

# RESEARCH AGENDA

## LAW

I focus the study of legal issues from a cross-c  
and from a multitude of jurisprudential perspecti  
analyze legal issues in different legal tradition  
problems from international and transnational per

## Space Law

- The development of a regulatory framework for the regulation of private commercial activities.



- Industrial self-regulation of space activities

- **International, Comparative, and Criminal Law**



- Crimes in Space: A comprehensive Criminal Law, Criminal Justice, and Criminology approach to criminal acts and deviant behavior in the International Space Station.
- Convergence of common law and civil law.



# SCHOLARSHIP OF TEACHING AND LEARNING



My research on the Scholarship of Teaching and Learning focuses on the promotion of deep learning, particularly through the development of academic skills in Higher Education such as critical academic reading. It gives me the opportunity to engage in teaching and to improve my students' learning. This research is essentially transformational as my aim is to enhance teaching effectiveness and student learning, and to promote deep learning within the Higher Education community.

- **Media Literacy and Deep Learning**

- Media literacy: The importance of teaching media literacy skills at the University level.

- **Academic Skills**

- Academic reading and deep learning.

- Mature, Anishinaabee, and other non-traditional students: academic skills and retention.

## **SPACE LAW**

### **a. The development of a legal framework for the regulation of private commercial activities.**

The objective of my research program on Space Law is to contribute to the development of the discipline by examining International and domestic Space Law which needs reformulation due to its inadequacy to regulate private commercial activities in outer space.

In the first decades of the space age, military and state security motivations indicated the direction of national space programs. At present, private sector-driven commercial endeavors in outer space have been increasing exponentially and have experienced a significant quantitative growth over the last years. Existing International Space Law, created during the Cold War through the search for minimum consensus between the then world superpowers, has proved inadequate to deal with the complex and sophisticated endeavors of private firms in outer space. Similarly, the existing domestic legal framework in many countries does not provide an appropriate regulatory solution to govern these activities.

My research agenda aims at elaborating the legal basis for a comprehensive legal framework to regulate private and other non-governmental space activities, including, space launch services, satellite telecommunications, space insurance, and remote sensing. I have been engaged in the examination of Space Law for nearly two decades. My research has already resulted in the publication of two books, several book chapters, and scores of journal articles. My publications enjoy wide acceptance and recognition. Legal scholars around the world have regularly relied upon them. Even some governments and international organizations have resorted to the main arguments and ideas of my publications to design regulatory actions in the space field.

At present, I am particularly interested in the exploration of alternatives to the mainstream law-making process for the enactment of domestic space laws.

#### **b. Industrial self-regulation of space activities**

I have been analyzing the structure and language of the main contracts used in the space industry for over two decades. I have been analyzing space launch services agreements, space insurance,

satellite purchase agreements, transponder agreements, and remote sensing contracts. I have pioneered in the analysis of transponder agreements and space launch vehicle insurance. My publications on transponder agreements have been the source of numerous books and articles which have been based almost entirely on my ideas. My analysis of alternative risk management strategies has also received wide recognition among legal scholars and practitioners.

Currently, I am interested in examining the effects of the fluctuations in the space insurance market on space contracts, particularly with respect to exclusions, deductibles, and coverage periods.

## **INTERNATIONAL, COMPARATIVE, AND CRIMINAL LAW RESEARCH AGENDA**

**a. Crimes in Space: A comprehensive Criminal Law, Criminal Justice, and Criminology approach to criminal acts and deviant behavior in the International Space Station.**



The International Space Station is one of the most ambitious and transcendental projects of humanity. It will permit the cohabitation of human beings of a mosaic of nationalities and backgrounds in a football-field size platform at several hundred miles from earth in outer space. The International Space Station by its very nature is bound to reproduce conflicts of human behavior in outer space. Due to the isolation conditions and the hostile environment, it is expected that these conflicts will have a high rate of occurrence as has been corroborated in recent multi-culturally diverse experiences in outer space. All these conflicts will have enormous criminal implications.

I have been conducting research on outer space and criminality over the past 10 years. I began my research in this area with an examination of the way in which laws are adopted in outer space where I focused on the problems derived from following an expert conception of law reform that neglects to consider the importance of participation of those affected by the law reform. This approach produced a criminal justice system on the International Space Station that is inadequate to deal with deviance and criminality. I also examined the Criminal Law regime engineered for the International Space Station, where I investigated its inadequacy to deal with criminality in outer space. In a seminal work, I examined

the main criminological theories to determine if any could explain criminal and deviant acts in outer space. In another work, I conducted a criminological analysis of astronauts' criminal behaviour on Earth, which attributes their criminality on Earth to the conditions astronauts experience in outer space. I recently completed another work, where I researched the shortcomings of the ISS criminal regime over perpetrators of non ISS partner states and the shortcomings arising from the lack of uniformity in the determination of substantive criminal offences.

At present, I am expanding these past research projects by redefining international Space Law to adapt to a new scenario of human settlements in outer space, and by examining the role of coercion in outer space and its connection to outer space criminality –an innovative approach never attempted by the criminological or Space Law literature before.

This research project aims at analyzing the most significant criminological theories to see which one –if any- may be applicable to criminal and deviant behaviour in outer space. The guiding hypothesis is that the unique characteristics of the space environment, together with the exceptional social factors of all involved actors, demand new and specific theories to explain

criminal and deviant behavior in the International Space Station. This research project has already resulted in the publication of three articles and a book chapter on different criminological aspects of criminality in outer space. At present, I am on the analysis a comprehensive legal and Criminal Justice regime to deal with possible criminal behaviour on the International Space Station and other long-term human missions in outer space based on an empirical analysis of the causes of space criminality and the examination of the existing international Space Law framework and the ISS regime for criminal acts.

Second, it will contribute to advance criminological theory by examining how coercive experiences in long-term space human endeavours, such as the International Space Station, can lead to deviant and criminal behaviour in outer space –a task never attempted so far. The research results will shed light on how astronauts react to experiences of personal and impersonal coercion and how this can influence deviance and criminality in outer space. By examining the relationship between coercion and crime, the program will expectedly redefine Colvin's conception of coercion and contribute to refine Colvin's typology of control.

#### **b. Convergence of common law and civil law**

Convergence constitutes the evolution of the legal institutions of different legal systems where the legal institution of one system resembles the other and the legal norms, principles, and scholarly comments of both are used in equal measure and even regarded with equal authority. Unlike harmonization, which implies a deliberate and negotiated process aimed at producing a legislative or other conventional act, convergence constitutes a natural, or unconscious, common development of legal institutions through mutual interest. Convergence is the result of a tendency in similar nations to have similar problems and to arrive at similar ways of perceiving and dealing with them.

The purpose of this research program is to show that there are several legal areas where there is a clear convergence between common law and civil law jurisdictions. Underlying the premise behind this research program is my conception that despite the view of the majority of authors, common law, especially as applied in the United States and Canada, and civil law, particularly as applied in Western Europe and Latin America, present remarkably common features owed both to their common historical sources –Roman law and northern natural law and late scholastics school- and to similar fundamental

social policy objectives, which are slowly and gradually taking them toward convergence.

The findings of this work, which already produced the publication of three articles, are expected to shed some light on future research on civil law and common law traditions.

# **THE SCHOLARSHIP OF TEACHING AND LEARNING**

## **Media literacy: The importance of teaching media literacy skills at the University level**

The revolution in media and global communications in the last few decades has transformed the very basic foundations of knowledge and education. Global citizens of today and tomorrow need to be equipped with the necessary skills to both interpret and produce media texts. North American universities, with a teaching philosophy built during an exclusively print-centered era, have not yet fully opened their classroom doors to media literacy. In order to foster the development of global citizens, we need to teach our students the conventions of media language so that they can be effective interpreters and producers of media texts.

The objective of this research project is to examine the importance of helping students develop media literacy at the University level and to explore some student-centered strategies in order to foster their media literacy skills.

### **Academic skills**

### **a. Academic reading and deep learning**

Research studies show that most university students today take a surface approach to reading and learning. A surface approach to reading is the tacit acceptance of information contained in the text. Students taking a surface approach to reading usually consider information as isolated and unlinked facts. This leads to superficial retention of material for examinations and does not promote long-term understanding. In contrast, a deep approach to reading is an approach where the reader uses higher-order cognitive skills such as the ability to analyze, synthesize, solve problems, and thinks meta-cognitively in order to negotiate meanings with the author and to construct new meaning from the text.

The surface reading phenomenon occurs because of a myriad of factors –both at the course and institutional levels. The former includes course misalignment, emphasis on evaluation on students' retention of facts and principles conveyed in lectures, the fact that teachers usually lecture the texts, and lack of teaching academic reading categories of analysis. The institutional factors include emphasis on assessment and grades, lack of trained faculty, lack of adequate support for innovative teaching practices, and the fact

that universities have not yet moved from the teaching to the learning paradigm.

The objective of this research project is to examine the teaching and learning strategies that lead students to take a deep approach to reading and learning. This project has already resulted in the publication of several articles, the presentation of conference papers, and the invitation to give workshops. At present, I am working on the examining whether students who have shown to take a deep approach to reading in a course that promotes deep reading continue to do so in courses where instructors do not specifically encourage students to read critically and do not promote deep learning. I want to find out if students incorporate deep academic reading skills into their learning or if this approach to reading is lost when students take courses where deep learning is not actively encouraged.

**b. Mature, Anishinaabee, and other non-traditional students: academic skills and retention**

Success at the university level mainly depends on existing pre-entry college attributes, including the mastery of some fundamental academic skills. These include –reading, writing,



critical thinking, oral presentation, and media and online literacy. Despite the importance of these skills for academic success, professors seldom teach them. They generally take them for granted, as they tend to presuppose that all students already acquired these skills either as part of their secondary education or during their first years of college. The reality is that many mature, Anishinaabe, and other non traditional students lack these skills, so they find themselves at a disadvantage. According to research findings, lack of basic academic skills is one of the main causes of university attrition.

The project aims at improving mature, Anishinaabee, and other non traditional students' academic success by investigating the strategies to help these students to acquire some of the fundamental academic skills necessary to thrive in university.

This project is inserted within a general goal of achieving retention and promoting academic success of non-traditional students. A widely accepted theoretical model on student retention views academic success as dependent on the extent to which students become integrated into the University's formal and informal academic and social systems. The research literature exhibits two competing theoretical approaches to implementing measures to

achieving student retention under this model. The predominant approach centers on what institutions do to fit students into their existing academic cultures. Based upon this perspective, universities have been offering a wide array of both academic and non academic programs and services to ease student transition into the academic and social university environment. These include academic support services bridging, access, and mentoring programs. These programs contribute to changing some of the individual pre-entry college attributes identified as determinants of success in the Tinto Model of retention/attrition. A competing approach to achieving retention suggests that university cultures should adapt to better fit the needs of increasingly diverse students. Under this perspective, student success is the result of how well the university values students' cultural attributes, and how differences between their cultures of origin and immersion are bridged. Within this perspective, rather than requiring students to adapt to what is often an alien culture and requesting that they leave their own, universities develop ways to affirm students' identities and incorporate them into the university's culture.

This project does not see these two approaches as necessarily competing and incompatible, but rather believes that retention and academic success depend on working on both aspects of the

student retention model. Universities must provide students with academic and social skills to adapt to the demands of the university life and, at the same time, universities should embrace and value the cultures of minority students. Research has shown that the highest rates of non-traditional student academic success take place when universities foster dual socialization, i.e., when they encourage and support both mainstream and non mainstream cultures.