

Equity, Diversity and Inclusion Course Mapping and Analysis

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Introduction

UBC is committed to creating a space for inclusion and equity on campus. This broad commitment is in part a result of community pressure at UBC from students, faculty and staff who desire a school culture that reflects the diversity it contains. To create these large-scale changes, UBC must first understand its achievements and gaps in regards to equity, diversity and inclusion (EDI). Tracking the existence of EDI content in courses at UBC should be central to this school's mission for a better future, as an academic institution is largely defined by its course offerings. This summary report documents an initial step by the Equity and Inclusion Office to create a standardized analysis of what qualifies as equity, diversity and inclusion (EDI) content in courses and to map the presence of these courses within the Faculty of Arts. This report aims to begin a larger scale project of tracking the strengths and trends within UBC on how EDI is represented in curricular offerings and what steps can be made going forward to improve student access to EDI content. With consideration of this project's timeline, the Faculty of Arts was selected as the first Faculty to undergo the EDI course analysis and mapping. This analysis was undertaken to help create a standard of what defines "EDI courses" in relation to course titles and descriptions, with the aim of further implementing this analysis in all of UBC's academic departments.

Origins of this Project

This project grew out of the Equity and Inclusion Office's partnership with the Faculty of Arts as part of the Student Diversity Initiative. The Faculty of Arts, as well as other units on campus, expressed an interest in better understanding how their curricular offerings provide opportunities for students to engage with EDI concepts. As a result, the Equity and Inclusion Office applied for and received funding through the Sustainability Scholars Program to study this topic. A similar approach by the UBC Sustainability Initiative was the main inspiration for our project. The Sustainability Initiative began this similar project close to a decade ago and thus much of the Equity and Inclusion Office's project is based upon it, including the data analysis process.

Equity, Diversity and Inclusion Defined

There are no set definition of what EDI represents, but many institutions and companies strive to achieve this somewhat undefined goal. For the sake of our work however, it is necessary to create a clearer outlining of what equity, diversity and inclusion all mean. *Equity* can be understood as access. Specifically, it accounts for the fact that barriers or advantages exist for different people and it's important to both be aware and compensate for these differences to allow equal access (University of Alberta 2019). *Diversity* is ensuring that the presence of difference is valued and promoted, and that homogenous environments or approaches are not unquestionably the given (University of Alberta 2019). Finally, *inclusion* emphasizes the need to make those who experience difference feel welcomed, and that their inclusion in a space is not only accepted but that it is valued (University of Alberta 2019).

The challenge with these broad and vague definitions, is that ultimately EDI can stand for many things, requiring additional parameters for course selection. At UBC these definitions are outlined by the Equity and Inclusion Office to relate to our campus's specific needs. An ongoing commitment exists to create more successful EDI environments for everyone, with a specific focus on people from historically, persistently, and systemically marginalized communities. However, when it comes to selecting courses that include EDI content, additional steps were taken to ensure that a more standardized system could be carried forward.

Determining an EDI Course

For the scope of this project, creating a course listing required a focus solely on course title and description. Due to time and resource constraints, details of student participation, teaching style, and the syllabus could not be considered. Thus, the main challenge of this project was to first identify what EDI is on the basis of thousands of simple course descriptions and titles. A method developed from the Sustainability Initiative was settled on to create an automation system that could automatically sort through what courses needed to be analyzed for EDI content, and what courses need not be considered.

Central to this portion of the project was the work done by a core team to determine keywords that would help highlight relevant courses. This will be explored further in the methodology section of this report, but will be summarized briefly here. Basing this approach on a similar strategy used by the Sustainability Department we have created a "weak" keyword list and a "strong" keyword list for coding. This way, it is possible to work with an automated system that pulls out relevant courses for a quicker secondary pass of the data by an individual who makes a final decision on whether or not a course is *EDI-Focused*.

The creation of the word list was done with consideration of every department within the Faculty of Arts. Only after a researcher read through all current course descriptions of established courses were we confident in setting out defined "Strong" and "Weak" words for indicating EDI. Additionally, our final EDI framework is based on previous reports done by universities in the USA to create similar course listings. Our final definition of EDI courses is thus a product of both a UBC-specific framing, and a reformatting of previous work in this relatively new field.

Review of EDI Course Analysis Literature

Ensuring Equity, Diversity and Inclusion content in courses and on campuses is a relatively new initiative in academic settings (Bauman et al. 2005; Laird, 2005; Milem et al. 2005). The lack of international or national standards for educational EDI content means that many organizations and institutions have their own unique approaches and there are limited studies on the effective methods for including such content in courses and even more limited ideas on how to measure that content when it does exist (Clayton-Pedersen et al., 2009; UC Berkeley 2009). This section delves briefly into the development of how EDI content has been handled and approached by other academic institutions and ends on the approach the UBC has adopted for this initial phase of EDI content analysis.

The Question of Diversity

The origins of current efforts to include EDI content in higher education curricula can be traced back to more limited initiatives in academics to include “diversity” in degree requirements (Milem et al, 2005). This push was a reflection of further diversification of college’s and universities’ student bodies. As the populations at these institutions have become more diverse, a parallel increase in demands for diversity in all aspects of higher education have become more pronounced. The approach to including diversity in curriculums now largely manifests as a “Diversity” requirement for students at some universities and colleges around the world (Laird et al., 2005). Generally, these “Diversity” requirements are that all students take a single qualifying course, such as a foreign language or cultural classes (Laird et al., 2005; Milem et al., 2005). Though these requirements are adopted in response to the growing diversity in the student body this singular approach is limited in creating appropriate results and further work is necessary to develop truly inclusive campuses for students. Finding how to create more equal, diverse and inclusive environments for students thus has become the current focus for many top institutions of higher education and is also reflected in UBC’s initiatives (Ualberta.ca, 2019; UC Berkeley, 2009; Quaye and Harper, 2014).

Initial research on this topic showed academic institutions the results they were after, that diversity courses can lower racial prejudice as well as improve moral reasoning (Laird, 2005), but more recent empirical studies demonstrate that these positives results only occur when students are able to engage in *multiple* diversity courses and spaces on campus (Laird, 2005). The research on curricular diversity by academic Nelson Laird exposed many of the downsides of one-dimensional approaches to diversity by academic institutions (Laird et al., 2005). Nelson Laird’s studies along with more current critiques by academics ultimately point to the fact that including and promoting diversity in curricula is a complicated process that requires more than singular course requirements (Strayhorn, 2018; Quaye and Harper, 2014) Unfortunately, the majority of current “diversity” requirements fall short on creating the results that institutions seek. This has been clear to not only administrative bodies but also students, as many institutions have been criticized for their failure to successfully promote diversity and equity on campus and new work is underway at many universities to address these shortcomings (Halualani & Associates, 2015; Strayhorn, 2018; UC Berkeley, 2009; Quaye and Harper, 2014)

Equity Diversity and Inclusion in Courses

There are no current projects publicly available that parallel UBC’s initial work on EDI course content. Due to the nature of trying to move beyond the simplicity of just meeting “diversity” requirements, but also maintain a replicable and clear process for EDI identification, this UBC project has various unique dimensions. Other institutions, such as University of California at Berkeley or Minnesota State University Moorhead, have identified EDI specific strategies for course content analysis. These reports have been essential resources for our process, but they are also are not replicable for our specific goals. Analysis of EDI courses at other institutions have all been presented as isolated and large reports that have not been replicated in the following years after they were published (Halualani & Associates, 2015; UC Berkeley, 2009). These reports were created to help these institutions outline the current state of EDI in their courses and where these schools could create improvements but ultimately do not achieve the

goals set out by our curricular analysis. Whilst these institutions' EDI approaches create quickly dated reports on evolving issues, the goal of UBC's EDI course listing is for it to be repeatable, standardized and accessible to help ensure continued opportunities for curricular engagement with EDI for the university. What we miss in this first approach to categorizing EDI courses is an in-depth analysis that goes beyond course summaries. Time and methodological constraints mean that the work necessary to parse through thousands of course plans, student experiences, and instructors' approaches is not realistic for this project, but these initial steps create further openings to potentially achieve the depth of work done by institutions like UC Berkeley and Minnesota State University Moorhead.

Currently the goal of this project is for internal use, with a focus on the Faculty of Arts as the initial Faculty that can be informed of how successfully EDI is represented. The existence of the Equity and Inclusion Office alone exemplifies UBC's commitment to improving its EDI accountability, but this project is essential for illuminating gaps and potential growth, as well as present successes in EDI content across the campus. The aim of this being that a higher content focus and explicit representation of EDI in departments will foster general equitable, inclusive and diverse environments for UBC students, faculty and staff.

Methodology

This report is partially based on the work by various other institutions to measure EDI, but our core approach to the course data and goals of the project are modelled after the UBC Sustainability Initiative's (USI) [Sustainability Course Listing](#). The USI team was responsible with providing with the course database for this project and a large part of our methodological process. Our primary goal in this initial course mapping is to create a final division of EDI courses at UBC with a process that is accessible and repeatable for future EIO staff to continue the analysis of EDI course content at UBC. Adopting the methods of USI, we are using a gradation system of EDI content that classifies courses in the Faculty of Arts by only the course title and description as the basis of the mapping. It is also due to USI's system that we are focused on established courses, courses that USI had found to be offered consistently at UBC and the more reliable representation of what our university has to offer. These adjustments and definitions were created with the expertise of a four person EIO committee along with the EIO's Sustainability Scholar Elydah Joyce.

Following USI's approach, we have a two-tiered system of data analysis. The first step is an automation in an Excel spreadsheet where the complete summary of all courses, including title and course description, is run against a word list that indicates the strength of EDI content in a course. Depending on the value that courses are automatically assigned through this word search process, the Excel automation creates a scale between "1" and "4" that is broken down in Table 1, found below.

This approach is based on the previous work by the Sustainability Initiative. Their methodology was to use an Excel approach that allowed for an easier "by-hand" sorting after an initial automation by associated word value. By reading through all current course descriptions in the Faculty of Arts, we were able to confidently clarify which words UBC departments generally use to indicate EDI content and which were more vague terms, and thus "Weak". Examples of "Strong" words are: Feminism, Colonialism, Race. Examples of "Weak" words are: Culture, Power, Society. By using this automation process, the second step of sorting through these courses "by-hand" is quickened and made more

straightforward for any researcher. More in-depth details on the automation process exists for the internal review of the results.

Table 1: EDI Automation

Automation Output	Technical Meaning	Translated Meaning
1	Two or more “strong” words found by excel	Very Strong EDI content detected
2	One “strong” word and/or multiple “weak” words	Moderate EDI content detected
3	Only “weak” words found	Weak EDI content detected
4	No EDI keywords found	No EDI content detected

The purpose of the initial automation phase is to reduce the time dedicated to the second phase of the data analysis. Through a process of trial and error we were able to determine that courses in “1” and “4” can be quickly glanced over to categorize into clearly EDI or clearly not EDI. Whilst, “2” requires moderate time to analyses the course description, and “3” requires often more complicated re-readings to determine the presence of EDI or not.

The second phase of this data analysis continues in Excel as the primary data analysis tool, but this time these automated outputs are categorized by hand, with the researcher reading the description, and are determined to be A, B, C, X, or Z. The descriptions of these categories are listed in Table 2 below. These categories are the final stage of the data coding and are what will be explored in the results section.

Table 2: EDI Course Categorization

Category	Definition
A “EDI-Focused”	<ul style="list-style-type: none"> • Indicates: <u>power, privilege, or interculturality</u> in terms of race/ethnicity, gender, age, sexual orientation, socioeconomic class, indigenous issues, religion/spirituality, region, nationality, disabilities, political perspective. <ul style="list-style-type: none"> • Explicit language on <u>power, privilege, and interculturality</u> • Highlights Identity groups as focus points in otherwise generalized topics (Women, Muslim people, queer people etc.) • Specific content related to the historical marginalization of certain countries or communities
B “EDI-adjacent”	<ul style="list-style-type: none"> • Suggest or vaguely indicates relationship to: race/ethnicity, gender, age, sexual orientation, socioeconomic class, religion/spirituality, indigenous issues, region, nationality, disadvantaged-languages, disabilities, political perspective • Mentions or relates to any subject area of historically disadvantaged populations or regions • No explicit language on power, privilege or interculturality

C "Unindicated"	Does not suggest or indicate relationships to EDI concepts.
X "Special"	<ul style="list-style-type: none"> • Special/Selected Topics Courses (no description given, further investigation required to determine EDI content) • Language courses
Z	Out of Scope (Thesis, Field work, etc.)

For the second phase of analysis the definitions for categories A and B are adapted from the Minnesota State University Moorhead's report on diversity for courses that are determined to have high or partial diversity present (Haluani & Associates, 2015). An important distinction in our approach is that courses that are considered A are *EDI-Focused* whilst category B courses are *EDI-Adjacent* with the potential to be EDI courses upon further investigation. Another important note is that category X includes language courses as we determined that language courses play a role in diversity requirements at UBC that set them apart from other courses that simply do not indicate EDI. These language courses, along with selected topics courses, are deemed *Special* and in need of further investigation to determine EDI content.

Additionally, differences by department were tracked to determine if this automation and ranking approach is suited to the entirety of the Faculty of Arts and what adjustments might have to be made in future projects. Definite differences in some departments were found, but overall these differences only create minor errors in the automation process. These minor errors occur because of the different usage of keywords by department and the ways that impacts the automation results. For example, *Imperial* is marked as a "Strong" word for our automation process, as it generally indicates EDI content, but the History department may use the term differently from other departments. In History the term "Imperial" often indicates a time period or historical moment for different regions, and is much less likely to relate directly to EDI content. However, these variations still only create minor effects in the automation and should simply be noted by the researcher during phase two of the EDI categorization.

Through this two-step phase of data analysis, we are able to create a complete list of courses by department in the Faculty of Arts that are highly likely to include content that critically engages with EDI topics, as well as identify gaps in our approach that could lead to further EDI course mapping projects.

EDI Categories: Course Examples

A – **POLI 345**: Gender and Politics: Political Thought and Practice: The role of gender in Western political theory and the implications for the practice of politics.

B – **GEO 350**: Urban Worlds: City systems and theories of urban location; internal spatial structure of the city; commercial and industrial location; social areas; neighbourhood and land use change; urban trends and public policy.

C – **PSYCH 360**: Biopsychology: The relationship between the nervous system and behaviour; the physiological basis of perception, motivation, learning, and memory

X – **FIPR 269**: Special Topics in Film Production: A topic of current interest in film production.

Z – **ECON 499**: Honours Essay: Essay on some theoretical, applied, or institutional problem.

Results

Overview

There are over two thousand established courses (courses that have been offered consistently in departments for at least 3 years) in the Faculty of Arts. Through this process, we were able to categorize all of these courses into one of the five categories described above (EDI-focused, EDI-adjacent, Unindicated, Special, or Out of Scope). We were also able to analyze the breakdown of courses for the Faculty of Arts as a whole as well as for each of the 25 departments within the Faculty. These results will be shared with key decision-makers in the Faculty and in individual departments to support further efforts to advance EDI within the Faculty.

Automation Tool Results

The automation process has proven to be successful as an assistance tool for a researcher sorting through these course descriptions. The tables in this section show that the automation categories align with the related final EDI category. For example, the table for “EDI Category C – Unindicated” shows how over 80% of the courses in this category were automatically eliminated during the automation step, showing that the final determination that these courses do not contain EDI content matched the automation tool’s initial sorting. The automation process also shows that the majority of the *EDI-Focused* courses, the identified category A courses, were mostly found in the automation sections 1 and 2. This result shows that the automation is successfully selecting out EDI indicators in these course descriptions.

EDI Category	EDI-Focused A
Automation Categories	% total of EDI Category
1 Very Strong EDI Detected	35%
2 Moderate EDI Detected	40%
3 Weak EDI Detected	21%
4 No EDI Detected	4%
Grand Total	100.00%

EDI Category	EDI-Adjacent B
Automation Categories	% total of EDI Category
2 Moderate EDI Detected	6%
3 Weak EDI Detected	66%
4 No EDI Detected	30%
Grand Total	100.00%

EDI Category	Unindicated C
Automation Categories	% total of EDI Category
2 Moderate EDI Detected	1%
3 Weak EDI Detected	18%
4 No EDI Detected	81%
Grand Total	100.00%

EDI Category	Special X
Automation Categories	% total of EDI Category
1 Very Strong EDI Detected	0%
2 Moderate EDI Detected	1%
3 Weak EDI Detected	35%
4 No EDI Detected	64%
Grand Total	100.00%

EDI Category	Out of Scope Z
Automation Categories	% total of EDI Category
2 Moderate EDI Detected	0%
3 Weak EDI Detected	8%
4 No EDI Detected	92%
Grand Total	100.00%

Discussion

The results gave us an initial understanding of what course titles and descriptions have to offer as initial indicators of EDI content. Our analysis shows that EDI content is already clearly present in the Faculty of Arts. Furthermore, a department breakdown shows that close to all departments have some number of already identifiable EDI courses. However, there are still clear differences in which departments make up this total count of category A EDI courses, as well as departmental differences in proportional representation. For further clarification, *EDI-Focused* courses that make up the final EDI count are simply representing what exist in the course description and title of courses. We are also aware that the process for changing or updating course titles and descriptions can be onerous and there is currently little incentive to for departments to update this information to reflect a shift to greater EDI content that may have taken place in recent years. This means that many EDI courses might exist that have not been captured by this approach and further development of this project is needed to address these limitations.

The results from this project that are publicly accessible are in regards to our automation process. These results show us the effectiveness of the automation process. The automation process shows a very low error rate for missing EDI courses (at around 4%), but this does not mean that this course sorting would be possibly solely through automation. Though the [results](#) in the automation tables earlier in the report show clearly that a trend exists between where the automation sorting and what the final category of the course is, there is still a large flexibility between the “maybe” categories (2 & 3) on the automation side that represent the necessity for a researcher to sort through these results. This doesn’t mean the automation tool is a failure, as the process of automatically sorting these classes eliminates a lot of course descriptions that a researcher might have to read, and allows for quicker passes over a lot of the data in order to find the necessary results. It is possible to now take this tool and expand it beyond the Faculty of Arts and also work with departments to adjust the tool to encompass more departmental differences.

Conclusion

This project is just an initial step in understanding EDI content in courses at UBC but we have successfully created a tool and a final EDI course count that can be used by departments and by the EIO in the future. We now know EDI content information when it comes to the Faculty of Arts, and that the automation process gives a low percentage of error that a human eye can easily correct. With this Excel tool developed, we can now begin looking at different Faculties at UBC, as well as show departments at UBC how to shape course descriptions to give students and researchers a better understanding of their EDI content. The current lack of EDI course content in any particular department is not a condemnation as this process has severe limitations and requires further development, but it is a starting point to begin further discussions on how departments present their EDI content and what this means for students and the university as a whole.

This current project has created the first building blocks for going beyond the Faculty of Arts with this discussion, as the wide variation within the Faculty of Arts has helped shape a tool that accounts for vastly different approaches to course descriptions. We found that various departments and disciplines used distinctly different language to one another and adjusted the automation tool to fit these and many similar variations in the data. Though there are still many limitations that should be addressed in how this data is being processed, the automation tool we developed functions as a broad assistant in identify EDI content. This project ultimately allowed for the time and work necessary to refine a tool that will now be useful in reviewing the majority of courses at UBC as it has already been designed to deal with a wide range of departmental differences.

This process has made it clear how EDI content is a complex and evolving idea, and that the topic of EDI work in-itself is still difficult to clearly define for institutions and academics spaces. This ambiguity doesn't mean we are not able to create definitions and standards but that we should be open to changing these definitions as new research and information becomes available. The current EDI course count is more a reflection of what students might potentially read from these course descriptions more than the ultimate content in the class. However, it should also be noted that this work could potentially extend beyond course descriptions in the future, addressing many of the current limitations of the project and helping to capture the lack of EDI in the departments that maintain very limited course descriptions.

This project can easily be extended in a few simple directions. The most obvious one is by entering in the data from all the different Faculties at UBC. Adding this data will help clarify the holes in the process as well as determine if this approach is effective for UBC in general. Another helpful extension would be to move the data analysis away from Excel. Though Excel is easier to manage and pass on to future project leaders, it also has limited data analysis tools and more sophisticated results might be found by using qualitative and quantitative analysis software. The current list of *EDI-Focused* courses could be narrowed down through further investigation into a curated selection (to be determined by future researchers) of EDI courses for UBC students.

This project has the potential to create a space that emphasizes the importance of EDI content for students, faculty and staff at UBC. As the previously discussed literature has covered, equity, diversity and inclusion are at the forefront of conversations in many academic institutions. These communities have come to terms with the fact that current approaches are not sufficient for creating the desirable on-campus results for universities and more must be done. The very existence of the Equity and Inclusion Office is a testament to this, as the complexities of these issues are dealt with by a full team of staff at UBC. Having a clear understanding of what EDI content exists for UBC students to access is a necessary part of our work to improve this campus for all its members.

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