

**Master Thesis U.S.E.**

**Students' Intentions of Enrolling in**  
**Entrepreneurial Education.**  
**United States and the Netherlands**

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## Students' Intentions of Enrolling in Entrepreneurial Education: United States and the Netherlands

### **Abstract**

This master's thesis aims to investigate the comparison in entrepreneurial programs offered at a university in the United States and one in the Netherlands, to further understand students' intentions, expectations, and opinions on what is currently being offered. Through a qualitative research approach, this study conducted 18 semi-structured interviews on 2 professors and 16 students from the George Washington University and Utrecht University. The results of this thesis find that students believe that a more immersive learning environment for entrepreneurial material is the 'best' way to learn, and one institution takes on a theoretical approach to teaching while the other an experiential style. Students found the material and lessons learned to be useful in their future career paths, whether or not they became entrepreneurs. However, it is important to acknowledge the limitations of this study, mainly the difference in sample sizes from both institutions, cultural differences affecting learning and teaching, and academic structure differences. Future research should aim to address these concerns by focusing on studies exclusively on one institution, to uncover what is working and what is not within an institution, more comparative studies with countries and/or institutions, as well as study a countries cultural differences when comparing institutions from different countries, as this could potentially play a large role in how content is being taught and presented. Largely, this thesis aims to contribute to entrepreneurial education research, and shed light on the aspects from various university programs benefiting their respective student bodies, and what should be done by institutions to further develop this discipline and its students.

**Keywords:** Entrepreneurial education, entrepreneurial intentions, university program, educational institution, qualitative research.

**JEL Classification:** A22, I2, I21.

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## 1. Introduction

Entrepreneurial education and the study of entrepreneurship in academia, has faced a dramatic increase in recent decades. Not only academia, but governments worldwide, increasingly, see entrepreneurship as an “engine” for current and future economic development, and henceforth are investing a large number of physical and financial capital in the education sector (Mason, 2011; Liu et al., 2019). Researchers have been trying to figure out if focusing on the education sector to breed future entrepreneurs is the way to go, leading to immense debate in the field.

Brooks et al (2007), mention that in 1985 there were close to 250 entrepreneurship courses being offered across universities in the United States, with that number increasing to more than 5,000 in 2007. With many countries focused on addressing future economic growth, particularly through the investment of Entrepreneurial Education (EE), governmental and educational institutions are finding it challenging to quantify and measure, primarily attributed to the scarcity of commonality in the field of EE (Duval-Couetil, 2013; Henry et al., 2005a; Henry et al., 2005b).

Generally, with the increase in research in the field of EE, scholars and academics have focused on four components of EE; entrepreneurial intentions of students (Lüthje & Franke, 2003; Izedonmi, 2010; Liu et al., 2019; Biswas & Verma, 2022), post-program outcomes (Gielnik et al., 2016; Gielnik et al., 2017; Matlay, 2008), challenges in program assessment (Duval-Couetil, 2013; Kuratko, 2005; Mason, 2011; Martinez et al., 2011; Henry et al., 2005b), and the program teaching methodologies (Jamieson, 1984; Timmons & Stevenson, 1985; Gibb, 1987b; Wan, 1989; Rae, 1997; Kuratko, 2003; Lackeus, 2015; Liguori & Winkler, 2020).

When inquiry into EE began to receive attention in the late 1980s and early 1990s, research was extensively seeking, and focused on uncovering the definition of entrepreneurship. However, contemporary research has stepped away from the debate of the definition of entrepreneurship (Carpenter & Wilson, 2022), to one of understanding the varying perspectives on entrepreneurship. With the extensive literature in the field, academics have stated the types of research harming EE due to the plethora of publications; the overuse of surveys (Carpenter & Wilson, 2022) as well as the focus on quantitative research (Ratten & Usmanij, 2021). What is suggested for future research is a focus on more qualitative and longitudinal research (Ratten & Usmanij, 2021; Blenker et al.,

2014) to uncover long-term outputs of the educational programs, as well as try and seek to explore a comparative approach with the use of interviews (Biswas et al, 2022; Carpenter & Wilson, 2022; Martinez et al, 2011).

Furthermore, what is lacking in the field, and which this paper hopes to contribute to, is a comparative approach analyzing students' intentions in enrolling in entrepreneurial studies in distinctive environments. This approach will serve beneficial for EE research as it will exemplify the aspects of the programs that are leading to the success of the programs, as well as point out the varying components in programs that might serve useful for the students and administration. Hence, this research will aim to modify the typical perspective taken by academics to further analyze and understand program success factors. The two institutions of study will be researched to learn comparatively how the programs can be improved, chiefly due to entrepreneurial programs emerging everywhere.

Thus, this research intends to study the following research question:

*How do the intentions of undergraduate students studying entrepreneurship in the United States, compare to those studying in the Netherlands?*

This thesis aims to contribute to existing literature and future research in three ways. First, this research will serve beneficial to EE research as it has shown the feasibility there is in applying this theoretical framework and the comparative analysis of programs. This framework, which serves to understand the core focus of the programs, can be utilized more often to understand the differing structure of EE programs worldwide, and which factors lead to a more successful program. Second, this thesis will be crucial in emphasizing the need for further academic and institutional research into the field of entrepreneurial education, to be able to achieve an improved understanding of the valuable elements in the field, and which ones need further improvement. Future research needs to focus more on a cross-sectional or comparative approach, due to this approach potentially serving a decisive role on the general intentions of the students and the programs. Thus, this comparative approach functions in an advantageous means for a variety of stakeholders; academics, school administration, students, etc. Third, it will have concrete evidence to show university administration interested in the implementation or improvement of entrepreneurial

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programs. This can potentially lead to institutions conducting their own individual research to know in a more comprehensive manner, how their programs are functioning and their general effectiveness. EE research has been able to find broad conclusions, having a difficulty in placing clear numbers to research, thus this comparative approach should place some spotlight on the program factors which are fundamental for good outcomes.

The remainder of this thesis is organized in the following manner. Section 2 presents an in-depth literature review on the field of EE, while addressing the theoretical framework employed by this study. Section 3 will discuss the methodology used for the study, highlighting the research design, empirical setting, sampling design, data collection, and data analysis processes. Section 4 and 5 highlights the empirical analysis and discussion of results obtained from the interviews. Section 6 concludes the thesis and gives insight into where future research should head and clarifies/identifies the limitations of this thesis.

## **2. Literature Review and Theoretical Framework**

The literature on entrepreneurial education has been growing steadily in the past decade, encompassing several varying perspectives and methodologies for research. Research has changed, from its beginning being primarily focused on defining entrepreneurship and being more focused on if entrepreneurial education works, to now being more focused into the long-term outcomes, personality traits, and program influence on the creation of entrepreneurs and new ventures (Ratten & Usmanji, 2021). This literature review will cover what EE is, the study of entrepreneurial intentions, and the challenges of assessing EE. Next the three primary ‘types’ of entrepreneurial education teaching methods will be analyzed and indicate the framework to be utilized in this thesis.

### *2.1 Entrepreneurial Education*

Entrepreneurial education is a field that has been evolving over the last few decades, largely forming in the 1980s, to then experiencing quick growth, to now being offered at thousands of universities worldwide (Kuratko, 2005). From 1985 to 2007, entrepreneurship courses offered in the United States rose from 250 courses across the entire U.S. to greater than 5,000 (Brooks et al., 2007). Many academics and researchers have different points of view on the topic and means of defining it. For this thesis, EE “aims to develop and enhance the quality of entrepreneurship, ambition, drive, and pioneering and adventurous spirit for the college students to prepare for a certain career, enterprise, or business plan” (Liu et al., 2019, p. 2). This way of observing EE encompasses the general traits of the programs in general and is not solely defining one type of entrepreneurial program.

EE has now evolved to not only interest business schools and their students but has been a prevalent topic of interest to students majoring outside of business schools (Duval-Couetil, 2013). University administration worldwide, insignificant of their field of study have been researching into the benefits of such program implementation and has become “one of the hottest topics at U.S. business and engineering schools” (Mason, 2011, p. 3).

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### *2.2 Entrepreneurial Intentions*

Research studying entrepreneurial intentions has been around for decades. Scholars such as Lüthje & Franke (2003, p. 142), see one's entrepreneurial intention, as "the most important predictor for an individual's entrepreneurial behavior". Their research has had an effect decades after with researchers such as Liu et al. (2019), to remain strictly focused in figuring out if entrepreneurial education has a positive effect and benefits, on an individual becoming entrepreneurial. Scholars such as Kirkley (2017) and Zhang et al. (2014), have revealed there to be a positive correlation between receiving entrepreneurial education and having entrepreneurial intentions, which serves useful in this thesis. Biswas & Verma (2022) stated that future research taking a comparative approach, can serve useful in trying to uncover whether there's an impact of EE on students' entrepreneurial intentions.

With a vast amount of research in entrepreneurial intentions, several other theories have emerged, and are being adopted as possible predictors on the intentions of students, not solely stemming from the courses taken. Scholars such as Antoncic et al. (2015) and Brown & Taylor (2014) have studied the Big Five personality traits model, possibly playing a role in measuring a student's entrepreneurial intentions. Similarly, other academics have taken a broader approach, mentioning how personality traits have a direct effect on overall intentions. While others have utilized theories from other fields of research and applied it to academia in entrepreneurial education, Liu et al. (2019) have applied the "Theory of Planned Behavior" (Ajzen, 1991), to investigate the underlying attitudes and factors that contribute to a person's intention in becoming entrepreneurial. This theory was one that was further developed by Ajzen (1991), in which it describes how one's intended behavior is predicted by three factors: (1) the attitude one holds to realize a behavior; (2) subjective, or the "perceived pressure" by society to perform the behavior or not; and (3) perceived behavioral control, or the "difficulty/ease" to conduct the behavior (p. 188). These three predictors later lead to an intention or not for an individual, ultimately becoming a behavior.

### *2.3 Challenges of Assessment*

Several scholars in the field of EE, research into the challenges there are surrounding the assessment and clear academic findings when analyzing EE worldwide. Duval-Couetil (2013) in her research, attempted to focus on the specific challenges that currently exist in the field, which



led to assessing programs and their instructional methods as difficult to accomplish. Duval-Couetil mentions there are four main characteristics associated with EE that make it challenging to assess:

“(1) it is a young discipline with a body of knowledge that is ill defined; (2) its heterogeneity limits standardization across students, faculty, and institutions; (3) it emphasizes practice and has significant involvement by nonacademic practitioners in teaching and administration; and (4) it is assumed that venture creation and economic development should be educational outcomes.” (p. 397)

All four of these findings contribute to illustrating this field as “immature” and relatively new, making quantifiable outcomes difficult to achieve or even discover. In addition, little consensus in the field across institutions, academics, and governments adds to the difficulty in assessment (Mason, 2011). An example is found in a study conducted by Fiet (2001), which yielded results solely on the review of syllabi across the field and found that there were approximately 116 topics being covered in education, with only about one third being similar. Henry et al. (2005a) further demonstrates this cross-sectional variation, with the content being taught ranging from “lectures, presentations and handouts to video and case study-based learning, with group discussion and role-plays” (p. 105). This potentially leading to the hindering of creativity and entrepreneurial thinking in students, with the main challenge becoming how can those teaching this EE find innovative effective learning methods for their students (Henry et al., 2005a; Henry et al., 2005b).

#### *2.4 “Types” of Entrepreneurship Education:*

There is ample research focused on the methods of instruction of the countless EE programs around the world (Jamieson, 1984; Timmons & Stevenson, 1985; Gibb, 1987b; Wan, 1989; Rae, 1997; Kuratko, 2003; Lackeus, 2015; Liguori & Winkler, 2020). With entrepreneurship receiving more attention in the field of academia, the term EE, and its implications in curriculums, has changed slightly in recent decades. Gibb (2000) points out that EE used to be referred to as “enterprise” education but shifted around the turn of the century to be referred to as “entrepreneurship” education. Not only has the name of the field of study transformed over the years, but the focus of university programs has also been addressed differently in academia. The field emerged as having three major educational focal points, education “about” enterprise, education “for” enterprise, or education “in” enterprise (Jamieson, 1984); to then having a slight change focusing on the teachable vs non-teachable (Jack & Anderson, 1998; Miller, 1987; Shepherd & Douglas, 1996; Rae

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& Carswell, 2001), to more recently being researched as “about” enterprise, “through” enterprise, and “for” enterprise (Lackeus, 2015; Kakouris & Liargovas, 2021). *Table 1* depicts the key attributes of Jamieson (1984) and Kakouris & Liargovas (2021), to provide a visual representation of their key similarities and differences.

*Table 1: Differences in Entrepreneurship Education*

	<b>ABOUT</b>	<b>FOR</b>	<b>IN / THROUGH</b>
<b>Course Objectives</b>			
Jamieson (1984)	- How to set-up and run a business	- Encourage individuals to follow their business endeavor - Teach Practical Skills	- Skills, Knowledge, and Attitude - “Adoption of an Enterprising Approach”
Kakouris & Liargovas (2021)	- “Knowledge, Skills, Attitudes” (KSA)	- “Skills, Knowledge, Attitudes” (SKA)	- “Attitudes, Skills, Knowledge” (ASK)
<b>Primary Focus</b>			
Jamieson (1984)	- “Awareness creation” - “Educate on various aspects of business creation”	- Preparation for Business Creation - Start-Up and Small Business	- “Ensuring growth and future development
Kakouris & Liargovas (2021)	- “Contingent Knowledge” - “Economic, Management, Product Development, Finance, etc.”	- “Skills” - On the individual, to then create the curriculum	- “Attitudes” - Assumption of possessed skills - “Humanistic perspective”
<b>Teaching Methods</b>			
Jamieson (1984)	- Primarily Theoretical	- Business Plans	- Management training - Growth training programs - Product development and marketing courses
Kakouris & Liargovas (2021)	- Class Instruction	- Experiential learning - Mentoring - Case studies	- “Attitudes are expected to intrude in the learning environment” - Difficulty due to variety of individuals attitudes - Individual reflection
<b>Creation</b>			
Jamieson (1984)	- “Foster skills, attitudes, and values”	- Business Plan	- Their future
Kakouris & Liargovas (2021)	- Skills, Knowledge, Attitude	- Skills, Knowledge, Attitude - Start-Ups	- Skills and Knowledge - Transform Attitudes
<b>Audience</b>			
Jamieson (1984)	- Students	- Students	- Established entrepreneurs
Kakouris & Liargovas (2021)	- Students	- Individual	- Individual

#### 2.4.1 “About”

The first form of EE that is often discussed among scholars and has similar definitions across academia, is what is referred to as education “about” entrepreneurship or “about” enterprise (Jamieson, 1984; Kakouris & Liargovas, 2021). Jamieson (1984) as the first scholar to create this three-category framework when analyzing EE, refers to the first type as the style of education that has the “specific objective of educating students on the various aspects of setting up and running a business mostly from a theoretical perspective” (Henry et al., 2005a). He mentions how there is not a difference between learning in this manner at the undergraduate or graduate level, and how it’s always focused on trying to “foster skills, attitudes, and values”, which are fundamental in venture creating (Jamieson, 1984). Lackeus (2015) poses a similar perspective as Jamieson (1984) and describes the teaching “about” entrepreneurship as an educational perspective that is theoretically driven, focused on teaching the general concepts in the field of entrepreneurship. Both academics emphasize the theoretical importance in the “about” method of teaching, and the creation of the base of knowledge in the field of entrepreneurship.

Kakouris & Liargovas (2021) have a similar perspective on the “about” form of EE yet have taken a slightly different approach of conceptualizing and describing the three forms. These two authors have focused on how the importance of Knowledge, Skills, and Abilities differs within the various types of EE, as shown through a graphical depiction in *Appendix A*. The “about” model is described as having the conceptual knowledge as the focal point of this form, which then leads to skills and abilities evolving and/or becoming the focus solely after the knowledge is transferred.

#### 2.4.2 “For”

The second way in which to categorize EE as proposed by Jamieson (1984), is education “for” enterprise. This style of education focuses further on the “preparation of aspiring entrepreneurs”, by being educated on the required skills of becoming self-employed. Jamieson describes this method, as being the style of teaching directed towards start-up and small business creation. Jamieson (1984) establishes that the method of instruction for this type of education is principally focused on business plans, through their creation and analysis. This type of education is targeted for students, primarily interested in becoming or learning how to become young entrepreneurs and encourages them to do so, through the teachings of practical skills. Lackeus (2015) similarly shares

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a perspective as Jamieson (1984) in the “for” category, and briefly describes this style as “an occupationally oriented approach aiming at giving budding entrepreneurs the requisite knowledge and skills”. The similarity in both academics is in Lackeus (2015) using the word “budding” and Jamieson (1984) mentioning “aspiring”, is where both authors share the same opinion of this style of teaching; this style of teaching, intended for those strongly focused on starting a business.

With a slightly different approach, Kakariou & Liargovas (2021) emphasize that this method of instruction is one in which the individual's skills provide them with their initial base, and thus the entrepreneurial knowledge learned, is accomplished through “experiential learning” (Concept b in *Appendix A*). This process of ‘experiential learning’ is done through mentorship throughout the program, and a high level of exposure to case studies, to get practical first-hand experience of the content being learned. The authors argue that if an individual or student follows this “for” method of teaching approach, they might develop a new venture/idea/concept, yet lack in the knowledge component. However, they further emphasize that the individual still has a good success rate, as they can gradually over time further understand the knowledge component to help them succeed.

### 2.4.3 “Through”

The third concept in the three-category framework the various researchers focus on, is education “through” or education “in” entrepreneurship. Education “in” enterprise for Jamieson (1984), dealt with “management training for established entrepreneurs and focuses on ensuring the growth and future development of the business.” (Henry et al., 2005, p. 102). This education was not seen as just for students, but more for any individual pursuing an entrepreneurial path. The methods of teaching for this form of education, was largely through management development, growth trainings programs, and product development and marketing courses (Henry et al., 2005a). Overall, Jamieson (1984) states that these types of courses are to “adopt an enterprising approach”, irrespective of the background of the individual. This entire approach is solely focused on providing training to the students/individuals, to build their skills, knowledge, and attitude, to go out and start a venture or solve a problem. Lackeus (2015) describes this method slightly different from Jamieson (1984), and names it, teaching “through” entrepreneurship, comprised of primarily as an “experiential approach”, taking students through the whole learning process. In sum, Lackeus

(2015) describes this style of teaching as “activity oriented”, in which there’s an abundance of real-world examples and hands on experiences by the participants.

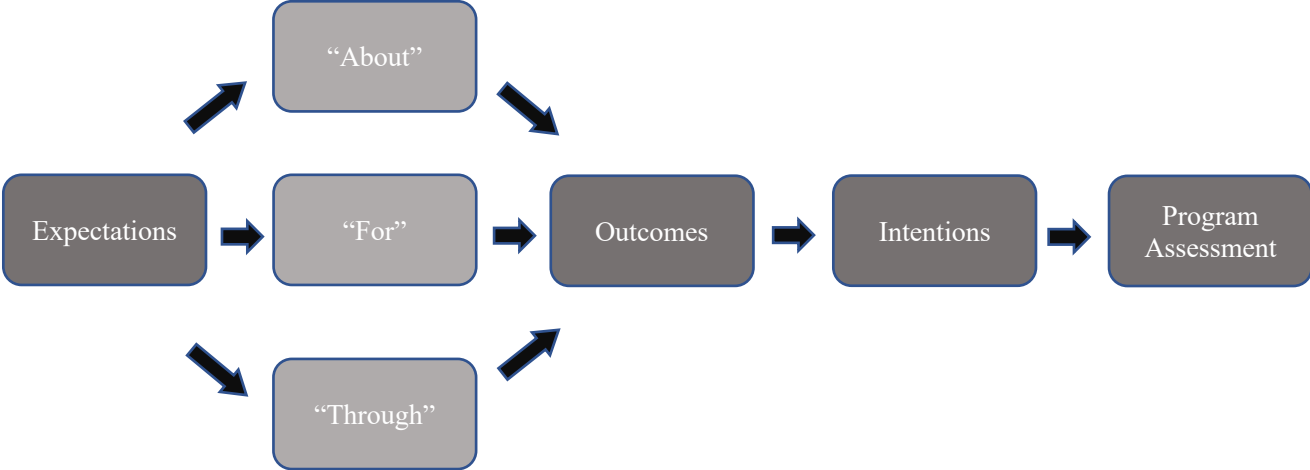
Kakariou & Liargovas (2021) across their model, describe the “through” method of teaching in part C of *Appendix A*. The authors describe this method as being grounded on the participants attitudes, in other words a “person centric approach” (p. 408). This approach entails that the individuals have the attitudes formed already, to now be inclined to be educated further. The authors emphasize that this method of instruction is vastly different from the other two, specifically due to the role attitude plays. In the other two methods, attitudes are assumed to be taught or change while acquiring the education, however in the “through” method, attitudes are a prerequisite and a necessity for this mode of instruction. This approach of instruction has an objective of trying to “transform the attitude of the attendees for business venturing”, through deliberate manners that align with the “interests of the trainees” (p. 409-410).

### *2.5 Theoretical Model*

A research model was built for this thesis, fundamentally developed from the works of Jamieson (1984) and Kakariou & Liargovas (2021). *Model 1* has four various stages in which the research will focus upon, allowing for the evaluation of the programs within themselves as well as between them. The first stage, furthest to the left is “expectations”. This section is composed of the overall expectations that the students have when participating and/or enrolling in entrepreneurship, and what they aim to attain through the programs. The next phase of the model is composed of the three types of teaching methodologies proposed by Jamieson (1984) and Kakariou & Liargovas (2021). This is where the program and courses being offered will be categorized into the different “types”, since the content, course objectives, and forms of instructions, differ. This in turn leads to the “outcomes” which will depict the varying results that the different teaching methodologies have. Next, the students’ “intentions” will be analyzed in order to see how these courses have impacted the intentions they possess in further taking another entrepreneurship course or their overall intentions in following an entrepreneurial path. Lastly, comes the overall individual program assessment looking at the curriculums of the courses and from an administrative point of view, is trying to be transferred to the students participating in the courses.

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*Model 1: Theoretical Framework*



### **3. Methodology**

In order to provide an answer to the stated research question, the following sub-questions need to be addressed first: (1) *What are the administrations intentions for offering the courses/programs?* (2) *How do the specific courses offered, effect the intentions of the students?* (3) *What do the programs hope to transfer to their students?*

To find a response to the stated question and sub questions, the methodology section will describe how the study will take place and be analyzed. This section will cover the intended research design, the empirical setting, the data collection, and data analysis approaches, and lastly cover the ethical considerations for the study.

#### *3.1 Research Design*





Given the objectives of this thesis, a qualitative research methodology will be utilized, due to its ability to uncover more authenticity in the overall findings and data collection process (Ebbs, 1996). Since the research intends to uncover the varying intentions undergraduate students have, a semi-structured interview approach, seems the most suitable. By utilizing semi-structured interviews, it allows for the interviewees to “occupy” the focal point of the study (Ebbs, 1996, p. 218). Through discussion, it will present more unique findings and analytical reasoning, allowing for great analysis to take place.

Moreover, with the focus of this study being on a definite demographic of individuals in two distinct countries, a multiple case study approach was the most appropriate. One of the reasons that the U.S. and Netherlands were a good base for this study, was that both countries exhibit similar scores on their “Post School Entrepreneurial Education and Training” in 2022 (GEM, 2023). The U.S. scored a 5.24 and the Netherlands a 6.07, with a 5 being a highly sufficient ranking, and showing that there is a great amount of incorporation of entrepreneurial education within both countries. Primarily due to geographical similarities between Washington, D.C., and Utrecht, these two regions became the focal point of trying to find institutions focused on entrepreneurship. The George Washington University and Utrecht University became the central points of study due to both institutions exhibiting loads of entrepreneurship studies, programs, courses, global rankings, and overall affirmative community sentiment, as well as having

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established entrepreneurial programs from similar time frames. *Table 2* demonstrates brief insights into both institutions' country, number of students enrolled, and some global/national rankings from U.S. News & World Report (2022).

*Table 2. University Facts*

Name of Institution	Country	Students Enrolled	Rankings
 The George Washington University Founded: 1821	United States 	~26,000 Students	<ul style="list-style-type: none"> <li>▪ 55<sup>th</sup> Best Business School</li> <li>▪ 271<sup>st</sup> Best Global University</li> <li>▪ 130<sup>th</sup> in Economics &amp; Business</li> </ul>
 Utrecht University Founded: 1636	Netherlands 	>35,000 Students	<ul style="list-style-type: none"> <li>▪ 44<sup>th</sup> Best Global University</li> <li>▪ 2<sup>nd</sup> Best University in the Netherlands</li> <li>▪ 140<sup>th</sup> Economics &amp; Business</li> </ul>

The qualitative research strategy best suited for the comparison approach to understanding the varying intentions of entrepreneurship students is a multiple case study approach. Yin (2009) mentions how that a case study utilizes “direct observation of the events being studied, and interviews of the persons involved in the events (p. 11). More specifically, a multiple case study approach will be used, as it allows for “cross-case” conclusions (Yin, 2009, p. 20). Yin (1994) explains that the theory and its analytical framework, are crucial for the theory to further develop as well as its validation to take place within academia.

Blenker et al. (2014), highlight that case studies are a suitable methodology for EE research. Additionally, a key strength of utilizing a case study, is its ability to follow and analyze change over-time, which works great for EE research and tracking how it has evolved, and the major differences there are in specific programs across time (Flyvbjerg, 2004). Overall, a multiple case study design will be suitable for this study, primarily due to the ability of case study research being able to uncover findings “horizontally (comparisons and analytical generalizations) and vertically (aggregation and statistical generalization)” (Blenker et al., 2014, p. 710).



### *3.2 Empirical Setting*

EE research has focused on the perspective of the students enrolled in these programs, the faculty involved in teaching the courses, and the administration creating these programs. With the intent of this thesis to uncover a cross-sectional approach (United States & The Netherlands), it becomes pivotal to analyze multiple perspectives involved in the educational process. Ultimately, this creates two units of study: the students enrolled in entrepreneurship courses, and the professors relaying the content. Roulston (2018), highlights the importance of considering the use of a selection criteria when conducting qualitative research. The following selection criteria was created to study suitable students: (1) university, (2) enrolled program, (3) graduation year, and (4) entrepreneurship classes enrolled in. Next, the criteria for the professors of entrepreneurship: (1) university, (2) educational and professional background, (3) years of teaching, and (4) classes of instruction. Grounded on these four criteria set for the students and professors, a total of 18 (n=18) interviews were conducted.

### *3.3 Data Collection*

Based off the selection criteria, 18 participants took part in this study (*Table 3*) with interviews lasting on average 25 minutes. The participants were contacted in early April of 2023 and the interviews were later conducted from mid-April to mid-May. There was a total of ten bachelor students from the George Washington University interviewed and 6 from Utrecht University. Some students were studying entrepreneurship as their major or concentration, while most were taking entrepreneurship courses out of personal interest. One professor was interviewed per university, both with more than 15 years of experience in entrepreneurship education and heavily involved in their respective entrepreneurship communities, institutions, and cities.

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*Table 3. Participants of Study*

Name of Participant	University	Field of Study	Year
GW PROFESSOR 1	GWU	15+ Years of Teaching	n/a
GW STUDENT 1	GWU	BA in Economics	4 <sup>th</sup> Year
GW STUDENT 2	GWU	International Affairs	3 <sup>rd</sup> Year
GW STUDENT 3	GWU	International Business & Entrepreneurship	2 <sup>nd</sup> Year
GW STUDENT 4	GWU	Public Health	4 <sup>th</sup> Year
GW STUDENT 5	GWU	Computer Science	4 <sup>th</sup> Year
GW STUDENT 6	GWU	International Business & Hospitality	4 <sup>th</sup> Year
GW STUDENT 7	GWU	Political Science	2 <sup>nd</sup> Year
GW STUDENT 8	GWU	Entrepreneurship & Marketing	4 <sup>th</sup> Year
GW STUDENT 9	GWU	International Affairs & Business	3 <sup>rd</sup> Year
GW STUDENT 10	GWU	International Affairs	4 <sup>th</sup> Year
UU PROFESSOR 1	UU	15+ Years of Teaching	n/a
UU STUDENT 1	UU	Psychology	2 <sup>nd</sup> Year
UU STUDENT 2	UU	Economics and Business Economics	2 <sup>nd</sup> Year
UU STUDENT 3	UU	Finance	2 <sup>nd</sup> Year
UU STUDENT 4	UU	Economics and Business Economics	2 <sup>nd</sup> Year
UU STUDENT 5	UU	Pre-Med	2 <sup>nd</sup> Year
UU STUDENT 6	UU	Economics and Business Economics	2 <sup>nd</sup> Year

This thesis followed a semi-structured interview approach, to grant the interviewees to assert a “degree of freedom” with their responses (Horton et al., 2004, p. 340). In addition, Horton et al. (2004) describes the ability and impact this approach has, by being able to allow the interviewer to ask follow-up questions based on the answers of the examinee, thus further questioning points of interest. Other authors such as Galletta (2012) describe the same benefit in this method of interviews, because it allows for the openness in dialogue to take place with the participant and not have set boundaries for responses. In this manner, the research will be primarily focused on the participants responses and build from there, instead of only focusing on set data collection boundaries.

In following this approach, prior to conducting the interviews, an interview guide was critical, in order to guide the interviews and have some structure in place (Roulston, 2018). This guide is utilized when conducting semi-structured interviews, to have guiding questions directing the conversation towards the research and have conversation starters in case the discussion needs some guidance (Kallio et al., 2016). Two separate interview guides were constructed. One with 10 questions built for the two professors interviewed (*Appendix B*), and another with 13 questions for the 16 students (*Appendix C*).

The interviews were then carried out in a hybrid manner. The students and professor, from the George Washington University, were contacted through email, and later interviewed via Microsoft Teams, due to the geographical distance, conflicting schedules, and time zone differences. The participants from Utrecht University were first contacted directly through an in-person conversation in their entrepreneurship Bachelor's course, in which later interviewed through a Microsoft Teams video call. All interviews were recorded utilizing the Voice Memo application by Apple on the iPhone, for a simple download as an mp3 file. The files were then sent over to a MacBook, in which the voice recordings were later transferred over to Microsoft Word, where they were transcribed utilizing Microsoft's transcription software, and finally edited for any technological mishaps and grammatical errors.

Furthermore, a bachelor's level entrepreneurship course at Utrecht University, "Essentials of Entrepreneurship", was attended at the end of April 2023. This allowed for the first-hand experience of the course, and direct contact with the students and professor. Additionally, it allowed for assessment of the content, and observation of the teaching methodologies and overall entrepreneurship environment offered at the bachelor's level. In addition to the interviews, access to some of the curriculums of courses being offered at both institutions were received, allowing for further supplementary program information. These documents served useful to get some background information on the programs and have context for the creation of the interview questions.

### *3.4 Data Analysis*

To analyze the data from this research, a thematic content analysis was done, by coding the data, with the support of a qualitative data analysis software program, NVivo. This software facilitated the data analysis process as it has several key functions, such as the search function, that allows the user to find specific key words in their data, however Welsh (2002), points out that further analysis is needed since participants of the study may describe the same concept in different ways, meaning there are various synonyms for concepts, therefore its key to first begin coding manually and not only use a software package. This software package allowed for a simpler visual organizational method to create separate groupings of the content found from the interviews.

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NVivo was utilized as the overarching analytical tool, however manual analysis was the primary analytical function, to uncover various angles of research. The interviews were first fully transcribed. Later, once the transcriptions were finalized, the data was grouped based on similar themes. And finally, codes were developed based on the themes discovered, and plugged into the NVivo application. Through a deductive coding approach, the data was first coded based on an overarching theory, forming the base of the data, in which the testing took place, and the coding confirmed/rejected the research questions, and later organized utilizing a thematic analysis (*Appendix D*).

Saturation within this study was a key component in the data collection and analytical steps during research, which was strongly considered. When describing saturation in the data collection process, saturation “relates to the degree to which new data repeat what was expressed in previous data” (Saunders et al., 2018). Saturation was assessed within the interviews with high levels of repetition already beginning to occur around the seventh interview for the GWU students, and the fifth for the UU students. Upon the completion of these interviews, a couple more interviews were conducted at both institutions, three at GWU and one at UU, to potentially gain a few more diverse opinions and perspectives on the courses. With saturated data being achieved, it will now lead to the further comparative analysis of students at GWU and UU partaking in entrepreneurial courses. Although saturation was noticed already at under 10 students interviewed, it's imperative to understand that it will not always be the same in any study, yet by reaching saturation in this given context, it further ensures credibility in the findings and transferability for analogous studies.

### *3.5 Ethical Considerations*

Next, it's fundamental that this research lays out the ethical considerations made, to showcase the analysis conducted with information that does not harm anyone. From the first contact with prospective participants, the aim of this thesis was clearly stated as well as what would be asked to the potential interviewee, to have “informed consent” from the research's participants (Denzin & Lincoln, 2011). This meaning, that honesty from the start would play a key role in the research, as well as openly keeping participants informed about how their information would be used and tracked for the research. Arifin (2018) mentions that when conducting qualitative research, it's the ultimate responsibility of the researcher to promote “clear and honest research” through the

protection of participants “identity” and “freedom of choice” (p.32). To keep the identity of the respondents anonymous, participants will be referred to as “Student #” and “Professor #”, followed by the institution they attend/work at, when stating results of the research. This is important, as for this study it is not specifically about who is saying what, but instead more about the underlying ideas mentioned by the participants and their comparison.

#### 4. Results

The students largely shared a view that their entrepreneurship courses were unlike any other courses they've enrolled or participated in, and most were left curious to learn more and/or find ways to link back the content learned to their corresponding fields of study or areas of interest. Upon conducting the interviews, there were two central features distinguishing the programs/courses offered in the United States and those in the Netherlands: i) institutions respective styles of teaching, and ii) overall students' expectations. Additionally, from both institutional programs, there appeared to be a shared belief in many recommendations for the future of entrepreneurial education; iv) increasing the number of courses offered and their variety, v) changing up the grading methods and types of assignments, and vi) as a research institution learn from other academic institutions worldwide.

##### *4.1 Structure and Style of the Entrepreneurial Education: "About" vs "For"*

###### *4.1.1 Course Objectives*

The course objectives among the various courses studied through the interviews, was the area that overlapped the most among respondents. Since most of the classes studied and/or observed from both institutions were introductory level entrepreneurship courses, as well as courses which had no enrollment prerequisites, both professors aimed to transmit similar content in their courses. The professors hoped to give the students a "skim" of entrepreneurship in their course, covering topics from 'what is entrepreneurship', utilizing the Business Model Canvas, to how to pitch an idea, and begin searching for funding sources. With the professors at both universities wanting their students to be exposed to as much content as possible during their course, they both used an entrepreneurial tool called the Business Model Canvas, in their class assignments. This model, used by universities worldwide, has ten different components, ranging from key activities, customer relationships, key resources, to cost structure and revenue streams; allowing students to learn broad aspects of entrepreneurship in the course, while conducting field work.

*"I think its most important for us, is showing students what being entrepreneurial is because I think that the entrepreneurial attitude that people can have, is something that will set them apart later on, when you look for jobs, even if you don't want to become an entrepreneur, you could be a very good entrepreneurial employee. So, that's where the intrapreneurship comes in." Professor 1, UU*

Furthermore, through these introductory-level courses, the professors wanted to teach the students concepts, ideas, and frameworks, that not only would serve useful in the course, but also down the road in their careers. Both professors shared a strong belief in that the skills learned through their courses are strongly transferrable to future employment and can be utilized at all levels within a company, not solely for entrepreneurs per-say. The students additionally recognized this idea of the transferrable skills component trying to be transmitted to them, but recognized the objectives of the material learned to fall more along the lines of soft skills they are both simultaneously learning, if not have been exposed to them already, or growing their already established skills. Students interviewed from both academic institutions, described the courses objectives as giving them a “broad background”, “basic idea” on entrepreneurship, with some seeing the courses from a differing perspective, believing the courses aimed to transmit the ability to grow “people skills” through the idea of “mentorship” and growing your network. The course objectives were seen as relatively similar from all students, irrespective of their university, yet some saw more of the transferrable skills as being the key objective. Due to the weekly material from all the courses studied, changing on a weekly basis, similar to a new chapter in a textbook, students were showed a plethora of sides of entrepreneurship, from definitions, to concepts, to theories, to examples.

*“Skills from this class that you can apply it to other aspects of your life it doesn't, you know, not necessarily just the starting a business like just general like... soft skills.” Student 2, GWU*

*“As I said, I think a lot of the skills taught in these courses translate well in the workplace to multiple fields and it teaches you good like presentation skills, writing skills. And just like how to market yourself and your brand in general.” Student 9, GWU*

In addition, through the courses objectives it made students see the benefits of these style of courses in their respective areas of study. Both institutions shared the ability to enroll in entrepreneurship courses no matter the student’s area of study, allowing the students to engage in teamwork, dialogue, and discussion, with varying different backgrounds. Students not only saw the benefits of these courses for their future professional careers, nonetheless, realized the advantages of these courses content and teachings for their non-business degrees and courses. Several students from both GWU and UU mentioned how they now feel slightly better off than

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their classmates who have not taken an entrepreneurship course, primarily attributed to the courses opening their perspectives to see any business through a distinct lens. Furthermore, they stressed how the skills learned in this course serve exceptionally beneficial in their other courses and feel that now they can contribute more to their course with different perspectives, methods, and theories.

*“100%. This changed my perspective about the way I view things and even in healthcare as well with my major public health. Like it's kind of changed how I viewed like healthcare business and how people like set up the organization and like running business in healthcare.” Student 4, GWU*

Overall, in terms of the content being taught within the entrepreneurial courses in both Washington, D.C. and at Utrecht, professors aimed to transmit similar views on entrepreneurship. Most students felt that what was being taught to them was useful information for the present and for the future.

### 4.1.2 Grading Styles

On the other hand, both institutions begin to diverge substantially in their ways of grading their students in the courses observed. At GWU, from the 11 interviews conducted on students and a professor teaching three of the courses, there were four factors that contributed to their grades. There was an individual assignment, typically a reflection of an entrepreneurial book read in the course, called ‘Scaling Up’. The professor included this as part of the course to include a bit of reading for the students, through a short under 200-page book of how to scale your company by 10 times. Then there was a class participation component, in which students must participate at least three to five times during the duration of the course, to have productive in class discussion from differing perspectives and not have the conversation dominated by the same few students. Next, in all three courses, students participated in one of three entrepreneurial competitions, “Pitch George”, “Mini-Pitch George”, or “The New Venture Competition”. Students were graded in these competitions not based on how far they made it, but on their different submissions for the competitions; business model canvas, 2–3-minute pitch, pivots made, and much more. And lastly, students were graded on an in-class presentation on the company they pitched in the competition. Students described this assignment as being public-speaking and presentation skill practice. It's significant to note that in none of the three courses observed was there any quizzes, mid-terms, or



final exam. The professor and students held a shared belief that memorizing just for the sake of memorizing for a test is not a great way to learn or even motivate students to learn, so they rather teach and learn, across the method of experiential learning, in order to learn through experience.

*“I've definitely enjoyed the grading process. I think it like makes you even more motivated to learn because you're not so focused on just trying to like, memorize things and like all I need to study for this test, like it's more. Definitely for that class I'm like, oh, like not feeling like nothing is forced, right. It's like you get in what you put out of it, which I really like that.” Student 2, GWU*

Students at Utrecht University on the other hand, utilized some of the same learning tools, such as the Business Model Canvas, yet the way of being graded was more along the lines of a typical course. Students from the 3 different courses, stated the classes they've participated in had three total assignments. The first was an individual assignment, that was not discussed much, but seemed to be an individual reflection on a specific entrepreneurial topic. Then, the students had a period long group assignment, similar to the GWU students, in which they had to come up with an idea of a company and utilize the BMC to further develop their idea and improve it, during the duration of the course. And lastly, the largest part of the student's grade, was attributed to a final exam, composed of the content learned from weeks one to eight; from readings, lectures, and tutorials.

*“Grade is 40% based on that team assignment in which they write the business proposal and the 60% is the theoretical side where students get a case study, and they have to apply what they've read in theory to the case study that they get during an exam.” Professor 1, UU*

This clearly shows there is a clear divergence of views when it comes to how to assess the students with the content learned throughout the courses. It's noted in multiple aspects of instruction how GWU is effectively more focused on the experiential aspect of their program, while UU has a more theoretical grounding, leading to the grading of students to be significantly different.

#### *4.1.3 Methods of Instruction*

The different institutions relayed the content to its students with distinct purposes and methods. Both GWU and UU were mainly categorized into two of the second order themes in *Appendix D*, the theoretical and experiential styles of instruction. The George Washington University students

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described their instructional methods as being “hands-on”, immersive, and from the first day being heavily exposed to entrepreneurial methods. The students and professor mentioned that a theoretical background was not so much taught or even viewed as important, as the content would be learned more through the experiential style of learning that most entrepreneurship courses were described at the George Washington University. Students had little to if any sizeable readings, but were exposed more to guest speakers, visiting community business's, conducting field tests, and further developing their venture idea from the first week of the course, until the last. Several students describe the course as getting started from the first day, something not standard for university courses that are four months long.

*“So, I think on the first day the professor was like, OK, now do like a pitch. And I was like, what is a pitch? You know, I've never done that in my public health courses. And then these students would just come up and do it perfectly. I was like, wow, she is so good. At this, which is very inspiring.” Student 4, GWU*

Not solely from the student's perspective, but the professor was cognizant of how they wanted to get the most out of their students in the semester long course they were enrolled in. Although a course that lasts four months, the professor wanted to expose the students to as much handy information as possible, also being well-aware of the tuition costs being paid by the students; one of the highest in the country. Students were tasked with participating in one of two entrepreneurial venture competitions offered by the university, ‘Pitch George’ or ‘New Venture Competition’, depending on the course the student was enrolled in. These were competitions in which students from across the university would pitch potential venture ideas to a panel of judges and be tasked with conducting customer discovery, pivoting, creating a business plan, and several of the other tools taught during the course, to potentially be awarded money to fund their idea, in the tens of thousands of dollars depending on the ventures sector. Therefore, the professor wanted the student to immerse themselves in the course, through the idea of having to attend this contest.

*“Class presentations and then to experience, dip their toe in the water being an entrepreneur, by engaging in a pitch contest” Professor 1, GWU*

Distinctively, at Utrecht University students were being taught the content from a more theoretical perspective, primarily by means of literature. For every new theme or topic that was taught,

students had to read some literature, several from recent years, and others that to some students seemed outdated, yet were the foundation of many theories utilized today. The courses would meet twice a week, once for the lecture, and again later in the week for a tutorial session. The students described the lectures as being grounded on literature or broad concepts of entrepreneurship, in which the tutorial would show how to link those theories, by being learned in real-world cases presented through case studies and the group assignment of creating a venture.

*“First few weeks it was very broad. It was more like different theories of entrepreneurship and which characteristics apply to each type of entrepreneurship and it went, it narrows really down like first you talk about entrepreneurship in the society and then you talk about entrepreneurship in the firms... we had a lecture and then they tell us the theory and then in the tutorials they link the theory to some articles or some companies like case studies.” Student 6, UU*

Similarly, to the distinctiveness across institutions on grading styles, there was a clear dissimilarity with the forms of instruction the students were receiving. One university was solely focused on providing predominantly hands-on experience, while the other presented students with a more theoretical background on entrepreneurship, while still providing them with some slight hands-on exposure.

#### *4.2 Differing Expectations:*

Supplementary to the structure and style of the courses offered by both institutions differing on multiple factors, the expectations of the students going into and after taking the courses differed by individual student. The result of the interviews did not yield concrete differences among students from the two institutions, yet there were three main expressive results shared by the students.

First, several students shared a strong belief that the courses ended up not being what they pictured when becoming enrolled in the course. Although this response was predominantly from the students from UU, some from GWU shared this belief as well. What most students expected when enrolling into an introductory entrepreneurship course, was there to be more experiential learning methods, or solely this style of teaching. Almost all students interviewed believe that entrepreneurship courses are and should be taught differently than a typical course and found it

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dissatisfying when what they enrolled in, was not the reality. Furthermore, students were left dissatisfied with some of the material being learned. In other words, they expected for there to be a broad range of topics discussed, but several students from GWU pointed-out that many standard entrepreneurial topics were not discussed further. The students felt that there should have been more of a focus on areas such as financing, a topic that is hardly taught in other courses for small to medium sized enterprises. With these discontents, it led to a few students to not feel motivated to do the work and readings, and therefore to not fully immerse themselves into the content of the courses.

*“The foundation and I know that's important to know, but I don't think anyone expected it to be like that. It wasn't so yeah, interesting as I thought... I expect like a course which wasn't as theoretical and more around the concept of entrepreneurs because entrepreneurship isn't that theoretical. I expected it to be more like interactive... But I think the difference between courses in the bachelor and, for example, doing your Master's is that you go really into detail at your Masters...I think that like an online course on entrepreneurship can give me more knowledge than the course that I had in university, so I'm not sure if I will do another entrepreneurial course in my bachelors.” Student 4, UU*

On the contrary to many students feeling as though they enrolled into a course different than what was expected, some students felt that the course ultimately was much more than they had envisioned, but in a worthy way. Students at GWU felt that the course started right from the start with assignments, pitching in front of classmates, and immersing themselves in an entrepreneurial environment. And the students from UU felt the course was offering them broad overview of the discipline and were able to utilize various theories and frameworks in different disciplines and in their daily lives. A particular result that immersed from a limited amount of GWU students, was how the entrepreneurship courses were one of the most time-consuming courses some students have taken during their studies, yet all complimented it incredibly well, and did not complain about the workload. The students saw the workload as truly being helpful and useful to learn but also to use further on in their careers and individual lives, since students from both programs stressed that most of the content learned in school is later forgotten or meaningless to have learned. As well, students described that by just taking one course in entrepreneurship, the lessons and content learned was comparable to have participated in numerous more.

*“It's more like than I thought it would be, but in like in a good way because you know like. I learned a lot more than I thought I would in just like one class. I thought it would take me like 5 classes or like at least a couple more classes to learn as much as I did, in this one class.” Student 7, GWU*

Moreover, some of the interviews highlighted how students became creative in terms of how they would further their knowledge in the field. Many became interested in entrepreneurship prior to the course and due to having been enrolled, while others felt they needed to have learned more from it. There were two primary reasons that this occurred. First, the programs at both institutions lacked some courses that the students felt interested in or thought would benefit them with their entrepreneurial studies and passion. This led to students, particularly ones at GWU, since the school offered a major in entrepreneurship, to take matters into their own hands and become creative with their studies. This meant, creating their own “major” to account for any content missed from the courses or content they felt would benefit them with their majors. Second, since UU students did not have a major offered, but only a minor, students had limited amounts of courses to choose from and many left discontented. Due to so, students began to try and teach themselves some content from online workshops, videos, etc. Overall, there was a dichotomy of the way students saw the courses, and is something important to observe, and analyze from the interviews.

*“That's why I'm doing marketing too because I tried to make like my own thing, you know, because I took pricing, for example, which is very helpful for entrepreneurs. How they're going to price their product? I took finance which is not related to my major. I took a venture capital class which is also very helpful for entrepreneurs. So, I tried to like take classes outside the program just to make sure I get all the knowledge I need.” Student 8, GWU*

#### *4.3 Student Recommendations for Future of Programs*

Ultimately, students pointed out three key recommendations for the future of their programs, as they see the programs as beneficial for their studies, irrespective of their area of concentration.

The main suggestion revealed by the interviews was the students desire for there to be more classes readily available for anyone interested to take. Both universities, although GWU had about four times the number of classes offered in entrepreneurship than UU, still lacked to offer students more

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options for courses. One recommendation in this regard mentioned, was to include entrepreneurship courses for different majors, not solely being provided by the business school. A UU professor interviewed mentioned that this was something offered by UU but over the years the courses are not being offered anymore. This should receive more attention, in order to possibly include more courses down the road and have a larger student body enroll in the courses.

*“So, Utrecht School of Economics offers this course, but we used to do this in conjunction together with other faculty at the university. And they're sort of pulling out right now. So, we used to have I think three or four different minors in entrepreneurship, and now we only have one left because business and science is saying we're not so much interested in having a specific minor for us, and it's the same for other minors too. So, we see, I see at the moment, sort of I think we've if you take a look at the hype cycle, we've been through the hype, we've had the hype and we're going a bit down now. So, I think the interest from other scholars is also a bit going down.” Professor I, UU*

Subsequently, multiple students pointed out that they'd prefer the grading style to be tweaked. Students mentioned that with a different grading style, it would allow for them to learn more content, as well as be more motivated to go to class and get the work done. Students from UU stressed these two factors, as several did not agree with the fact that they had to take an exam in the course, yet some pointed out it was good since what they were chiefly learning were theories. It becomes important to not outweigh certain suggestions to others, but to still hear them out, as they can mainly only improve the programs offered. Their suggestions would be to change the percentages of the grades to not be so test heavy, for example, since currently there is 60% the exam. Another suggestion, for the GWU students was to not make the participation policy so strict. The current policy does not allow you to miss a class, and if you do then you cannot receive an A. The student mentioned not to make it easier to skip the course, but that sometimes something uncontrollable arises and it impacts your grade at the end, so maybe to relieve some of that pressure. All these suggestions, the students believe will incentivize them to learn more in the course and be present and participate.

Thirdly, the respondents recommended for the university to learn from other academic institutions. Regardless of where the university is situated, students advised their schools to utilize methods and provide courses that are working from other leading institutions. Educational institutions such

as Babson College, in the United States, are one of the world's trailblazers when it comes to entrepreneurial education. Some students mentioned they'd recommend their schools to offer new assignments, or courses, which are similar to already being offered elsewhere. Some of the assignments suggested would be a capstone assignment for the entrepreneurship majors, in which they'd have to work on creating a company for a given period, with the hopes of pursuing that venture/idea post-grad. Another idea was to also have more interactive long-term assignments for students, irrespective of their majors, but enrolled in entrepreneurship courses. These two additions, the students saw as improving the overall program, as well as also having an effect post-grad on the students but quite possibly also for the program's reputation.

*“So, I know like for example, Babson is number one for entrepreneurship in the world and it has been for the past thirty years or something. I know a lot of there are courses and that's also because, like their school is kind of built around this entrepreneurship curriculum, so it may not be applicable for a school like GW, but I know that they have entrepreneurship courses where their teacher is actually like an entrepreneur themselves and like each teacher focuses on a group of like 5 or 6 people and they actually start a business and receive funding from the school. And like go from the A-Z process over the course of the year and then if they want to sell the business, they can, and the profits go back to the school. And if they want to continue the business, that's also an option.” Student 9, GWU*

#### *4.4 Institutional Heritage:*

Lastly, the interviews offered insight into the history of the entrepreneurship programs from both institutions. At Utrecht University, entrepreneurship courses began to get offered to their students in the late 2000's. At the beginning, the programs were primarily focused on the study, analysis, and creation of business plans, while having an overarching focus on business management. Today, the professor has mentioned that there has been a shift in focus from the business plans to the utilization of the Business Model Canvas as a learning tool, sparking a shift more to skills-based learning, particularly attributed to the BMC making the students conduct field work, creating a more experiential style of learning. As previously mentioned, the professors have the freedom to teach whatever content they deem important however have some administrative requirements that all UU courses must follow, such as the 60/40 rule; exams weighing 60% of the total grade and 40% for assignments, projects, participation. Similarly, the George Washington University has been offering entrepreneurship courses since the early 2000's and has also had a Center for

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Innovation and Entrepreneurship (CIE) since 2010. The CIE has become a prevalent entrepreneurial resource in the Washington Metropolitan area and has been present not only on university campus to the student body, but also the D.C. metro area. The main changes that have taken place within the entrepreneurship major and courses, mentioned by the professor, has been the restructuring of some higher-level courses to now become introductory courses offered to all students, as well as the addition of several courses to the curriculum. Both institutions have experienced change over the last almost two decades of the programs existence and expect to continue to grow for years to come.



## 5. Discussion

Past research has aimed to answer if there is a correlation between receiving entrepreneurial education and an individual becoming entrepreneurial. As that question cannot be directly answered due to the scope of this research, what can be answered is that many of the respondents of this study became more interested and/or involved in entrepreneurship due to their enrollment in these courses. Similar results were obtained by Kirkley (2017) and Zhang et al. (2014), which found there to be a positive correlation between receiving entrepreneurial education and later having entrepreneurial intentions, which is slightly presented through this research. An interesting result taken from the interviewees is that most students who were positively impacted from the course, were students from non-business backgrounds. Furthermore, these students expressed their desire to remain involved in the entrepreneurship space and were hopeful that similar classes could be offered in their programs in the future.

Additionally, this thesis intends to build from Biswas & Verma's (2022) suggestion for future research targeting a comparative approach, as it would allow for results to be compared and conclusions drawn to determine the specific factors responsible for the numerous differences. From this suggestion, this thesis utilizes the "About", "For", "Through" styles of Entrepreneurial Education theory, first proposed by Jamieson (1984) and later expanded by Kakariou & Liargovas (2021), to visualize and compare the entrepreneurial programs and courses offered at The George Washington University and at Utrecht University. This framework made it simpler to understand key attributes from the programs that should be compared and simplified through the cross-comparative process.

This research uncovers the varying impact on students resulting from the style of entrepreneurial education being taught possesses. Upon conducting the interviews with the students and professors, a general difference in the structure of the programs was observed. There were particular intersections of principles and instruction styles and formats, but from the standpoint of Jamieson (1984) and Kakariou & Liargovas (2021), these two institutions were utilizing two distinct styles of entrepreneurial education. The George Washington University was fundamentally utilizing a "for" style of teaching, while Utrecht University was principally employing an "about" form. Within the styles of EE, the data analysis primarily focused on three concepts of comparison

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taken from the overarching theory: the course objectives, the grading styles, and the methods of instruction.

Although the professors sought to transmit similar content, the teaching philosophy from Utrecht University was predominantly literature and research-focused, thereby resulting in an instruction format primarily composed of providing a theoretical background. The potential explanation for this is that with UU being a leading 'research' institution in the Netherlands the content although taught and created mainly by the professor, was grounded in literature, instilled by the university culture. This can be shown through Kakariou and Liargovas (2021) model for "about" styles of EE (*Appendix A*), in which the pyramid has a base with knowledge as the focal point, thus later leading to skills and abilities. These results suggest that there is an overall institutional difference in the way all fields are being taught, resulting in entrepreneurship education to take a more theoretical related approach. This suggests that there may be other factors affecting the reasoning behind conducting different 'styles' of teaching entrepreneurship.

On the contrary, the interviews conducted with students at GWU, found that professors there have the same freedom to teach the content desired, however the professor aimed for a hands-on approach for the entirety of the course. Given that this approach falls along the lines of a "for" method for EE, this model created by Kakariou and Liargovas (2021) slightly changes. The base of the pyramid becomes skills, or the practicality that is gained from the course's methods, which then leads to the knowledge and abilities to become entrepreneurial. Furthermore, for the "for" method proposed by Jamieson (1984), the primary course objectives are to encourage individuals to follow their business endeavor and teach practical skills. These are two concepts that the students repeatedly emphasized that were taking place. Although both courses overarchingly try and teach their students an introduction to entrepreneurship, these results show that the way the students are taught the content matters significantly. Yet the program assessment, in terms of which program leaves the students better-off, becomes difficult because of the little to no consensus across the discipline (Mason, 2011). This becomes one of the main concerns for which more research is needed. The ability to describe or show what 'style' of EE proves to be the most beneficial for students, and if that method can be adapted across institutions, or has various other factors needed to be considered in order to be implemented to its full potential.

The results have given some understanding into the content and teaching methods from the various courses analyzed from both institutions that work within their respective universities. What becomes crucial to understand is to highlight what works best and how that could potentially be adopted elsewhere. At the George Washington University what is currently working the best is the partnership of the entrepreneurship courses with the entrepreneurial competitions and varying style of experiential learning methods, allowing the students to gain experience within most aspects of the course. However, what is still needed is more variety in the courses offered within the business school as well as for other disciplines at the university. This shows that the university is and has been doing well in the field of EE; however, there is still room for improvement with regards to addressing the needs of its students and community.

Another considerable result emerged from the interviews, was the students' expectations of the courses. There were two main opinions shared by the students, either that the course did not result in what they expected or that the course was exceptional and exceeded their expectations. Both institutions shared some similar methods of instruction, similar to those mentioned by Henry et al. (2005a). Henry et al. (2005a, 2005b) explains that having numerous teaching styles across the academic discipline can potentially have a negative impact by deterring students from engaging in certain styles of entrepreneurial thinking. Although this is not applicable for all students that expressed not having their expectations met by the course, it does offer some insight and explanation as to why their expectations were not met due to the structure of the introductory entrepreneurship courses as being overly theoretical or literature based.

These results suggest that as an institution, internal discourse must occur, to clarify what explicitly the programs want the students to obtain. Currently, there is not much dialogue occurring between both institutions' entrepreneurial programs and their administrations in terms of content and teaching methods, however this research and framework potentially facilitates the needed dialogue to take place. Utilizing Jamieson's (1984) framework, allows for researchers to have a focal point to address in future studies and dialogue, as well as have a set of guidelines that university administrations can focus on, when trying to adopt or improve entrepreneurial courses. The reason this theory emerged was to show the differing styles that courses are taking and the diversity in the field, therefore should be utilized to show the disparity in teaching styles worldwide and how the

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EE 'styles' can be modified to incorporate elements from the various styles and provide students with the background in entrepreneurship they are looking for.

### *5.1 Contributions and Implications*

As previously noted, this research has three main contributions for past and future research in the field of entrepreneurial education. This thesis contributed to literature by: (1) expanding on the need for comparative research, (2) highlighting the various styles of education that exist within an academic discipline, and (3) emphasize the styles of programs/courses that best-suit different universities. This thesis can stand advantageous for both university administration curious about introducing entrepreneurial courses to their programs and see which 'style' would be of best-fit for their institution, and for administration wanting to learn from other university practices in the field of entrepreneurship. Moreover, this can be of use for researchers in the field of EE, to encourage further comparative research approaches across programs and motivate institutions to learn from others; not as competitors but as allies, wanting to expand recognition in the entire field.

First, this research will serve beneficial to EE research as it has shown the feasibility there is in applying this specific theoretical framework and the comparative analysis of programs. This framework, which serves to understand the core focus of the programs, can be utilized more often to understand the differing structure of EE programs worldwide, and which factors lead to a more successful program. Second, this thesis will be crucial in emphasizing the need for further academic and institutional research into the field of entrepreneurial education, to be able to achieve an improved understanding of the valuable elements in the field, and which ones need further improvement. Future research needs to focus more on a cross-sectional or comparative approach, due to this approach potentially serving a decisive role on the general intentions of the students and the programs. Thus, this comparative approach functions in a helpful manner for a variety of stakeholders; academics, governments, school administration, students, etc. Third, it will have concrete evidence to show university administration interested in the implementation or improvement of entrepreneurial programs. This can potentially lead to institutions conducting their own individual research to know in a more detailed manner, how their programs are functioning and their effectiveness. EE research has been able to find broad conclusions. Having a considerable

difficulty in placing clear numbers to research. Therefore, this comparative approach ought to place attention on the program factors which are fundamental for adequate outcomes.

## 6. Conclusion

Overall, research in the field of entrepreneurial education has a long way to go, especially a solid answer for university adoption of content, courses, methods, that are probing to be effective. Entrepreneurial education at the university level is different at every institution, therefore through research and more discourse, there can possibly be more agreeance about what content and methods prove to be the most effective. It is worth mentioning that normally for entrepreneurial courses, the professors are the ones responsible for the entirety of the content being taught, which is drastically different to most fields in academics, which is discussed continuously amongst school administration, faculty, and the professors. With the content to be taught solely at the hands of the professor, it leads to the field to be objectively separated in terms of content being relied to the students, thus making it difficult to create a standardized introductory curriculum.

It was found that the pre- and post-program intentions of students studying entrepreneurship were much stronger in the U.S. than the Netherlands and can be mainly contributed to the teaching and course styles offered by the university. Both institutions intended to teach similar material, yet the way the content was produced and depicted was moderately different. Students preferred a more hands-on approach, particularly for an introductory entrepreneurship course, and students from both universities advised for this to be the main teaching style in the future. As a contribution to the theory first established by Jamieson (1984), and later developed by various scholars including Kakariou & Liargovas (2021), this research highlights the clear differences in styles of entrepreneurial education, and their various outcomes for the universities and the students and intends to spark more dialogue amongst school administration and scholars, on the “style” of teaching playing a pivotal role, and not solely the courses.

### *6.1 Limitations and Future Research*

Addressing and acknowledging the limitations of this study is crucial to fully understand the context of these findings and for future research to improve this research model. This thesis has some limitations, which can be mostly improved with more detailed supplementary research. One of the limitations is that the research dealt with two institutions from different countries, which could have underlying cultural differences affecting their styles of teaching, content being relied to their students, and various other factors. Future research should intend to study the cultural

teaching differences in Europe and the U.S., for example, to concretely show the role culture plays in the content being taught. If there is a cultural difference in how these regions view entrepreneurship, this could possibly be a determining factor that explains the differing styles of EE being offered at distinct institutions. In addition, the interviews were all held in English, however some of the students in the Netherlands had a difficult time trying to describe what they felt in English and would have to cut their sentences shorter by trying to directly translate on the spot. This could be fixed in future studies by having the interviews held in the first language of the interviewees to gain the most in-depth responses. Furthermore, the two programs studied have different academic calendar years, in terms of GWU being on a two-semester basis and UU operating with four periods per academic year. This results in the courses at GWU being longer than UU, resulting in more content being able to be taught throughout the academic year, while also having an overall effect on the students' perceptions of the courses. Lastly, there was a time constraint for the research to take place, and future research should aim to analyze the data with a more relaxed timeframe.

This study has produced several findings beneficial for EE research in general, and methods that can be utilized for future research. Based on the findings and limitations of this study, several recommendations for future research can be advised. Future research should aim to have more cross-sectional studies, comparing university programs, to have more well-founded findings. While the geographical focus could remain set on the United States and the Netherlands due to their similar views on entrepreneurship, research should focus on how different institutions within these countries may have different objectives or teaching styles for their programs. These types of studies would preferably result in improved findings, with a larger sample size and the more diversity in its sample; various professors from the institutions, students from differing disciplines, university administration, and employees working in the entrepreneurial offices/centers. As well as provide these institutions with more concrete insights into the advisable methods to implement within their programs. Additionally, studies should be conducted by universities to research their own institutions, to achieve a more thorough result; a bottom-up approach seeing all the attributes of their individual programs. Resulting in more solid findings on an institutional level, to not compare across institutions, but more so address directly what is needed within the programs.

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This research has proven that students are interested in entrepreneurship, regardless of their primary discipline. Nonetheless, there exists a lack of entrepreneurship courses not only within the field of study, but also tailored non-business degrees, such as medicine, law, politics, and engineering. Despite the limitations, this research lays a base for future studies to develop understanding in the field of entrepreneurial education and provides great material and insight for future studies and institutional adoption. In conclusion, this Master's thesis aimed to shed light on the different approaches to entrepreneurial education taken by universities in varying countries and hopes to encourage further dialogue and research in this field.



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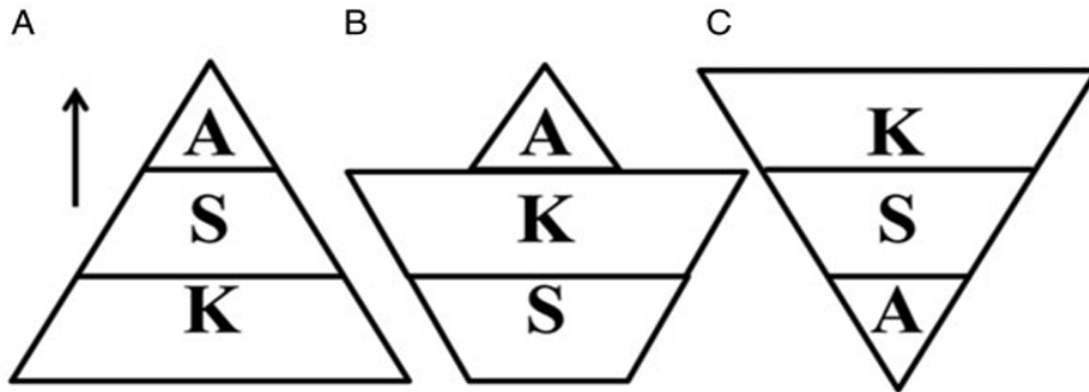
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## 8. Appendix

A: “Building Entrepreneurship Education Modes Upon Knowledge, Skills, and Attitudes: (A) “about,” (B) “for,” and (C) “through.””



(Adopted from Kakouris, A., & Liargovas, P. (2021). On the about/for/through framework of entrepreneurship education: A critical analysis. *Entrepreneurship Education and Pedagogy*, 4 (3), 396-421.)

B: Interview Guide for Professors

• What course/courses are you teaching? How long have you been teaching?
• What got you into teaching entrepreneurship courses?
• What do your various courses aim to transmit to its students?
• Have you seen a change in the courses offered from when you first began teaching entrepreneurship in higher education until now? Which ones? Change in focus, content, material, etc.?
• Who comes up with what should be transmitted to the students, solely you as a professor, or combined with administration? Especially for an introductory course in a subject that is relatively understudied in higher education
• What style of teaching methods do you typically use? (Case study, hands on learning, theory, business plans)
• How did you decide to use those methods, and not the typical textbook form of lectures?
• Does your course partner with any third-party companies, guests, organizations?
• How do you grade your students? Why do you feel it is graded different than a typical course that has a midterm and final exam?
• Is there a specific target audience your courses are intended for? Or is it open to anyone curious about entrepreneurship?

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### C: Interview Guide for Students

• What is your current field of study? Year?
• What made you enroll in an entrepreneurship course?
• What do you intend to do after graduation? Have entrepreneurship/business courses, contributed to this decision?
• What is your opinion/describe on the courses offered and/or that you've taken? Broad?
• Do you like that they're being offered to anyone no matter their field of study?
• Do you see entrepreneurship as something that can be taught, and you can learn and apply?
• What do you see as the course objectives for this course? Is it what you expected for an introductory course?
• What methods of instruction are being utilized to learn the content? (Case studies, theory, literature, business plans, etc.)
• What forms of instruction do you feel suit entrepreneurship related education the best?
• Are you aware of the resources offered by the university in terms of business creation and support? Would you want something else? How are you aware?
• How are you graded?
• Would you take more entrepreneurship courses if you weren't in your last year?
• Opinion on exams for entrepreneurship courses

### D: Thematic Analysis

1 <sup>st</sup> Order Concepts	2 <sup>nd</sup> Order Themes	Aggregate Dimensions
<ul style="list-style-type: none"> <li>• "I think that's also what sets or should set a university course apart from any other course is that it's not just hands on let's do something, but it's also where does it come from? What is the theory behind it and what's what sort of research is being done on this specific topic?"</li> <li>• "Grade is 40% based on that team assignment in which they write the business proposal and the 60% is the theoretical side where students get a case study... during an exam."</li> <li>• "We have to read three articles every week, academic papers"</li> <li>• "I think the literature is needed and the papers to yeah to gain knowledge and to have background information"</li> <li>• "a lot of readings and mostly was around schools, economics and what they expect and think about entrepreneurship"</li> <li>• "I expect like a course which wasn't as theoretical and more around the concept of entrepreneurs, because entrepreneurship isn't that theoretical. I expected it to be more like interactive"</li> <li>• "There was one exam around content from the start of Week 1 to Week 8"</li> <li>• "But it was way more theoretical than I expected."</li> <li>• "Different theories of entrepreneurship and which characteristics apply to each type of entrepreneurship"</li> <li>• "Theories to know, just to broaden your knowledge about entrepreneurship."</li> </ul>	THEORETICAL	STYLES OF EE

<ul style="list-style-type: none"> <li>• “Dip their toe in the water being an entrepreneur, by engaging in a pitch contest”</li> <li>• “Really just all about hands on experience”</li> <li>• “You just learn, like if you have experience, you're going to remember those experiences versus like for me, I probably forget all the international business models I learned or whatever.”</li> <li>• “Interactive projects”</li> <li>• “I thought it's very meaningful and interesting because we attended 2 competitions, one is called new venture competition and one is Pitch George. And I thought these are very useful because you are really like engaging in some real-life things which you cannot obtain from other classes.”</li> <li>• “I like that kind of method of instruction cause entrepreneurship is more like down to the space that you need to do everything that and you will learn through your experience.”</li> <li>• “So much teamwork”</li> <li>• “So, I think on the first day the professor was like, OK, now do like a pitch. And I was like, what is a pitch? You know, I've never done that in my public health courses. And then these students would just come up and do it perfectly. I was like, wow, she is so good at this, which is very inspiring.”</li> <li>• “We did go to like a restaurant nearby... and we were able to speak to like the restaurant owner and he was talking about his entrepreneurship journey.”</li> <li>• “That's why I like I like the classes because you do more projects than like exams and stuff.”</li> <li>• “One of the past classes, we acted as student consultants for our company and actually vetted a bunch of you know, potential buyers and helped liquidate stock.”</li> </ul>	<p>EXPERIENTIAL</p>	
<ul style="list-style-type: none"> <li>• “Well, after taking this course, I would say that I'm now thinking about starting my own business, because I think that's very interesting. And like you could learn a lot through doing everything by yourself, and that's what you could learn from any like internship or job under one company in a particular position.”</li> <li>• “Kind of inspired me to be an entrepreneur”</li> <li>• “Thrown into new venture competition like the first month of class, which it was a really great experience, but it really pushed me to like even though the classes, it's easy to get an A, it's like I put way more effort in than any of my other classes just because I was like passionate about it”</li> <li>• “This class is definitely just in the knowledge I've gained and that I can use forever and the contacts I've made.”</li> <li>• “Skills from this class that you can apply it to other aspects of your life... got soft skills like that.”</li> <li>• “Know that I'm walking away and there's things that I will remember and things that I will use.”</li> <li>• “But like I've said before, I genuinely think that I'm walking out of this class with things that I did learn and things that I will use so it's not what I expected, but it's not what I expected in a really good way.”</li> <li>• “Like everyone is supportive of each other and you learn a lot from other students, not just like from the professor as well and you get to see like different perspectives from everyone. So, I think it's really cool, that people share similar passions”</li> <li>• “I'm really grateful I was able to take that class.”</li> <li>• “The class that I've probably learned the most like in in, in one it's a message is because it was all new to me and it's something I'm really interested in and I guess I, you know, put in the work and tried to, you know, learn as much as I can”</li> <li>• “So, I quite like it. Actually, it's different than like medicine can almost be a cult sometimes, so the same types of people there. So, it's nice to have a course with people from different fields.”</li> <li>• “Within Utrecht I thought this was the best entrepreneurial course to start with.”</li> </ul>	<p>EXCEEDED BELIEFS</p>	

## Students' Intentions of Enrolling in Entrepreneurial Education: United States and the Netherlands

<ul style="list-style-type: none"> <li>• “Yeah, it's, it's sort of what I expected. Sometimes, it's a little bit boring long papers about entrepreneurship”</li> <li>• “Most of the people would not read the papers.”</li> <li>• “I feel like they grade a lot harsher here than in America.”</li> <li>• “I expected more out of it.”</li> <li>• “The foundation and I know that's important to know, but I don't think anyone expected it to be like that. It wasn't so yeah, interesting as I thought.”</li> <li>• “I expected like a course which wasn't as theoretical and more around the concept of entrepreneurship because entrepreneurship isn't that theoretical. I expected it to be more like interactive”</li> <li>• “I think that like an online course on entrepreneurship can give me more knowledge than the course that I had in university, so I'm not sure if I will do another entrepreneurial course in my bachelors here.”</li> <li>• “It's not what I expected. And honesty, I think I thought it would be more along the lines of once you have an idea of a business, what do you do? How do you build that business? You know, stuff like that. But it was way more theoretical than I expected.”</li> </ul>	<p>DIFFERENT EXPECTATION</p>	<p>PERSONAL OPINIONS</p>
<ul style="list-style-type: none"> <li>• “However, I do think that it should maybe be more of a 50/50 between the exam itself and the start your own business part, I think.”</li> <li>• “Not an entrepreneurship course where they teach a lot of theory, but more hands on”</li> <li>• “Yeah, I wish they'd have something like that in public health, it would be so fun.”</li> <li>• “I would maybe like suggest would be like having more. A little bit more lecture, but not like too much lecture because I feel like lecture can nothing. Like get students distracted and like, not pay attention.”</li> <li>• “I think it's good, but I think there's still like an opportunity to improve and to add more courses”</li> <li>• “They should add like more finance classes. They should add more marketing, I think also they should add a capstone project where you actually have to start a business to graduate whereby the end of your senior year you should have like an LLC. You should have like registered business. You should have initial customers because this is this way you can actually like feel.”</li> <li>• “That's why I'm doing marketing too, because I tried to make like my own thing, you know, because I took pricing, for example, which is very helpful for entrepreneurs. How they're going to price their product? I took in finance which is not related to my major. I took a venture capital class which is also very helpful for entrepreneurs. So, I tried to like take classes outside the program just to make sure I get all the knowledge I need, but yeah.”</li> <li>• “Because I feel the fact that I mentioned, we've been moving from business management topics to more entrepreneurial personal skills. And if you take it from that perspective, I think it's something that we should be doing more at the university level than we're doing right now, but that is my, let's say, my wishful thinking.”</li> <li>• “And my opinion in terms of the class itself, I recommend everyone to take it.”</li> <li>• “So, I think I think, yeah, the first course is very helpful for all GW students.”</li> </ul>	<p>PROGRAM SUGGESTIONS</p>	

### E: Codes utilized on NVivo

Name	Files	Refer...
Education	0	0
Business Major	8	9
GW	11	11
Non-Business Major	8	11
UU	6	6
Future Outlook	0	0
Classes-Teaching	9	16
Suggestions	3	4
Immersive	12	21
Miscellaneous	0	0
Great Quotes	11	31
Perception of Entrepre...	5	9
School Resources	5	12
Style of Course	0	0
About	3	6
Course Objectives	7	11
Grading	7	19
Professor Opinion	1	4
Student Opinion	6	37
Teaching Methods	7	21
For	7	20
Course Objectives	11	35
Grading	11	33
Professor Opinion	0	0
Student Opinion	10	70
Teaching Methods	11	61
Theoretical	5	17