



A Comparative Study of Interdisciplinary Field of Culture and Communication in Canada and USA

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ARTICLE INFO	ABSTRACT
<p>Received: 07 November 2019 Revised: 30 January 2020 Accepted: 08 February 2020 Online: 17 March 2020</p>	<p>The interdisciplinary studies is a relatively new field in academic approaches. The interdisciplinary studies have been considered due to the increasing complexity of social problems, the need for combined approaches and the adoption of multiple approaches in order to address scientific problems. The present study, with a qualitative approach and thematic analysis, will extract information on the history, fields and approaches at five universities and more than 25 interdisciplinary courses in the field of media studies, culture and communication. The study results show that simultaneous attention to the "structural" and "content" characteristics is essential to the success of the interdisciplinary courses. The study results showed that structurally, small group training and the use of four semester teaching method increase the efficiency of interdisciplinary courses. Also, consideration of content characteristics such as setting goals, allocating interdisciplinary courses to graduate students, and increasing the number of selective courses should be observed by Iranian higher education policy makers.</p>
<p>KEYWORDS</p> <p>Interdisciplinary Culture and communication Policy recommendations Higher education Educational policy making</p>	

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1. Introduction

The interdisciplinary studies are among the fastest growing academic fields in the world. By definition, interdisciplinary refers to new fields of knowledge that study more than a purely scientific field. In other words, interdisciplinary is the result of a combination of two or more scientific disciplines in a research or educational activity. An interdisciplinary field is the "integration of knowledge, method and experience of two or more scientific and specialized fields to identify and solve a complex problem and / or multi-faceted social problem" (Khorsandi Taskoh, 2009: 57).

The academic systems have a long history, especially in the Western world. Over many years, academic systems have undergone substantial changes (Mostajeran Gortani, 2014: 48). The single-disciplinary approach is an almost traditional approach to education. Discipline is a term used to describe scientific disciplines that are independent of each other and rarely interact with each other (Etemadzadeh et al., 2009). The disciplinary approach was the dominant discourse of the era in which social communication, interaction, and change were depicted linearly and predictably. Hence, specialized disciplines are considered as strategic islands with unique characteristics, values, and validity (Khorsandi Taskoh, 2008: 21).

In recent decades, collective thinking about complex human problems and finding scientific and appropriate answers has led scientists to cross horizontal boundaries - boundaries of disciplines - and on the other hand vertical boundaries - experts, decision-makers and users - of disciplines (Zahedi, 2009). There are many interesting reasons showing why some boundaries as so-called field boundaries have collapsed including development and stress within established scientific fields, creative activities that do not fit within scientific field framework, deepening relationships between universities and surrounding communities, and the actual interests of contemporary researchers (Dehshiri, 2009).

In interdisciplinary studies, concepts, theories, content, data, methods, and tools obtained from two or more scientific disciplines or sets of specialized knowledge are combined to enhance basic understanding, answer a set of questions, address complex and widespread problems and solve problems that are so broad that they do not fit into a single approach (Klien and Newell, 1997). This evolutionary movement, of course, has led to the emergence of various fields of human

knowledge under the titles of disciplinary and interdisciplinary approaches and related concepts such as "multidisciplinary" and "transdisciplinary", each of which has advantages and limitations (Table 1).

Table 1 Comparison of capacities and limitations of different knowledge approaches

Approach	Definition	Advantage	Limitation
Disciplinary	Academic activity either individually or in collaboration with a university degree	<ul style="list-style-type: none"> • Institutionalized and professional specialized norms • Specific academic structures • Identification and validation mechanisms 	Insufficient area for targeting and solving various problems of the scientific community
Multi-disciplinary	Knowledge activity in collaboration with experts from several different fields and separate activity in the field of expertise	<ul style="list-style-type: none"> • Optimizing knowledge activity through collaboration • Expertise in knowledge effectiveness, problem solving and accountability 	Parallel knowledge activities and their linearity Combination problem Neglecting that the whole is not equal to the sum of the components
interdisciplinary	Knowledge activity by combining several specialized fields	<ul style="list-style-type: none"> • Crossing professional and professional boundaries • Overcoming the limitations of specialization and individualism • Achieve more and more diversity and integrity, and resolve problems 	Endangering professional and disciplinary norms as well methodological ambiguities
Transdisciplinary	Knowledge activity by combining several specialized fields and by sharing non-university knowledge fields	<ul style="list-style-type: none"> • Crossing academic boundaries • Expanding the boundary of human knowledge and extending it • Greater integrity 	Compromising justified knowledge production criteria Methodological ambiguities Vulnerability of scientific credibility of activities

Source: Farasatkah, 2011: 17

One of the interdisciplinary fields that have recently attracted researchers is the interdisciplinary field of culture and communication. For example, among the US universities, only four universities of Drexel, New York, Georgia Tech, and Indiana Bloomington have a department or school called "Culture and Communication." Of course, the academic tradition is different in different countries and even within one country. In other words, a university may have a school

called "Communication", but the curriculum and courses it offers are strongly cultural-communicative.

In the Iranian academic system, the interdisciplinary field of culture and communication is relatively new. The experience of setting up the interdisciplinary field of culture and communication began with the establishment of the school of culture and communication at Imam Sadeq (AS) University, and the acceptance of the first doctoral degree began since 1995 (Pahlavan, 2009). The postgraduate courses and five doctoral degrees since 2003 are the result of this university's experience in the field of interdisciplinary culture and communication courses. The University of Bagher Al-Alum was the second university to offer a master's and doctorate in the field of interdisciplinary culture and communication courses, with a relatively similar curriculum. In contrast to the two universities, which have been founded after the 1979 revolution, the old and famous universities still do not feel the need to establish interdisciplinary culture and communication courses, and most follow the traditional approach to teaching major disciplines of communication, or sociology, with cultural approaches. The research question is how the world's leading universities in the field of study have followed and how their experience can be used to design similar courses in Iran.

2. Research Method

The research method of the present study is qualitative comparative using the thematic analysis approach. The study population is composed of a nation and sampling is purposeful according to the strategy of "systems with maximum similarity". Accordingly, the studied countries include the United States and Canada. The criterion of interest to researchers is the selection of universities that have a disciplinary or course of culture and communication at different levels of study (including doctoral, master's, undergraduate and short-term). Accordingly, the content and programs of three universities in the United States and two universities in Canada were considered. In addition to the university databases and the specific pages of each department and field at the selected universities, the data were collected from books and papers from national and international organizations. Data extraction and categorization including information on overviews, university introduction, group or school introduction, educational structure, courses offered (bachelor's, master's, and doctoral), introduction and description of each course, course titles and

course descriptions. The thematic analysis was used to analyze the data. The thematic analysis is a method of examining themes that seem to be important in describing phenomena, the process of identifying themes through careful reading of data (Fereday, 2006: 2). This method is a process for analyzing textual data and converts scattered and varied data into rich and detailed data (Abedi Jafari et al., 2011: 152).

3. Results

First we should introduce the universities studied by country

Canada

In Canada, only two Concordia and Calgary universities have courses in culture and communication, according to the study subject. Concordia University in Quebec, Canada, has "Communication Studies" department and its courses are more limited and relevant to the particular field of communication. Also in undergraduate studies, Communication Studies, and Culture and Communication Studies, and in postgraduate Studies, Media Studies and in Ph.D. ... awarded to volunteers. The University of Calgary in Calgary, Alberta, has a Department of Communication, Media and Film at the School of Humanities. The undergraduate degree includes Studies of Communication, Film, Science, Technology and Community, and three courses are also offered: Culture and Communication; Communication Studies; Culture and Community Studies at both a master's and doctoral level. This department focuses more on film and health communication studies (University of Calgary, 2020).

United State of America

Drexel University in Pennsylvania is one of the few universities with an interdisciplinary field of culture and communication at the School of Arts and Sciences. This department has undergraduate degree in anthropology, communication, criminal justice, linguistics, sociology, environmental and urban policy, and master's degree in communication, environmental policy, and publishing management, and Ph.D. in just one course, "Communication, Culture and Media" (Drexel University, 2020). The second American university is New York University, where the Department

of Communication, Culture and Media is located at Stein Hart School of Culture, Education and Human Development. In this department, undergraduate, postgraduate and doctoral degrees are awarded to candidates. The undergraduate degree offers two courses: "Communication, Culture and Media" and "Media, Culture and Communication / Public Health" and Ph.D. in "Communication, Culture and Media". The focus of the undergraduate department is on critical thinking skills necessary to understand the social, political, and cultural aspects of communication technologies and systems. In postgraduate courses, studying contemporary theories and key subjects in the field of communication and cultural studies forms an important part of the objectives of the course (New York University, 2020). There is a major difference between the University of Northwestern (Evanston, Illinois) and the two previous universities. The university has an independent school of communication and is therefore expected to have more courses: five departments of Communication Science – Disorder with Clinical Approaches, Communication Studies with Humanities Approach (Especially in Health Communication field), Radio, Television, Film Focusing on Modern Mass Media Production, Performance Studies Focusing on Culture, and Theater Focusing on the performing arts, each course offers undergraduate and graduate levels (Northwestern University, 2020a).

Comparative Thematic Analysis

Content and thematic analysis of the interdisciplinary field of culture and communication courses from a structural and content perspective is comparable between the universities studied. Below some structural and content characteristics are introduced.

First: Structural components

The structural components are those components that precede the curriculum of the courses in question, such as the structure of education, inter-university communication, and university-to-business communication.

1. Characteristics of the University: The study departments were all in the major universities in terms of the degree of comprehensiveness of the fields of study. For example, over 50,000 students have enrolled at New York and Concordia universities this academic year.

Table 2 Comparison of structural categories of the universities studied

University	The number of students	The number of courses per year	Year of foundation	Term structure per year	Relation to workplace
Drexel	24000	250	1891	Quarter	Industry Relationship Center
Concordia	5000	290	1974	Quarter	
Calgary	33000	200	1966	Quarter	Partnering with outside institutions
New York	6800	200	1831	Semester	-
Northwestern	22000	150	1850	Semester	-

2. Department / discipline Position at the University: Large and long-standing universities have a significant history and are usually formed by the combining of schools and institutes over time. Understanding the discipline therefore requires familiarity with the university's background and its special tradition. Drexel University's Department of Culture and Communication is affiliated with the School of Arts and Sciences alongside Departments of Chemistry, Biology, Linguistics, Mathematics, Physics, Psychology, Environment, History and Politics, and is only one of Drexel's 13 schools. This combination gives rise to a particular academic tradition, with some courses in the Department of Culture and Communication presenting elective or core courses in chemistry or mathematics. In principle, such a structural characteristic facilitates the possibility of holding interdisciplinary courses.

3. Educational structure: The duration of the course at all undergraduate universities studied is the same and includes about four full-time years. The semester is usually offered in two ways: semester and quarter terms. Each of these courses has its benefits, but the four-term system seems to be more suitable for an interdisciplinary course as it offers more courses. A four-year undergraduate degree is 128 units in the semester term system and 182 units in the quarter term system. Of course, more courses are not offered in all cases reviewed. For example, the undergraduate program at New York University is a semester term structure and most courses have 4 units (New York University Steinhardt, 2020), while Drexel University has a quarter terms system and each 3-unit course (Drexel University, 2020).

4. Theoretical and practical courses: Providing practical cases along with the theoretical courses is one of the important characteristics of the studied courses. For example, Concordia University focuses on media subjects in the Department of Culture and Communication, focusing on practice and media production, in addition to theoretical subjects, and provides students with appropriate and advanced opportunities for any type of media production.

5. Keeping up with the industry: The relationship between the university and labor market is considered as a serious challenge for the higher education system in many countries. One of the interesting cases about the University of Drexel state is its structure and that the internship system is worthwhile. Drexel University has registered partnerships with thousands of companies and has a comprehensive database of job opportunities. The undergraduate employment in three 6-month courses is required by the university, with the student earning the substantial income from the internship (at least \$ 16,000 for every six months). Drexel University model is known as "cooperative education program" (Drexel University, 2020).

6. Compensation for high costs of education: The cost of education is very high in all universities studied. On average, an undergraduate degree will cost more than \$ 60,000 per student, which is very high even on the scale of American household income. However, the academic degree is designed to offset the cost of tuition, as an 18-month university internship at Drexel earns about \$ 48,000 per student (Drexel University, 2020).

7. Minor studies: In the US and Canadian educational system, the student is able to study concurrently in the short-term courses and obtain a degree alongside the major studies. In addition to the major studies, many departments also offer these courses. Northwestern University, for example, offers undergraduate minor studies in human communication, film and media, theater, sound design, and dance in addition to the undergraduate major studies (University of Northwestern, Communication Sciences + Disorders, 2020b). New York University's Media, Culture and Communications Department offers undergraduate courses in Media, Culture and Communications for students of other minor studies, including 16 units. There are also minor studies in business, entertainment, media and technology focusing on film and television and the music industry is another minor study. This structural characteristic enables students interested in the field of culture and communication to pursue their favorite subjects in other departments or students of other fields to become familiar with the field of

culture and communication studies (University of Northwestern, Communication Studies, 2020a).

8. Flexibility to Rename School / Discipline: The field of study of communication is a relatively new field, but some of the studied universities have a significant history in this field of study. For example, the history of Concordia University Communications Studies Department goes back to the Communications Arts Department, which was founded in 1965. Northwestern University's School of Communication is much older. The history of the school, located in Evanston, goes back to 1878, when the elocution group was founded. The elocution group was later renamed the School of oratory. In 1921, the School of Communication became the School of Speech and finally, in 2002, it became the School of Communication (Northwestern University School of Communication, 2020a). This school deals with various aspects of communication and its role in the human interaction and culture. The subjects such as studies of communication, theater, performance, and etc. are discussed at this school.

9. Inter-university exchanges: The students' interaction with the academic environment and understanding of different experiences is a necessity for interdisciplinary studies. Some universities have taken special measures in this regard. New York University's Department of Media, Culture and Communications offers students many options for international study and travel. The students typically participate in the course for one semester. The interested students can stay in two different countries for two terms (New York University, Steinhardt, 2020).

10. Intra-Academic interactions: One of the operational ways of implementing the interdisciplinary course is to reduce major courses and increase selective courses. In order to implement such a course, two structural contexts are needed: 1) the existence of multiple departments, and 2) the flexibility of departments and the possibility of obtaining units from different departments. For example, New York University undergraduate course in Media, Culture, and Communications is designed to select 52 major units of the department, 60 units from the courses of 10 other departments. Interestingly, 4 courses from other schools (even technical schools) can be selected (The New York University Steinhardt, 2020). The rest of the units are optional and will be along with the guidance of a consultant.

11. Small group education: A large number of courses and a large number of faculty members make it possible to hold courses with a small number of students. It also increases the student interaction with school and students, resulting in better results in less time.

Second: Content Components

Content components are those recommendations that relate to the content of the courses and how they are presented. It also has recommendations that include learning more fields for an interdisciplinary student and linking opinion and practice (See Figure 1). These components are as follows:

1. *Degree of Subject Focus*: In general, the analysis of the content of the interdisciplinary courses can yield two patterns in the extent and scope of the subjects. First, the Limited Pattern: New York University's Media, Culture and Communication department, for example, holds the same course at all levels and focuses on a deeper understanding of media-related cultural developments. There is also a course in this department regarding this but emphasizes the cultural effects of media and technology on health field. In general, the selected fields of the Media, Culture and Communication department of universities are relatively limited. Second, the Broad Pattern: For example, Drexel University's Department of Culture and Communications at the undergraduate level comprises a range of humanities such as anthropology, communication, criminal justice, linguistics, sociology, and environmental and urban policy making. Another example is the University of Calgary. The Department of Culture and Communication at the University of Calgary holds three undergraduate courses of Communication, Film, Science, Technology and Community Studies.

2. *Inclusion of diverse fields*: Among the universities studied, four universities have a department of communication and / or culture and communications and only one has a (Northwestern) School of Communication.

3. *Setting goals for different levels of education*: Most of the studied universities make a clear distinction between educational goals between different levels of education. At undergraduate and even postgraduate levels, the goal is to create a professional skill for students. In other words, courses are defined as more skill-based. These skills are institutionalized in the form of practice and media content production or with broad student training courses. However, some disciplines, such as anthropology that are more theoretical, are actually a starting point for pursuing higher education. However, the need for skills of the undergraduate and postgraduate courses is highly considered.

4. *A Specific Discipline in Undergraduate Courses*: The interdisciplinary identity in higher courses and the need for enhanced skill make the undergraduate student study a well-known field of study, and the higher the level the courses become, the more intense the interdisciplinary character is. While not true for all universities studied, this formula is reasonably defensible. A freshman has less ability to clear academic fields and identify problem-based interests compared to a graduate or doctoral student. Therefore, some study departments try to have a higher concentration of interdisciplinary higher education, especially for doctorate. For example, Drexel University Department of Culture and Communication holds undergraduate courses that have a more disciplined scientific identity.

5. *The broad range of selective units*: In this sense, the studied interdisciplinary courses mean individual curriculum planning, with those having their own curriculum while the number of selective courses is high. Describing this, Drexel University's Department of Culture and Communication says: "Culture and communication is a fascinating department, where students personalize the curriculum and pursue their interests in one of the five social sciences courses" (Drexel University, 2020). In other words, it is easier to run an interdisciplinary course at a university like Concordia that has 293 courses at different levels that offers thousands of courses.

6. *Defining major subject field*: Some of the studied departments, while acknowledging the interdisciplinary and high range of selective courses, identify the major subject field. For example, New York University has identified five major subject fields in undergraduate studies. The students should focus on two of the five subjects in the second and third year including global and intercultural communication, image and performance studies, social interactions and processes, persuasion and politics, community and technology (New York University Steinhardt, 2020).

7. *Post Graduate Alternative Practices*: One of the interesting things about how to complete a postgraduate course is that a student has a choice of several options at the end of the course. New York University, for example, proposes three ways for completing a master's degree: first, a master's thesis, second, a comprehensive exam, and third, a course called Professional Writing and Research Application. Describing this we have, "this course is a tool for combining knowledge and skills acquired during the master's degree in order to achieve advanced levels of competence in several fields, including: writing specialized papers, preparing navigation tools, or the like to collect data, review specialized literature, writing scientific abstracts, understanding the process of self-edit, and the ability to provide a clear presentation of the final research report "(New York University Steinhardt, 2020).

In another example, a graduate degree in communications from Drexel University requires a 6-month internship in a field, and a professional portfolio with the minimum 3 and maximum 5 subjects. According to the definition of a professional portfolio, "in order to graduate with a Masters degree in Communication, you need to provide a professional portfolio. This professional portfolio should not only reflect the student's effort but should also reflect the ideas and skills developed during the course of study otherwise it should show the student's communication ability skills" (Drexel University, 2020). At Concordia University, there are four options for full-time and part-time students to complete a master's degree: dissertation; the option of creating innovative research for media makers; compiling a specialized research paper and the lesson-centered option for those who want to do a program that involves only practice (Concordia University, 2020).

Table 3 Comparison of content categories in the studied universities

University	Degree of thematic focus	Interdisciplinary Focus Level	Diversity of studies and courses	Practical courses
Drexel	Broad	M.A and Ph.D.	Highly diversified - both B.S. and theoretical (B.A) courses.	3 months of internship (With payment)
Concordia	Limited	B.A	Low diversity - three undergraduate and one graduate and doctoral courses	Seminars, workshops, film screenings, and creativity labs
Calgary	Limited	-	Medium diversity	Practice
New York	Limited	B.A	Low diversity	
Northwestern	Broad	M.A and Ph.D.	High diversity - over 21 courses	Practical disciplines such as performance studies, and etc.

4. Conclusion

The development of sciences and the complexity of the human problems have faded the boundaries of traditional sciences and their ability to respond to new questions and challenges. One solution is to select an interdisciplinary approach. This approach opens a new window to a better use of a set of traditional sciences in order to solve real problems. The demographic characteristics of Iran, the increase in the number of universities, and the high unemployment rate of university graduates, have put the minds of Iranian higher education practitioners on how to increase the professional efficiency of university graduates. One solution is to focus on new developments in the curriculum and utilize ideas to combine science disciplines. Based on this thinking, the interdisciplinary courses in Iran have been designed and implemented aimed to combine humanities and Islamic sciences. It should also be noted, however, that the victory of the Islamic Revolution in the late 1970s was not merely a political consequence. One of the early aspirations of the revolutionaries was to combine the new and traditional sciences with the localization approach of sciences. The purpose of the present paper is to return to this goal from the point of view of a particular scientific field i.e. "culture and communication". Benefiting from the experiences of others, in addition to reducing the initial startup costs of a similar idea, also contributes to its increasing efficiency and effectiveness.

The present study, which has been conducted with a comparative analysis of structural and content components of the field of culture and communication studies, provides a set of policy recommendations for interdisciplinary designers. The study results showed that a set of field and infrastructure can be identified to perform an optimal interdisciplinary course. According to the study results, it can be suggested to Iranian policy makers and curricula planners in the interdisciplinary field of culture and communication to start establishing this discipline from large universities that are more suitable for the design of interdisciplinary courses. Interactions within and between universities, as well as serious relationships with professional fields, are another structural necessity that provides the chance for an interdisciplinary field to succeed in both identifying real community problems and using different perspectives. In terms of content, the main purpose of an interdisciplinary course is to educate graduates with a questioning and problem-oriented mind. For this reason, it is recommended to begin interdisciplinary courses of higher education (postgraduate and doctoral).

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Figure 1. Policy recommendations to improve the efficiency of interdisciplinary courses



