using this system, students would be discouraged to attend classes – since materials are posted online, is hilarious to conceive. This potential outcome may be present solely in a scenario where the use of the system is improper. For example, the availability of course outlines, syllabuses, materials, and video or audio recordings is useful for students at least from two perspectives. First, they can have permanent access to the digital materials required for each course and therefore the information can be reviewed by everyone, regardless of time. This aspect is essential, given that not all students learn in the same way and if they have not understood something in class, they can review the material at any time, any day. Furthermore, it can provide great insight since it can be used for materials that are not made public, such as sketches done by the professor or a certain interpretation of a legal provision that is present in an upcoming book and so on. Secondly, by having access to materials or recordings, students can better prepare in advance for a certain class or seminar. In what concerns at least two critiques that I can think off, respectively the fact that the opinions of professors during class should not be disseminated to everyone and that the availability of PowerPoint presentations would lead to a decrease in student attendance, the solutions to solve them are simple. Insofar as the attendance issue is concerned, it could be solved by either imposing compulsory attendance or by simply posting a part of the PowerPoint. Turning towards the dissemination of opinions, this issue could

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<sup>13</sup> David. I. C. Thomson, *Law School 2.0. Legal education for a Digital Age*, (Newark: LexisNexis Matthew Bender 2009) at 81

be solved by a username and password requirement in order to access the recordings and as such, only students that are registered for the specific course with the specific professor can have access.

Turning towards Clickers, they are essentially a form of technology described by those who created it as a Student Response System. The setup is composed of several devices that look like Apple TV remotes and a receiver that is plugged in the lecturer's laptop. Depending on the order, the remotes come with three, four, or more buttons that can be clicked when, for example, a pop quiz is administered. The feature of the system is a prompt and anonymous feedback mechanism that works in conjunction with a displayed Power Point or something alike. The most common use, is, as said before, the administration of multiple choice questions. In a plastic description, it works as follows: the tutor displays a Power Point presentation that contain quizzes. Each quiz is composed of a multiple choice question that has 4 possible correct answers. The tutor asks the class to click on what they consider to be the correct answer. In a fraction of time, students click on what they believe to be the correct answer and a pie chart appears on the screen displaying the percentage of students that clicked on each answer. Afterwards, discussions can take place on the results.

In what concerns the use of clickers in higher education, the truth is that they are widely accepted. Several empirical studies were conducted in undergraduate education with respect to the utility of using clickers, and the responses were consistent, but at the same time, diverse. In one study,<sup>14</sup> it was highlighted that the use of clickers indeed promotes active learning, but it does not enhance the comprehension of the material, when compared to other traditional review methods. However, in another study, it was found that significant differences in final grades exist when students use clickers as a review mechanism, when compared to students that did not use the technology. Moreover, according to the second survey, students felt that clickers were fun, they increased class participation and involvement, they were effective to the learning experience and the use of technology made them feel mentally engaged and academically responsible.<sup>15</sup>

With regard to legal education, all that were at some point students, can remember the omnipresent question that is posed by a lecturer in every course – ‘Does anybody have questions?’,

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<sup>14</sup> David Fike, Renea Fike, Krystal Lucio, “Does Clicker Technology Improve Student Learning?” (2014) 20:2 Journal of Technology and Teacher Education 113 at 120

<sup>15</sup> Leonard Bachman & Christine Bachman, “A study of classroom response system clickers: Increasing student engagement and performance in a large undergraduate lecture class on architectural research”, (2001) 22:1 Journal of Interactive Learning Research 5 at 5

and the usual response – ‘Silence’. It has been the same way since the beginning, nothing changing in this respect. I believe that Clickers are useful in this regard, although they have been met with severe resistance. Their usefulness is obvious for the most basic of reasons. They encourage active learning, students do not feel the pressure of getting up and answering the quiz, the comprehension of the material is tested among all students and not only the respondent – as in the Socratic model and it is user friendly and visually explanatory – by means of the pie chart that is created. In what concerns drawbacks, two possible ones come to mind: the costs of implementation and the possibility of failure. While the former is not necessarily a critique, since students may be required to buy the clickers (as they do textbooks), the latter presents some importance. However, I consider that the technology, given its wide implementation in undergraduate education, has been sufficiently refined.

Finally, Wikis are a Web 2.0 technology that essentially gives individuals the opportunity to collaboratively work on a certain project.<sup>16</sup> The most well know wiki is Wikipedia. The site functions as an online encyclopedia, where people can collaborate on describing or explaining different topics. While the use of Wikipedia in legal scholarship has been a center for debate, the wiki technology is not constricted solely to an online encyclopedia. The word wiki is actually of Hawaiian origin and it means fast. In this sense, as it has been pointed out,<sup>17</sup> the assumption on which the technology was created is that the judgment of many is better than the judgment of few, and the quality of information is improved when having more contributors. For the purpose of legal education, the advantages of using wikis are multiple. As a principle, the use of wikis can be circumscribed to the idea that students should be not just consumers of knowledge, but also producers of set knowledge. In doing so, the ones involved can teach and learn at the same time. By working in writing, collaboratively, they can articulate what was explained and critically asses it. As it was stated,<sup>18</sup> a wiki is particularly useful when tackling complex legal topics, since students are made to test their knowledge to public scrutiny, share that respective knowledge and deliberate with others. At the same time, the social responsibility of giving back to others is exercised, as well as the meaning of reputation. Therefore, this technology could solve the paradigm of debates

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<sup>16</sup> David. I. C. Thomson, *Law School 2.0. Legal education for a Digital Age*, (Newark: LexisNexis Matthew Bender 2009) at 81

<sup>17</sup> Beth Simone Noveck, “Wikipedia and the Future of Legal Education ” (2007) 57:1 Journal of Legal Education 3 at 4

<sup>18</sup> *Ibid* at 8

in seminars, when, even though engaged in a discussion, it always comes down to the opinion of the tutor, and the students feel comfortable with that outcome. With regard to the drawbacks, as the functions do not include citation, I personally do not see any, since different platforms already exist (such as Google Docs) and are free. If a more personalized design or experience is desired, there are no impediments for the University or for the course coordinator to create a class wiki.

##### 5. How digitized should Law School be – student perspectives

In order to answer the fundamental empirical questions of how digitized would the ones involved like Law School to be, the only suitable method would be to conduct an empirical study. While a sophisticated and broad empirical study is a desired avenue for a different occasion, in this instance, the goal is to assess how current and former students of Babes-Bolyai University – Faculty of Law, my former Alma Mater, see digital advancements and how should they be implemented in the future – a pseudo empirical study. The choice of University and Faculty was made given personal experience, and the fact that, among all the Universities that I had the opportunity to be a student of, the chosen one was the least digitally savvy. In other words, technology was basically not used. In trying to analyze the feedback, a survey was formulated and sent via Facebook to all student run groups that are currently studying Law at the LLB level and to the Facebook group of the 2014 generation, respectively my own.

Several quantitative questions were embedded in the survey. In the order they were formulated these are: (1) During Law School, was technology used in pedagogy or in order to ease the learning process? (2) If available, which technology from the following list [an electronic learning environment, laptops and tablets, wikis, clickers, video and audio recordings] would be useful in Law School? (3) If possible, would you like to have access to all the readings, recordings, course syllabus and online submission of papers on an online platform? (4) Do you think that having a designated Faculty enabled e-mail address for students would be useful - for communication purposes with professors or among peers? (5) Do you think that Clickers would be useful? (6) Do you consider that working collaboratively in Wikis would be useful – with a tutor or just with your peers for a paper?

The results were as expected. For Q1, 65% answered that only laptops and Power Points presentations were used in Law School, while 29% answered that no technology was used and

6.5% considered that technology was used in pedagogy. For Q2, the availability of Video and Audio Recordings online is at the forefront in preference – 87.1%. Second, the use of an electronic environment is preferred with 61.3%, followed by Clickers 29% and Wikis 29%. For Q3, the availability of all materials online is approved with a 96.8%, only 3.2% appreciating that it would not be useful. With regard to the creation of a University enabled e-mail address (Q4), 58.15% considered it to be beneficial, while 41.9% appreciated that the personal e-mail address is sufficient. The utility of clickers (Q5) as feedback mechanisms is balanced, 51.6% of the respondents appreciating that they are useful, while 48.4% believe that they would not bring any benefits. Wikis (Q6) are in exactly the same situations, 51.6% being for the implementation, while 48.4% against it.

With regard to the qualitative questions, they concerned the advantages that students see when using the aforementioned technologies. All answers viewed technology as mutually advantageous, promoting active learning, being fast and reliable and in essence, a plus for legal education.

## 6. Conclusion

As it has been pointed out, technology is, and in the future, will be, a constant element in our daily lives. Having this factual evidence in mind, legal education should implement the trend promoted by law firms, public institutions, Courts and others in order to implement technology in pedagogy and as a student resource.

In the above chapters I have presented arguments both in favor and against different technologies, depending on the degree of their refinement, the expense of their implementation and the understanding that educators have with regard to the technologies. Several, such as eBooks and the use of laptops during exams are still nascent and yet not fully implementable, given their expense on the one hand, and the fact that they still do not work flawlessly, on the other. However, some show promise, such as the use of gadgets in class, the electronic learning environment, clickers and wikis. They are working and they present a multitude of pedagogical advantages.

As a final note, in the end of the 1980s, two education scholars, respectively Zelda Gamson and Arthur Chickering developed seven principles for good practices in University Education. The principles were at the forefront of education reform, and from my perspective, they

still could be used as guidelines. The principles are: encouraging student-faculty contact, encouraging cooperation among students, encourage active learning, give prompt feedback, emphasize time on task, communicate high expectations and respect diverse talents and ways of learning.<sup>19</sup> While this essay was not the medium for an in depth analysis of the seven, I believe that, in one way or another, the technologies presented before, do give justice to the principles. Maybe not individually, but applied together, they do encourage, *inter alia*, active learning, prompt feedback, student-faculty contact, cooperation among students and they do respect diverse talents and ways of learning.

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<sup>19</sup> Arthur W. Chickering & Zelda F. Gamson, *Applying the Seven Principles for Good Practice in Undergraduate Education*, (San Francisco: Jossey-Bass Inc. 1991)



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