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An Examination of the Liberal Arts

1. Purpose

This report details and examines the liberal arts tradition in higher education, its history and varied recent pedagogical models arising out of the tradition. The report aims to provide a knowledge base for further discussion of the suitability and attractiveness of developing a liberal arts curricula, program or educational platform at Lund University.

2. Introduction and Background

The basic concepts of the liberal arts tradition will be very briefly introduced in the following section.

After providing a background, the report moves directly into a survey of program structures. This review of established models is the main purpose of the paper and specific models of interest from around the world are surveyed. The report then attempts to summarize the primary approaches and structures vis-à-vis the current state of Swedish Higher Education, including critical issues which must be considered in any Swedish discussion of adopting liberal arts models. As this report represents a starting point for discussion and not a set of conclusions, some relevant questions and suggested next steps are put forward for consideration.

Key secondary references used in this survey include valuable reports and articles by Patrik Mehrens (2006)¹, Jonathan Becker (2014), Thomas R. Cech (1999), and Deirdre Klein Bog and Marijk van der Wende (in Jung et al., 2016).² Recent reports produced by Humtank³ describe current issues around humanities programs and faculties. A handful of interviews were also conducted with Swedish academics, administrators and a Swarthmore University alumna.

¹ From an Uppsala-based report series

² For a more instrumental guide to the implementation of liberal arts programs and further examples of curricular models in EU countries, Boetsch, Balli and Schreel (2015) have produced a detailed EU-Funded report which is highly relevant to the discussion.

³ <u>http://humtank.se/rapporter/</u> a "think tank for the humanities" with members based across a number of Swedish universities and key members at LU.

The Concept

What is the liberal arts tradition? The definition has evolved somewhat over time, but the core concept remains the same: a focus on education of the entire individual in a classical way, including exposure to philosophy, literature, mathematics and natural science with the aim of cultivating interdisciplinarity in the service of critical thinking and complex problem solving (Becker, 2014).

Put in another way, a liberal arts education should be wide-ranging and provide students the appropriate foundation and tools to connect knowledge across diverse disciplines in a humanistic tradition. Educating broadly based scholars and professionals serves several aims. One of these is to improve individuals use of diverse fields of human knowledge to better enable them to achieve "far transfer" (Aoun 2017, p.87) – defined loosely as the ability to creatively connect knowledge from different disciplines. Today, this is seen as increasingly important in emerging fields and start-up companies which connect the wisdom and richness of traditional disciplines with rapidly emerging technologies in order to innovate in progressive and societally useful ways (Aoun 2017, p.65).

Such deeply-rooted yet flexible problem-solving and synthesis may be one key to resolving today's grand challenges, enabling a full utilization of the diverse tools that emerging technology offers⁴, but in ways that do not threaten to neglect or even unravel existing social fabrics, including the values and structures of open societies, liberal democracy or indeed our very notion of humanity.⁵

It is the position of many advocates of liberal arts education that in order to best achieve this type of outcome, a liberal-arts curriculum should ideally be offered across the entire institution – studied by future engineers, scientists, medical doctors and financiers alike and not just by humanities students, as some would assume. And indeed, as most often enacted today, even the most vocationally targeted programs at liberal arts institutions *"put great emphasis on the broadness of the education."* (Mehrens, 2006).

The origins of the liberal arts concept in higher education is American, but traces its roots back to British, Renaissance and Greek traditions in learning (Becker, 2014). From the earliest American colonial institutions of higher education, founded in the mid-1600s, the concept has grown, evolved and spread to institutions around the world. Today, nearly forty European institutions teach some kind of liberal arts-based curricula⁶, including many of Europe's largest research institutions.

Notably, amongst fellow League of European Research Universities (LERU) members, UvA, Freiburg, Leiden, KU Leuven, UCL and Utrecht have liberal arts programs or have founded specific colleges which teach in this manner, not to mention the ancient universities of Cambridge and Oxford, which are often cited as forerunners of the American model (see Jung et al. 2016; van der Wende, 2011).

⁴ See LUs Omvärldsbevakning 2018, DNR STYR 2018/618; LU Strategisk Plan 2017–2026.

⁵ A range of concerns about the impact of emerging technology on society has been raised by both industry leaders and theorists in the past few years. See, for example: Harari, Yuval N. 2016. *Homo deus: a brief history of tomorrow* – and see also

https://www.theguardian.com/technology/2019/mar/28/can-we-stop-robots-outsmarting-humanityartificial-intelligence-singularity as a few of many examples.

⁶ https://www.ecolas.eu/eng/?page_id=226

A Brief History of the US tradition

Liberal arts education as a concept is most often traced to the early institutions founded in colonial America, namely Harvard and the College of William and Mary. These institutions were to some degree patterned on the models of Oxford and Cambridge - a humanistic tradition of education which claimed roots in Greek and Renaissance educational ideals. Today, hundreds if not thousands of institutions in the US cite a "liberal arts" tradition, though in practice, the pedagogical structure can take dramatically different forms. Many of the oldest schools following this model were founded by religious groups, although the majority of them are now essentially secular (Garsten et al., 2013).

US Programs' success and subsequent attractiveness as a model

Top liberal arts colleges in the US have gained esteem and attention as model institutions as much for their successes in preparing students for doctoral studies and research careers as for leadership roles (Aoun, 2017; Lang, 1999; Kiley, 2011). They have highly impressive statistics related to "yield-ratio" meaning the percentage of graduates from a given undergraduate college or university program who go on to complete a PhD. This includes graduates going on to study PhDs in the natural sciences (Cech, 1999).

Swarthmore and Reed Colleges are two of these prototypical American liberal arts colleges commonly referenced as exemplars due in part to the impact of their graduates and high rates of progression to PhD studies, as illustrated clearly by the table below:

Rank	Life sciences	Physical sciences	Humanities
1	Caltech	Caltech	St. Johns College
2	Reed College	Harvey Mudd College	Reed College
3	Swarthmore College	Reed College	Amherst College
4	Carleton College	MIT	Swarthmore College
5	MIT	New Mexico Tech	Carleton College
6	Grinnell College	Carleton College	Yale
7	Harvey Mudd College	Wabash College	Thomas More U.
8	U Chicago	Rice U.	Bryn Mawr
Adapted fro	milung at al 2016 p 22 from cu	revove data in the nublic doma	in (ununu nef anyletatistics)

Undergraduate origins of US PhD Awardees by general field of study (by yield-ratio), 2000-2010

Adapted from: Jung et al. 2016 p.22 – from survey data in the public domain (<u>www.nsf.gov/statistics</u>)

According to US government statistics this pattern has been stable over several decades (nsf.gov). Although the majority of the small colleges included in the table above are unfamiliar names in Europe, the merits of their educational approach has not gone unnoticed by those hoping to learn from the successes of the US Higher Education System.

Owing both to these successes and the cultural influence that the US projects abroad liberal arts inspired models have found homes in universities and colleges across East Asia, Southeast Asia, and Europe. The development of international institutions and programs with a liberal arts foundation have often been spurred by American initiatives (the American Universities of Beirut and Cairo, for example). This continued in parallel with the spread of US influence after World War II with the founding of American Universities in Paris and Rome as well as in East Asia (Long, 2018).

In the past two decades, new institutions in Eastern Europe were founded, driven primarily by reformist efforts after the fall of the Soviet Union (Jung et al. 2016). In recent years, the trend has accelerated again in Western Europe through institution-within-institution models which seek to replicate the small college experience within or alongside large research universities. Most recently, a new wave of liberal arts institutions and programs have been inaugurated in China and across Southeast Asia (Garsten et al., 2013).

3. General Survey

As liberal arts models have developed and spread, several distinct approaches to program curricula have developed. The theoretical and pedagogical underpinnings of each approach are extensively documented elsewhere (Mehrens, 2006; Becker, 2014; Boetsch et al. 2015; Jung et al., 2016; Adler-Kassner 2018). In the interest of this survey, however, we will present varied examples of curricular design from the USA, Japan, Singapore, The UK, the Netherlands, Germany and Sweden, whose suitability and features can be discussed vis-à-vis existing structures and future ambitions at Lund University.

Twente (NL)	Uppsala liberal arts Visby	Berkeley (US)
Gothenburg	UC Freiburg (DE)	Swarthmore (US)
AUC (NL)	Yale-NUS	UCL BASc (UK)
	Leiden UC in the Hague	Waseda SILS (JP)

USA

Swarthmore

Located on acreage outside Philadelphia, this college founded by the Quakers in 1864 is amongst the best known of the many small liberal arts colleges in the US. One statistic that stands out is the 27% of bachelor's students who go on to complete a doctoral program after graduation, the 4th highest so-called "*yield-ratio*" in the country (nsf.gov).

From the course catalogue "the major goals of the first 2 years of a Swarthmore education are to introduce students to a broad range of intellectual pursuits, to equip them with the analytic and expressive skills required to engage in those pursuits, and to foster a critical stance toward learning and knowing. All students must fulfill the requirements normally intended for the first 2 years of study, although engineering majors may spread some requirements over 4 years."

In the most basic model, students must meet a distribution requirement in this two-year period. The requirement is that they study three courses in each *"division"*:

- 1. Art, Humanities and Theology (including languages)
- 2. Natural Science and Engineering
- 3. Social Science, History, Economics, Linguistics

When choosing these courses, they must also be mindful that 20 credits need to be outside their major subject area, which helps ensure breadth in the "division" as well as across the college's schools.

⁷ http://catalog.swarthmore.edu/content.php?catoid=7&navoid=162#7-2

Students must also take three additional writing courses in at least two of the divisions above and normally take seminar courses during their first year which are cross-disciplinary and focused on academic inquiry.

Seminar courses are key and often cover contemporary issues in a cross-disciplinary way. Examples include:

- HIST 001A. First-Year Seminar: The Barbarian North
- PEAC 023. First Year Seminar: Global Responses to Violence
- HIST 001M. First-Year Seminar: History of Food in North America
- CLST 011. First-Year Seminar: Talking Animals
- LING 009. First Year Seminar: Languages of Fear, Racism and Zombies
- ECON 002. First-Year Seminar: Greed
- POLS 010F. First-Year Seminar: When Disaster Strikes

It is notable that many of the courses have thematic commonalities with Lund University's current SAS course offerings – exploring interesting subjects and topics in a discipline in an intensive way, but without the barriers of extensive entrance requirements.

A mid-career alumna from Swarthmore was interviewed for this report and spoke about the intensive nature of the seminar process at Swarthmore – where a maximum of eight but as few as three students and one academic staff member meet for three hours, once a week. The amount of preparation students undertake for these seminars is as much for a performance as for a class meeting, and the process gives participants who prepare and perform well confidence and a deeper understanding of the learning patterns and abilities of themselves and their classmates. The process fosters a lasting rapport with the professor and the other seminar students (Paradiso, 2019).

In their third and fourth years, students must elect and study a major, and can choose optional minors or optional second majors. As detailed in the course catalogue, the major requires that "a student must be accepted as a major; must complete eight courses (or more, depending on the department); must pass the department's comprehensive requirement; and must fulfil other specific departmental requirements." Small seminars continue as a key component. There are additional rules to constructing a degree and although the process can be complex, there is a great deal of expert guidance offered.

It is notable that the most popular majors of graduates over the past several years are:

- Economics (20% in 2018)
- Computer Science (16.7%)
- Political Science (10.5%)
- Engineering (9.6%)
- Biology (9.6%)
- Mathematics (9.6%)⁸

This is not the graduate profile one might initially imagine from a "liberal arts" college.

⁸ <u>https://www.swarthmore.edu/sites/default/files/assets/documents/institutional-research/DegMajors.pdf</u>

In 2017-18 total enrolment was 1640, with slightly more women than men. The school has 13% international students from a wide range of countries. There are 187 faculty members, which gives an 8:1 student-teacher ratio according to their website. 95% of students live on-campus, which is required for the first three years. 59% of domestic students went to publicly-funded high schools (including charter schools). They have an endowment of nearly 2.1 Billion USD (2018) – returns from which underwrote 53% of operating expenses in 2016 – 42% was covered by tuition fees.

Another way of thinking about the size of the endowment is that each of the 1640 student "places" or "seats" at the university has its own 1.2 million USD endowment (11.1 Million SEK). Assuming a 7% return, which is quite conservative in the world of institutional endowments (Seltzer, 2019), the school would theoretically have 84,000 USD per year, per student, to utilize without diminishing the endowment.

Tuition fees are listed at 68,000 USD per year, but due to generous financial aid awards made possible by the endowment, the average student pays less than 18,000 USD.

University of California, Berkeley

At the UC Berkeley College of Letters & Science, degree requirements include "Essential Skills" courses and mandatory elective courses referred to as "Seven-Course Breadth".

The "Seven-Course Breadth" requirement relies on approved lists of elective courses in Arts, Biology, History, International studies, Philosophy, Physical Science and Social Science. Students can take no more than two courses in each area, which aims to have them study coursework in at least four of the seven disciplines. Approved study abroad or internships can count towards the breadth requirements as well.⁹

"Essential Skills" covers writing, quantitative reasoning and foreign language. While many incoming students can satisfy some of the "Essential Skills" requirements with prior studies or test results¹⁰, a good number choose the popular **Data 8** course in order to satisfy the Quantitative Reasoning requirement.

The Data 8 approach to quantitative reasoning has resonated far beyond the Berkeley campus and is now available online through the edX platform as well as other free online platforms. The textbook is an open-access work, published in wiki format. The effectiveness and popularity of the course arise from its successful blending of perspectives focused on "inferential thinking, computational thinking, and real-world relevance."¹¹ In other words, students don't learn statistical analysis or computer programming or logic in isolation, but instead combine these skills in applied decision-making and analytical, machine-learning-assisted project work.

This type of cross-cutting course which is meant to be useful to various disciplines is found in many of the curricular designs reviewed. Both the "Essential" and the "Breadth" sets of requirements ensure that graduates leave the university with a broad knowledge base and having mastered technological tools which allow them to apply their knowledge in new and

⁹ https://ls.berkeley.edu/seven-course-breadth-requirement

¹⁰ https://ls.berkeley.edu/advising/degree-requirements

¹¹ http://data8.org

innovative ways, in whichever field they find employment or undertake creative or entrepreneurial endeavours.

As the Data 8 textbook specifies: "The world has too many unanswered questions and difficult challenges to leave this critical reasoning to only a few specialists. All educated members of society can build the capacity to reason about data. The tools, techniques, and data sets are all readily available; this text aims to make them accessible to everyone."¹²

Japan

Liberal arts education has a significant history in the Japanese post-war education landscape but has come under recent criticism from the current government and business sector actors. Some changes are expected in line with the government's National University Development Plan, although the magnitude of these changes is still not clear. However, top national universities with a liberal arts tradition are in no danger of a dramatic shift. Many leading Universities in Japan such as the University of Tokyo, Meiji University and Waseda University feature a prominent dedication to the liberal arts tradition in their curricula and are cited as successful models in the Japanese context (Garsten et al., 2013).

The University of Tokyo's dedication to the tradition extends beyond the University through its East Asia liberal arts Initiative (EILAI) which "aims to share the University of Tokyo's long-standing experience in liberal arts education to East Asia" with a cornerstone of the initiative being a collaboration project between University of Tokyo, Peking University, Seoul National University, and Vietnam National University, Hanoi. ¹³

Of several leading examples in Japan, we examine The School of International Liberal Studies (SILS) at Waseda University here, which was founded at the University in 2004, during a period of renewed Japanese interest in such colleges (Jung et al., 2016).

Waseda University SILS

While Waseda follows a somewhat familiar structure in the liberal arts tradition, the model's structure is more strictly defined than most, and is presented in two plain tables detailing what is normally studied/expected in each semester, and how many credits in each subject area. The program is popular with both Japanese and international students studying a full degree in Japan. From its inception, study abroad has is a major feature of the program (Waseda SILS, 2019).

As a partner of Waseda, Lund University receives roughly 20 SILS study-abroad students per year, who study primarily our SAS Course offering during their semester in Lund.

¹² https://www.inferentialthinking.com/chapters/intro

¹³ http://www.c.u-tokyo.ac.jp/eng_site/info/research/organization/ealai/

Degree Progression

Year	1st	2nd	3rd	4th
Semester	1st 2nd	3rd 4th	5th 6th	7th 8th
Themes	Developing Themes	Basic Study	Studying Abroad (Optional)	In-depth Research
	Students sele courses in a v exploring ge rather than s and discoveri educational t to research in	ct introductory ariety of fields, neral interests pecialized areas, ng the hemes they wish n more depth	Students may choose to spend this year studying abroad	Students take advanced classes and seminars.

Adapted from: https://www.waseda.jp/fire/sils/en/about/curriculum/

Credit Distribution

Area	Fundamental	Courses	Specialized C	Electives	
Credits	33 credits		54 credits		37 credits
Туре	Language	Statistics	Seminar	Lectures	
Course	Japanese	Intro Statistics	1st Year Seminar	Intro. Courses	Specialized Courses
	English		Intermed. Seminar	Intermed. Courses	Open Courses
	Other Language		Adv. Seminar	Adv. Courses	Other Depts.
			Thesis		Study Abroad
Credits	31	2	14	40	37
Credit Req	uirement for Gra	duation 124 cre	dits		

Adapted from: https://www.waseda.jp/fire/sils/en/about/curriculum/

Singapore

Yale-NUS College

As a high-profile, heavily funded and initially somewhat controversial initiative (Lewin, 2012) introducing the liberal arts college model to Singapore, Yale-NUS College has been closely watched internationally as perhaps the most ambitious of several recent higher education hybrids launched in the city-state. A somewhat risky and high-cost experiment under the watchful eye of a public and press that tracks job placement, starting salaries etc. of graduates as a matter of national interest (Wong, 2018). With the first cohort from 2014 having just graduated, it is too early to determine the College's future, but interest from students remains high, and the quality and resources of the parent institutions lend a great deal of weight to the scales, on the side of success.

The college was founded in 2011 as a joint enterprise and had its first intake in 2014. The first president was a Yale academic, while the current president is a NUS academic. The intake in recent years has been 250 students per class and there are roughly 120 Faculty members, for an overall student-faculty ratio roughly of 8:1. International students make up 40% of the student body.

The preparation and reasoning behind the curricular design for the college is extensively documented in the publication "Yale-NUS College - A New Community of Learning" (Garsten et al., 2013). This explains the common core curriculum for all majors taught primarily in the first two years – made up of 11 courses in 8 subject areas:

The Tule Nos col	lege core				
Literature	Philosophy &	Comparative	Quantitative	Historical	Scientific
humanities 1	Political	Social Inquiry	Reasoning	Immersion	Inquiry 1
	Thought 1		_		
Literature	Philosophy &	Modern Social	Learning		Scientific
humanities 2	Political	Thought	across		Inquiry 2
	Thought 2	_	Boundaries		

The Yale-NUS College core

Adapted from: https://www.yale-nus.edu.sg/curriculum/common-curriculum/

As the theorists behind the core structure state regarding their choice of this model "We are impressed by the observation made by professors who teach in core programs about the potential for such programs to draw students into one intellectual community." (Garsten et al., 2013).

In the final two years, students choose from a wide range of majors taught within the college and can choose to study majors based partly at other NUS facilities. Notably, despite the college's wide major offering, they have done away with discreet academic departments. "No to departments, yes to majors" is another example of a radical rethinking of institutional design at Yale-NUS. As with many colleges, students declare a major during their first two years, not at the time of application (Garsten et al., 2013).





Reprinted from: https://www.yale-nus.edu.sg/curriculum/student-experience/

Beyond the core curriculum, seen above in blue, and the purely elective courses, in green, there are primarily major courses in years three and four (in orange), including a capstone project in the major area. The conception of the capstone is somewhat unique. These are senior projects with an outreach aspect as in many other curricula, however, the concept behind shared "studio space" for capstone projects is somewhat novel and designed so students can "pool knowledge and ideas, learn new techniques, and present work in progress." (Garsten et al., 2013).

UK

University College London

UCL offers an Arts and Science degree system somewhat confusingly labelled a "BASc" which allow for a variety of degrees to be constructed "incorporating both arts and sciences specialisms." There are four pathways groupings which group specific Majors and Minors students choose for their degree:

- <u>Cultures</u>
- <u>Societies</u>
- <u>Health and Environment</u>
- <u>Sciences and Engineering</u>

Students who choose one of the Humanities / Social Science majors must choose a Health / Science / Technology minor, and vice versa.¹⁴

¹⁴ https://www.ucl.ac.uk/basc/current/pathways

This is a key differentiation in the UCL approach – *"all students study an Interdisciplinary Core of subjects and must take a combination of Arts and Science subjects throughout"*.

All programs include a core of courses designed to help students make interdisciplinary links – such as a quantitative methods and research methods courses. Other core courses are electives which are also interdisciplinary but should relate more closely to the chosen "pathway" major / minor. All students must also study a foreign language.

Offered since 2012, this is a standard-length 3-year 180 ECTS bachelor's degree, but with a highly flexible framework. According to UCL, the framework was developed *"responding to increased demand from employers for outstanding graduates with cross-disciplinary experience, [equipping graduates] with knowledge, skills and insight across arts and sciences subjects."*¹⁵

UCL degree structure

Core ((50%)	"Pathway" Subjects (50%)		
Interdisciplinary Modules	Language	Major	Minor	

Adapted from: www.ucl.ac.uk/basc

Although it is noted in the program description and marketing material that this is a very unique program structure "at the forefront of the new wave of liberal arts and science degrees in the UK", their claim is that after several cohorts, they are confident that graduates should be eligible for 90% or more of UK master's degrees. i.e. depending upon the major area, graduates shouldn't have any issue qualifying for a related UK master's at another institution. UCL attracts large numbers of international BASc applicants. Along with the innovative nature of the program, they heavily publicize the program's diverse student body and central London location.

The Netherlands

With perhaps the strongest embrace of the liberal arts model in Europe, such programs can be found at many leading Dutch research universities. Several of them (at Amsterdam, Leiden, Maastricht and Utrecht) introduced in the late 1990s (van der Wende, 2011).

In the Netherlands, classical education is still an important part of selective uppersecondary public education. Approximately 25% of students aiming directly for university study at selective "gymnasium" while the other 75% of university-bound students study at 'athenium' – the primary difference being that in the Dutch "gymnasium", Greek, Latin and other classical education is compulsory (CBS StatLine, 2016; van Bommel, 2016).

University of Twente

"Should the extent to which modern society is dependent on technology not have consequences for the way we educate engineers?" – ATLAS Program

ATLAS is a 3-year 180-ECTS bachelor's program in Technology and Liberal Arts and Sciences offering a "small-scale and intensive education" aimed at producing tomorrow's engineers.

¹⁵ https://www.ucl.ac.uk/prospective-students/undergraduate/degrees/arts-sciences-basc/2019

The program admitted its first cohort in 2013. The initial cohort was around 30 students and in recent years, the intake has been roughly 50 students per year. They admit applicants with university-track upper-secondary credentials "if they have a background in math and sciences, preferably physics."

Due to the unique structure and demands of the program, they arrange a several-stage preenrolment orientation, including a site-visit to ensure that students truly understand and are a good fit for the structure of the program. Prospective students who are not able to attend during the site-visit are invited to interviews which are held with both current students and teachers.

Characterized by self-directed learning and an iterative, project-like approach to each student's educational path, ATLAS is a highly ambitious rethinking of the traditional "requirements based" approach to educating engineers.

"Modern engineering solutions require not only technical but also social perspectives and understanding. They require an integrated socio-technical perspective and an understanding of how technical solutions function in the real world." (Vonk et al., 2018).

credit Distribution in the Twe	nte ATLA	S progra	m					
	Sem1	Sem2	Sem3	Sem4	Sem5	Sem6	Total	
Domain Natural Science	6	3	3				12	
Domain Social Science	6	3	3				12	
Domain Mathematics	6	3	3				12	
Project	9	9	9	9			27	
								63
Capstone							15-20	
Electives		9	9	18	27	7-12	70+	
Personal Pursuit		6	(6	(6	5)	12+	

Credit Distribution in the Twente ATLAS program

Reprinted From: ATLAS Self-Evaluation Report 2018

As can be inferred from the very general nature of the credit table above and as is discussed in detail in the ATLAS Self-Evaluation Report, the program is one of the most adaptable and least traditional we have reviewed. Students design their learning in various areas as the program progresses and in close collaboration with the program's dedicated academics.

"ATLAS has chosen a bold approach to teaching and learning by putting the student in the lead of their learning, and the individual academic development of students at the heart of the curriculum." (Vonk et al., 2018)





The PDP-SER cycle

At the start of each semester students identify their current interests and future academic profile and draw up a plan for the current semester (the Personal Development Plan, top right) that will help them achieve this. This plan, the PDP is approved by the programme to ensure it indeed allows the student to reach the semester goals.

During the semester the student works along the PDP. Mid-way the semester the student selfevaluates their progress and receives feedback on that progress from the semester's teachers. In case the Mid-Term Evaluation results in an updated plan, this requires re-approval. At the end of the semester, the

student evaluates and reflect on their semester in a Self-Evaluation Report (SER). This SER is assessed by the programme. The feedback and feedforward the student receives on their SER also serves as input for the next Personal Development Plan.

Reprinted From: ATLAS Self-Evaluation Report 2018

In this program, students set their own goals and the student's own evaluation of their progress towards goals is the starting point for overall evaluation. ATLAS have developed a model wherein students are driven towards "self-directed learning" from the outset. In the program's five-year self-evaluation report, stakeholders reflect that:

"it is a way of working not unfamiliar to the engineer: in a sense, we are continuously prototyping, evaluating, learning, and improving, in a responsible way." (Vonk et al., 2018)

In this vein, the main dilemma presented in the report is not a tension between breadth and depth, but a tension between guidance and self-direction, which is obviously felt by both the students and academic advisors. As they describe it, they seek to create "a learning environment that itches but does not hurt"- challenging students at the margins of their capabilities without pushing too far.

"we are continuously balancing between students feeling lost and students feeling chaperoned, and we choose to err on the side of lost, always." (Vonk et al., 2018)

One of the key factors they point to as helping to ensure that they create such an environment is a focus on teaching quality – highlighting the qualifications held and awards won by the instructors associated with the program.

ATLAS was the 7th University College founded in the Netherlands, but the first at a University of Technology. Their evaluation report, produced in late 2018 after the first

several cohorts, was the main source of the information presented here, and is notable in contrast to documents from the other programmes surveyed in that it includes significant input from the students themselves. Students have a good deal of praise for the curriculum and talk largely about the same crucial issue of guidance versus self-direction.

Leiden University College (LUC) - The Hague

LUC in the Hague offers a standard 3-year 180 ECTS bachelors' program with six available majors (both BA and BSc). The crosscutting theme is "Global Challenges" which provides a common foundation along with the complementary courses seen as necessary to address Global Challenges effectively. As with many Dutch programmes of this type, it is very prominently marketed to international students.



LUC first year structure

Reprinted From: https://www.universiteitleiden.nl/binaries/content/gallery/student-recruitment-sites/fgga/luc/first-year-program.jpg/

Detail of Global Challenges foci





Reprinted From: https://www.universiteitleiden.nl/en/education/study-programs/bachelor/liberal-arts--sciences-global-challenges/about-the-program/global-challenges

Majors are chosen after the first year, and students can elect either a BA or BSc major:

- Human Diversity: Culture, History, Society (BA)
- International Justice (BA)
- World Politics (BA)
- Earth, Energy and Sustainability (BSc)
- Global Public Health (BSc)
- Governance, Economics and Development (BSc)

The entire program was designed with a strong sense of its place in The Hague, the International City of Peace and Justice (Boetsch et al. 2015).

Germany

University College Freiburg (UCF)

Housed in a historical part of the University of Freiburg campus that centuries ago was a centre of teaching in the method of the *Artes Liberales*, the UCF today serves as a centre for innovation in higher education, utilized by the entire University, and is also home to an English-taught bachelor's program in the liberal arts model.¹⁷

Founded in 2012, UCF offers a unique 4-year 240 ECTS bachelor's program in Liberal Arts and Sciences (LAS). Both BSc and BA degrees are awarded depending upon major. Students can choose to major in Earth and Environmental Sciences, Life Sciences, Governance or Culture and History. Annual intake is around 80 students.

The program homepage cites North American and Dutch liberal arts curricula as its primary reference points, and the program director previously worked in the Netherlands with similar programs.

¹⁶ https://www.universiteitleiden.nl/en/education/study-programs/bachelor/liberal-arts--sciences-

global-challenges/about-the-program/study-program

¹⁷ https://www.ucf.uni-freiburg.de/college

UCF LAS - Shared core modules in three main parts



Reprinted From: https://www.ucf.uni-freiburg.de/liberal-arts-and-sciences/curriculum/core

All students must take the core modules. Many of these are discreet courses included in the foundational year (see below). Others, such as those in the area of "responsibility and leadership" are introduced later and address major social issues. These issues are dealt with utilizing the specific skills and knowledge gained in the student's chosen major area.





Reprinted From: http://www.ucf.uni-freiburg.de/liberal-arts-and-sciences/curriculum/foundational-year

In comparison with many US models, this is a highly structured program. However, it does provide space for exploration in the first year, before quickly moving towards a major area in the second year and remaining focused on this major in years 2-4 of the program.

Detailed diagrams of each major path are available via the UCF website.¹⁸ What is most notable about this program is that the Foundational year, which includes most of the core, is essentially an "extra year" of study, and the final three years of the bachelor's degree more closely resembles the curriculum in a typical European single-focus degree (i.e. students take well over 100 ECTS in their chosen major area).

This is a highly unique program in the German context. Mindful of this, it is telling that UCF requires prospective students to complete a 90-minute orientation via an online "study-choice assistant"¹⁹ which serves as an in-depth "study orientation test" introducing the program in detail and providing video interviews with several of the main professors, lecturers and current students. Their aim is to ensure that students really know what they are signing up for. Those undertaking the orientation are quizzed on the contents as they go through the online module, as well being asked to answer questions related to their own study approaches and personality traits. Upon finishing, they are provided with a certificate of completion which is required to enrol in the program.

Sweden

Both Gothenburg and Uppsala universities have offered liberal arts programs over the past several years – Gothenburg's Liberal arts, kandidatprogram (H1LIB) in some form since 2011 and Uppsala's Liberal arts-programmet (HLA1K), based at the Visby campus from 2013. The program at Uppsala is currently not enrolling new students (the last intake was HT2017) and its status has been described as "resting" (Ekbom, 2019). Södertörns högskola has also recently launched a program. While this is noteworthy, it is a quite new program and will not be examined in detail at this time.

These programs provide more detailed and relevant data on demand and selectivity, as the application numbers in prior years as well as admissions rates, etc. are readily available via the national admissions system and UHR's published statistics.

Antagnings omgång	Sökande i tid	Förstahands sökande	Antagna urval 1	Antagna urval 2	Söktryck	Reserv urval 2	Behöriga	Andel behöriga 1:A	Andel kvinnor
HT2018	128	28	46	19	1.5		115	93	48.44
HT2017	174	32	61	42	0.8		183	81	53.45
HT2016	169	33	30	18	1.8		154	88	55.62
HT2015	224	39	48	48	0.8	5	200	90	50.89
HT2014	245	43	44	40	1.1	47	264	98	51.02
HT2013	227	61	45	40	1.5	40	229	85	51.54
HT2012	284	97	1	37	2.6	33	261	85	50.70
HT2011	353	125	30	30	4.2	90	355	94	48.73
Source – NyA O	pen via K	uben							

Application Numbers - 2011-18 - GU H1LIB

¹⁸ https://www.ucf.uni-freiburg.de/liberal-arts-and-sciences/curriculum

¹⁹ https://www.osa.uni-freiburg.de/las/index.html

Application Numbers 2013-17 – Uppsala HLA1K

Antagnings omgång	Sökande i tid	Förstahands sökande	Antagna urval 1	Antagna urval 2	Söktryck	Reserv urval 2	Behöriga	Andel behöriga 1:A	Andel kvinnor
HT2017	160	34	45	22	1.5		137	97	67.50
HT2016	197	41	40	35	1.2		169	90	63.45
HT2015	243	54	30	30	1.8	11	192	81	63.79
HT2014	269	66	35	30	2.2	14	243	80	66.54
HT2013	212	47	30	30	1.6	25	201	91	64.62

Source - NyA Open via Kuben

Neither of these Swedish programs have seen remarkably high application numbers. A review of prior admission's rounds using UHR's statistics for the required *Antagningspöang* for admission in various *Urvalsgrupper* reveals that at GU, the program has been amongst the University's least selective, while at UU the program was initially quite selective but grew less popular and subsequently less selective in later years²⁰

Gothenburg University

Mindful of the extremely broad aspirations of most liberal arts programs we have examined, the GU liberal arts program represents instead an ambitiously traditional version of "liberal arts" – a heavily humanities-focused curriculum based at the philosophy department that, while broad within the faculty, bears little resemblance to the broader liberal arts models surveyed at other institutions. Perhaps more accurately represented as cross-cutting humanities program, or something similar to what a philosophy major might study at a US liberal arts college, the program structure and courses are fixed and start off as an introduction to humanities and the other traditional disciplines, with logic leading into maths coursework in the second semester and animal studies leading into biology in the second year.

"A central feature of the program is interdisciplinary: philosophy, history of ideas, literature science and classical languages (including Arabic) are studied in interaction with each other and with topics such as physics, astronomy, mathematics, biology, theory of science, philology and rhetoric".

The program is focused in the humanities with connections to the sciences in a historically correct context.

Electives are not a feature. There is a set program structure, a heavy focus on language learning and the program director stresses the importance of deep study of language – emphasizing that there is no substitute for language study as a life-enriching academic endeavour.

²⁰ <u>http://statistik.uhr.se</u>

The detailed program structure is provided as a PDF which is available online via the programme website.²¹

Moa Ekbom, Program Coordinator, was interviewed for this survey and helped to illuminate some of the factors which are unique to the program and how the program fits into and functions in the Swedish context.

Typical of a research university approach, the program benefits from access to worldleading guest lecturers and a learning environment close to research, where doctoral students and post-doctoral researchers lecture on and discuss current issues in their fields.

Intake is set at 30 students per year with 12-15 continuing after the first year. Most come from the Gothenburg area. There have been a few students from the Nordic region, but as a Swedish-language program, it does not attract broader international applications. Core teaching staff are drawn from the philosophy department. Some academics are brought in on an as-available basis to teach other courses, while others are regular contributors, such as their physics professor, who is employed at Chalmers University of Technology.

The program has been offered for eight years, but the structure has shifted slightly over this period. Based on experiences with early cohorts, they have added more writing courses. Some specialized philosophy courses were removed (Pre-Socratic Fragments, for example).

Generally, it is an expensive program to run by Swedish standards. Detailed budget figures are not included here but could be useful at a future stage of analysis.

Most students go on to master's degrees, and the program director has been active in raising awareness of the program structure and its benefits amongst, for example, social science master's programs at GU. Internal advocacy has been positively received and she reports that master's programs find the students very well prepared (Ekbom, 2019).

4. Summary of Surveyed Cases

According to Eugene Lang, "A cornucopia of curricular concepts have entered the liberal arts lexicon" in recent years (Lang, 1999). Some of the more recent and innovative additions are included in our survey. Despite the diversity of approaches, the nine programmes surveyed above can be roughly categorized into three distinct groups:

Blended / Hybrid	Foundation / course core	Breadth requirement
Twente (NL)	UCL BASc (UK)	Berkeley (US)
Gothenburg	UC Freiburg (DE)	Swarthmore (US)
AUC (NL)	Yale-NUS	Uppsala liberal arts Visby
	Leiden UC in the Hague	Waseda SILS (JP)

Surveyed	Program	by	program	type
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Amsterdam University College and Uppsala are included above as they were initially included in the survey. However, as Uppsala's program is "sleeping" and AUC has recently undergone some curriculum revisions, they were not examined as full cases above.

²¹ https://flov.gu.se/digitalAssets/1653/1653794_h1lib.pdf

Breadth Requirement / Distribution / Electives

Perhaps the most widespread general approach to liberal arts mandates a breadth requirement or "distribution requirement" in the first two years of the program. This takes various forms, but we see representative approaches in four of the surveyed degree programmes.

One strength of a "distribution requirement" is that students who are unsure of their area of specialization or feeling doubts about their prospective major are able to take totally unrelated courses from across the university – a freedom which can lead to new intellectual loves, or make clear to a student that they are, in fact on the right path with their current plan. The Swarthmore alumna shared a story of a Biology course which she took on a pass/fail basis (which does not impact the GPA). "I like to help people and thought I might be interested in going on to medical school…" One biology course at university-level led her to realize that medicine was not her path to public service (Paradiso, 2019).

On the other hand, "one concern about a system of distribution requirements is that it creates a significant risk of incoherence in student course programs outside the major." (Garsten et al., 2013). Without adequate guidance, students sometimes get lost.

In order to mitigate this risk and ensure a coherent package, some schools (Waseda and UCL for example) provide less choice or more program structure in the curricular design.

Foundation-style common courses / core courses

The Yale-NUS program gives extensive rationale for its choice of a core course program in its inaugural curriculum report. The authors point to the inherent coherence in a common core design, and the ability for the curriculum design to challenge students to step outside of their comfort zone. They contrast this with a supposedly common practice employed by students in unstructured breadth programmes – many choose courses which are rumoured to be easy (Garsten et al., 2013).

Yale-NUS also look to a core due to its potential to "draw students into one intellectual community" (Ibid, 36) and build links of cooperation and understanding in a cohort.

Further arguments for the core model are that it allows for a conceptual theme to be implemented across the non-major courses (and indeed extended throughout the studies). Examples of this are the Leiden in the Hague program with its Global Citizenship and Global Challenges focus based in "the International City of Peace and Justice" (Boetsch et al. 2015) and UCL with attempt to create an extremely interdisciplinary cross-over degree that fully combines BA and BSc skill-sets within any chosen major.

Fully Blended, Hybrid and Heterodox programs

The programmes in this category vary greatly but have one thing in common – a strong philosophy that encompasses the entire curricular design and wraps the courses into either a fixed progression (Gothenburg) or a fixed process (Twente; AUC). Within this segment, the fixed nature of the course structure or process make it extremely important that

students are well suited to the program, because they will be more tightly bound to its structure than in other systems. To some, this belies the core precept that freedom of choice is an essential part of the liberal arts philosophy (Becker, 2014), but the model of ATLAS at Twente seems to incorporate both freedom and strong process in one of the most compelling and heterodox curricular approaches surveyed.

5. Considerations

Existing educational structure & perceptions of the university's role

By and large, newly enrolled university students in the US and Asia are seen as immature, budding individual in need of moulding and character development on the path to responsible adulthood (Gartner et al., 2013). The higher education institution is thus charged with responsibility for academic, civic and to some extent moral education. Universities view their new students (most coming directly from high-school at age 18)²² as needing extensive hand-holding and coddling and offer extensive university-run services to help students bridge the gap between the family home and adult independence.

Swedish universities do not take as many students directly from upper-secondary education (gap years, work and military service being relatively more common in Sweden prior to first university matriculation). Incoming students are, on average, several years older than their US counterparts (UKA Report 2017:9) and are treated as mature, self-sufficient and generally responsible (not least for their own learning).²³ Much of the emphasis on educating prepared, well-informed individuals occurs in upper-secondary school. While Swedish universities undoubtedly play a role in shaping individuals beyond the classroom, this role is not emphasized and rarely discussed. (Meherns, 2006).

Questions that this raises for Lund University include:

- Are Swedish students entering the university with a higher level of educational selfdirection than counterparts in countries where the liberal-arts model is popular?
- Are some of the pedagogical elements contained in a typical freshman / sophomore liberal arts curriculum in most parts of the world already present in the Swedish Gymnasium system?

Breadth Vs. depth

A common argument from supporters of liberal arts approaches to higher education is that although early specialization can be an effective route to early mastery, there is a downside in that such a focus can lead to situations where "Absorbed in their disciplines, more and more teachers confine their responsibilities to the classroom and laboratory, competing for student majors who can be trained according to research needs with slight regard for the content or direction of their non-academic lives" (Lang, 1999). This, in turn is argued to give rise to

²² <u>https://nces.ed.gov/fastfacts/display.asp?id=372</u>

²³ For further background vis-à-vis the models surveyed: In the Netherlands, average age of first university enrolment in is similar to the US (typically 18 or 19) although the Dutch upper-secondary model is more similar to the Swedish gymnasium structure.

situations where, dominated by a narrow perspective and focus on credentials and a predefined and competitive career path, graduates become disconnected from larger social questions and even the basic human values at the root of the university.

From a curriculum standpoint, the Swedish emphasis on strict progression in programs and program structures including only courses directly related to the area of study suggest extreme narrowness in the curriculum when compared with the liberal arts tradition. However, the larger structure of Swedish university and student life broaden the engaged student's experience markedly. Long-established student owned and managed institutions shape the student experience outside the classroom. Here, voluntary student communities are responsible for organizing the social and cultural aspects of student life. These structures provide a great deal of freedom and flexibility beyond one's studies and develop individuals' maturity and sense of responsibility while broadening their perspectives, skills and interests.

The development of a citizen with an active role and engagement in their community and personal cultivation of social responsibility are key benefits cited by proponents of a liberal arts education (Lang, 1999). In other words, there is an emphasis on teaching "students how to conduct their lives rather than prepare them for a specific profession" as part of the academic program itself (Mehrens, 2006).

- Are elements of student life and student institutions at Lund University an alternative means to foster breadth-related engagement and development?
- Should opportunities for such engagement and personal development be formalized in the curriculum and required, or informal and optional? When and in what situations is one preferable to the other?
- Importantly, what are the implications of this discussion vis-à-vis University goals for broadened participation, broader recruitment and lifelong learning?²⁴

The campus experience

Advocates of the liberal arts college often highlight the importance of mandatory residential living (Garsten et al., 2013; Chopp, 2013). This is seen to foster an intense learning environment that nurtures future scholars as well as creating "intentional communities" which Rebecca Chopp, former president of Swarthmore, sees as a valuable experience through which young adults learn to live in diverse communities (Chopp, 2013).

Although many students studying at the bachelor's level in Lund are living "on-campus" so to speak, there is no residential requirement. Indeed, the approach to student housing in Sweden is fundamentally different from that of most residential colleges and the majority of HEIs worldwide. Some argue that residential living is not required to fulfil the liberal arts mission (Becker, 2014), others cite it as critically important (Lang, 1999). It is important to note, however, that the housing models and at LU and related housing law in Sweden appear to be incompatible with a "residential college" model in its purest form.

• Does Lund University function similarly to a residential college for those who fully engage in university life? To what degree and in what ways?

²⁴ For a concise review of these issues, see LUs Omvärldsbevakning, DNR STYR 2018/618

Teaching

Many small liberal arts colleges and independently-structured programs at larger universities are teaching-intensive and value teaching talent highly (Lang, 1999).²⁵ Student-teacher ratios at many of the surveyed programs range from 8:1 (Yale-NUS) to roughly 16:1 (ATLAS at U Twente).

Beyond quantitative measures of classroom size and staffing, the structure of programs we have examined and of the college model on the whole privileges and emphasises teachers and teaching above researchers and research (Cech, 1999). As this configuration is largely unfamiliar at large research universities, it is difficult to duplicate in a program or programs using this model without serious intent, resourcing and dedication. The dedication of teachers to their students at small liberal arts colleges is the stuff of legend in the US. When interviewing Swarthmore alumna Darragh Paradiso, she recounted an IR professor who held seminars in his living room; German classes of 3-5 students, and several other stories that clearly demonstrate this dedication as well as the resources it requires.

Successfully drawing students from disparate educational backgrounds into a rich and previously unfamiliar vein of knowledge and tutoring them to learn to bridge disciplines requires excellent pedagogical methodology executed in fine form. As Paradiso stated, "Bad teachers don't make it at Swarthmore". On the other hand, there was no conception of a close connection to research: "we usually knew about [professors] interests from their bios... But it wasn't a main focus." (Paradiso, 2019).

For more on the differences between the college and the research university's teaching environments (and the advantages and disadvantages of each approach) Patrik Mehrens (2006) and Thomas Cech (1999) have written important papers.

- How should issues of teaching and pedagogy be examined in the consideration of a liberal arts approach?
- Are the teaching practices in liberal arts models compatible with the roles and responsibilities at a large research university such as LU?²⁶ If not, is there any way around this?

Costs

The college model – whether at a stand-alone liberal-arts college or a college within a larger institution – is expensive (Becker, 2014). Even teaching an intensive liberal-arts program in an existing faculty is expensive (Ekbom, 2019).

The US, in part due to schools that teach in this manner, spends more per university student than any other country in the world apart from Luxembourg (OECD, 2018). As discussed above, the classic US Liberal-Arts education relies on small student-teacher ratios and time-intensive constant assessment and feedback models, which would pose additional burdens and costs in countries with tightly regulated labour-markets. As Cech states, the model is simply "*a very expensive approach to higher education*".

²⁵"At the heart of liberal education is the act of teaching." – Vartan Gregorian (in Lang, 1999)

²⁶ Or indeed the högskolelagen's mandate of a close relationship between education and research

In the US, schools finance these costs through a mix of endowments (see the Swarthmore case above as representative of top-tier non-profit institutions), very high tuition fees, and a reliance on underpaid doctoral students to assist with teaching / tutoring (nces.ed.gov). Programs in the Netherlands and elsewhere also tend to be expensive in comparison with traditional curricula in those countries. As Twente states about its ATLAS program:

"The annual tuition fees for [ATLAS] are higher than those for other bachelor's programs... There is a good reason for this... a small-scale educational setting, a very intensive study program with a student-teacher ratio of 16:1 and additional contact hours with teachers, tutors, lecturers and personal mentors (24-30 hours per week)."²⁷



Higher Education Spending Per Full-Time Equivalent Student, 2015 (US\$ at PPP)

²⁷ https://www.utwente.nl/en/education/bachelor/programs/university-college-twente/admissionand-enrolment/tuition-fees-visa/#tuition-fees On the other hand, utilizing existing and proven structures could be a way to reduce any start-up costs or to introduce some of the elements of choice in a well-tested and fiscally sensible way. At Lund University this possibility may exist in the SAS course structure (as previously mentioned).

One area of inquiry moving forward is into the possibility to expand, repackage and rebrand the SAS course offering. This could represent a cost-effective way to launch a breadth concept with a core of already proven well-developed courses and a cross-faculty structure that could accommodate new courses and course packages in a relatively dynamic framework.

Expansion of the SAS offering could be used to highlight specific areas of strength across faculties at LU – as with Berkeley and their Data 8 course, and subjects of vital interest – such as Agenda 2030 and the Sustainable Development Goals.²⁸

Offering SAS courses in complementary "course packages" as an option would allow for attractive and effective complimentary course combinations which could meet the needs of various student groups: domestic bachelor's students with a free semester for elective credits; study abroad students who need a 30 ECTS package of courses to secure a residence permit for studies, and exchange students with a specific thematic interest.

Such sensible packages could be titled, designed and promoted to appeal to both domestic program students and various categories of international student.

Gothenburg effectively uses doctoral students and post-docs to reduce costs at its liberal arts program (Ekberg, 2019), but this is feasible in a program only insofar as appropriate individuals are routinely available and meet the high standards of instruction required.

- Would expanding, repackaging and rebranding an SAS course offering at LU be the most cost-effective and efficient first-step to exploring a broadened course offering?
- If so, in which ways and in which directions could this be done?

Attractiveness to applicants

As previously detailed, the liberal arts-style programs introduced at Uppsala and Gothenburg have not proven highly popular thus far, although the Gothenburg program has been running successfully with adequate student numbers for some time.

A carefully-considered, well-designed program offer at Lund University would attract considerable interest from applicants but estimating the expected applicant numbers and what kind of education or marketing would need to be done around the launch of a program to meet targets depends upon the specific program or offer that takes shape.

• Considering our knowledge of Swedish students, which offer or program format would be most attractive to bachelor's applicants?

²⁸ This approach would tie-in with larger goals highlighted in LUs current Strategic Plan and considered in depth in LUs Omvärldsbevakning 2018 (DNR STYR 2018/618)

- Beyond curricular design and institutional framework, which language of instruction would be the most suitable? Is an English-taught or Swedish-taught program more likely to be popular with applicants?
- Would such a program or offer be an attractive addition to our international bachelor's-level offer, either as a program or as packages of courses?
- Would attracting non-European students help offset the costs involved?

Demand in Sweden and internationally

Analysis of the potential level of demand is an important and difficult undertaking before committing resources to new programmes or courses, not to mention the establishment of entirely new colleges, as has transpired at many of the institutions previously surveyed in this report. Even a changed offering and/or structure of SAS courses would require additional resources, and similar projections would be needed.

While a full-scale analysis is something for a later stage of discussion, some useful data to highlight here is the demand profile for current interdisciplinary bachelor's programmes offered at Lund University. These can be considered and discussed in comparison with the figures for the much differently conceived but also interdisciplinary liberal arts programmes at GU and UU presented above.

The bachelor's programme in Philosophy, Politics and Economics (PPE) is offered in Swedish and based at the Philosophy department in the Joint Faculties of Humanities and Theology. It is taught in cooperation with the departments of Political Science and Economics (*nationalekonomi*). As an illustration of the inspiration behind the program, the homepage²⁹ cites the international recognition and popularity of the PPE degree model.^{30 31}

Antagnings omgång	Sökande i tid	Förstahands sökande	Antagna urval 1	Antagna urval 2	Söktryck	Reserv urval 2	Behöriga	Andel behöriga 1:A	Andel kvinnor
HT2018	597	81	50	40	2.0	59	453	78	38.86
HT2017	597	94	50	40	2.4	65	490	83	42.71
HT2016	560	75	50	40	1.9	74	437	84	42.32
HT2015	619	71	38	30	2.4	76	483	82	46.20
HT2014	611	99	40	35	2.8	112	543	80	45.01

Application Numbers – 2014-18 – LU PPE

Source - NyA Open via Kuben

²⁹ https://www.fil.lu.se/utbildning/kandidatprogram/

³⁰ https://en.wikipedia.org/wiki/Philosophy, Politics and Economics

³¹ https://www.theguardian.com/education/2017/feb/23/ppe-oxford-university-degree-that-rulesbritain

It is useful to look at the similarly interdisciplinary, but differently focused, bachelor's programme in Development Studies (BIDS) with English as the language of instruction. Based at the Human Geography department, the program is taught in cooperation with the departments of Sociology, Political Science and Economic History and combines *"both the background theoretical knowledge and the practical skills needed to work in development-related fields"*. ³² Field study and internships are key components of the program.

The application figures for the BIDS program are more complex due to the fact that the program is open each year in both the normal "Swedish" bachelor's application round (Rounds designated by HT) as well as the "international" round (Rounds designated by IKHT).

Antagnings omgång	Sökande i tid	Förstahands sökande	Antagna urval 1	Antagna urval 2	Söktryck	Reserv urval 2	Behöriga	Andel behöriga 1:A	Andel kvinnor
HT2018	564	79/ <mark>3</mark>	93/ <mark>0</mark>	45	1.8	61	535	95	67.55
IKHT18	323	170/ <mark>82</mark>	56/ <mark>25</mark>	56	3.0	112	229	72	67.49
HT2017	667	96/ <mark>0</mark>	95/ <mark>0</mark>	52	1.8	91	633	96	66.72
IKHT17	358	188/ <mark>53</mark>	63/ <mark>16</mark>	44	4.3	86	252	74	65.08
HT2016	632	86/ <mark>4</mark>	98/ <mark>2</mark>	58	1.5	73	603	97	69.30
IKHT16	364	213/ <mark>64</mark>	54/ <mark>9</mark>	38	5.6	66	230	64	59.34
HT2015	560	85/ <mark>3</mark>	88/ <mark>1</mark>	42	2.0	75	510	85	67.50
IKHT15	271	141/ <mark>56</mark>	48/ <mark>9</mark>	31	4.5	74	175	54	60.52
HT2014	585	105/ <mark>0</mark>	88/ <mark>1</mark>	42	2.5	76	519	84	68.03
IKHT14	251	137/ <mark>42</mark>	36/ <mark>4</mark>	36	3.8	34	125	52	57.77
HT2013	566	87/ <mark>2</mark>	120/ <mark>0</mark>	66	1.3	53	509	91	69.61
IKHT13	185	107/ <mark>50</mark>	50/ <mark>12</mark>	45	2.4	22	120	51	57.30
HT2012	427	86/ <mark>1</mark>	48/ <mark>0</mark>	48	1.8	63	431	88	69.56
IKHT12	192	104/ <mark>61</mark>	43/ <mark>7</mark>	43	2.4	35	142	67	63.54
HT2011	362	71/ <mark>11</mark>	29/ <mark>0</mark>	28	2.5	52	345	90	63.81
IKHT11	527	240/ <mark>44</mark>	66/ <mark>26</mark>	63	3.8		129	24	33.02

Application Numbers - 2011-18 - LU BIDS (figures	in Red are the fee-liable student subset)
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Source - NyA Open via Kuben

- How should we interpret the differences in the application statistics between these two programmes?
- Which factors may cause these differences?
- What do these statistics and differences suggest, if anything, regarding possible demand for a Liberal Arts focused program at Lund University?

³² https://www.keg.lu.se/en/education/academics/bachelors-programmes/bids-bachelors-indevelopment-studies

Progression to master's level studies

A key consideration when introducing programs or program platforms with novel forms concerns the study options graduates will have in the larger Swedish university system. With the structure of degrees and expected pattern of progression at Lund University, the more multidisciplinary a student's undergraduate degree, the less likely they are to be eligible to specific programs at the master's level, given current entry requirements and admissions regulations.

The practical impact of such issues was highlighted in conversation with the liberal arts program director at Gothenburg, who discussed the need to advocate internally (and informally) in order to ensure that graduates merits were considered fully at relevant GU master's programs (Ekbom, 2019).

• How could issues related to master's progression be formally resolved?

Attractiveness to & recognition by employers and institutions

One of the factors ensuring liberal art's graduates' success in the US labour market is that many successful professionals in hiring roles and academics working with PhD admissions are themselves graduates of liberal arts programs (Becker, 2014) and the value of such degrees is generally understood, as is the investment that students make at the institutions who teach them. It goes without saying that there is no critical mass of alumni or much liberal arts background knowledge in general in the Swedish labour market or university sector.

In contrast, although employers in Sweden claim to want new hires with broad skill-sets (Lundell & Viklund, 2017), what they (or their hiring processes) are accustomed to is filling positions with applicants who "tick all the boxes" so to speak – holding the specifically designated degree and having closely related prior work experience or internships.

This problematique is investigated in some depth by the Humtank reports referred to earlier. However, these valuable reports look at humanities majors and the humanities faculty as their primary point of interest and investigation. A more general sketch is provided in Lund University's Omvärldsbevakning (2018, DNR STYR 2018/618). Suffice it to say at this point in the investigation, a liberal arts program graduate could prove a confusing prospect to a potential employer or prospective PhD supervisor in Sweden, when compared to a graduate with a single clearly dominant major area.

It is also important to note that there is a clear "grass is always greener on the other side" phenomenon occurring in the breadth-depth debate that is highly visible when comparing various systems around the world, and the national-level debates within these systems. The key question, as succinctly stated by Linda Adler-Kassner is whether these debates serve as a "productive tension or strain" in the system (Alder-Kassner, 2014; Mori, 2015) and how they are tied to larger phenomenon in the society, i.e. as a symptom of larger tensions or societal imbalances (Buurma & Heffernan 2018; Blanchard, 2018).

• How might Swedish employers be encouraged to look more openly at applicants with liberal arts degrees.

6. Possible Next Steps

- Decisions on further research, review or action
- Further analysis of existing models / courses, including possible site visits to insitutions with models of interest
- Analysis of internal capacity and expertise
- Cost estimations
- Demand analysis and projections
- Market research and planning

References

Adhikari, Ani and John DeNero (n.d.) *Computational and Inferential Thinking Introduction*. Retrieved February 20, 2019, from: https://www.inferentialthinking.com/chapters/intro

Adler-Kassner, L. 2014. *Liberal learning, professional training, and disciplinarity in the age of educational "reform": Remodeling general education.* College English, 76(5), 436-457. Retrieved from: https://www.ncte.org

About AUC. Amsterdam University College. Universiteit van Amsterdam. 3 Aug. 2018, www.auc.nl/about-auc/about-auc.html.

Aoun, Joseph. *Robot-Proof: Higher Education in the Age of Artificial Intelligence*. The MIT Press, 2018.

Beckett, Andy, 2017, February 23. *PPE: the Oxford degree that runs Britain. Oxford University graduates in philosophy, politics and economics make up an astonishing proportion of Britain's elite. But has it produced an out-of-touch ruling class?* Retrieved from: https://www.theguardian.com/education/2017/feb/23/ppe-oxford-university-degree-that-rules-britain

BIDS - Bachelor's in Development Studies. The Department of Human Geography, Lunds Universitet, 15 May 2019, www.keg.lu.se/en/education/academics/bachelors-programmes/bids-bachelors-indevelopment-studies

Boetsch, L., Balli, V., & Schreel, L. 2017. *Guide to Emerging Liberal Arts and Sciences Practices in the EU*. Retrieved from: http://www.ecolas.eu/eng/wp-content/uploads/2017/11/Handbook-final-BLASTER.pdf

Becker, J. 2014. *What a Liberal Arts Education is... and is Not* (2003/2014). Retrieved from: http://iile.bard.edu/

Broschyrer Och Rapporter Om Pedagogisk Utveckling. Rapporter Om Pedagogisk Utveckling - Uppsala Universitet, Retrieved 27 May 2019 from: mp.uu.se/web/info/undervisa/pedagogisk-utveckling/pedagogiskutveckling

Buurma, Rachel & Laura Heffernan. 2018. *Elite Colleges Have No Monopoly on the Liberal Arts.* July 15, 2018. The Chronicle of Higher Education. https://www.chronicle.com/article/Elite-Colleges-Have-No/243915

CBS StatLine. *Hoger Onderwijs; Eerstejaarsstudenten, Studierichting 1990-2015.* opendata.cbs.nl. 2019. https://opendata.cbs.nl/statline/#/CBS/nl/dataset/70961ned

Cech, Thomas R. 1999. *Science at Liberal Arts Colleges: A Better Education?* Daedelus 128(1): 195–216.

Chopp, Rebecca. *Remaking College with Rebecca Chopp & Daniel Weiss*. Transcript. WHYY. December 10, 2013. Retrieved from: https://whyy.org/episodes/remaking-college-with-rebecca-chopp-daniel-weiss/

Cooper, Preston. *The Crazy Amount America Spends on Higher Education, In One Chart.* Forbes, 12 Sept. 2018. Retrieved from: www.forbes.com/sites/prestoncooper2/2018/09/12/the-crazy-amount-america-spends-on-higher-education-in-one-chart

Curriculum. Waseda School of International Liberal Studies. Waseda University. Retrieved February 20, 2019 from: www.waseda.jp/fire/sils/en/about/curriculum/

Data 8: The Foundations of Data Science (n.d.). Retrieved February 20, 2019 from: http://data8.org

East Asia Liberal Arts Initiative (EALAI). (n.d.). Retrieved March 20, 2019, from: http://www.cu-tokyo.ac.jp/eng_site/info/research/organization/ealai/

Educational Program (n.d.) in The Swarthmore Catalog. Retrieved March 03, 2019, from: http://catalog.swarthmore.edu/content.php?catoid=7&navoid=162#7-2

Eduation at a Glance 2018: Indicator C1 How much is spent per student on educational institutions? OECD. 2018. Retrieved from: https://www.oecd-ilibrary.org/education/education-at-a-glance-2018/indicator-c1-how-much-is-spent-per-student-on-educational-institutions_eag-2018-21-en

Ekberg, Tim. 2018. *Omvärldsbevakning*. Lunds Universitet (DNR STYR 2018/618) Retrieved from: hwww.medarbetarwebben.lu.se/sites/ medarbetarwebben.lu.se/files/omvarldsbevakning-2018.pdf

Ekbom, Moa. Liberal Arts at GU. Telephone interview by author. March 29, 2019.

Forsberg Lundell, Fanny & Roine Viklund. 2017. Humtank Rapport #2: *På jakt efter framtidens kompetenser. Om humanioras potential på arbetsmarknaden.* Humtank.

Garsten, Bryan, et al. 2013. *Yale-NUS College: A New Community of Learning*. Retrieved from: https://www.yale-nus.edu.sg/newsroom/a-new-community-of-learning

Hammar, Isak, Magnus P. Ängsal & Marie Öhman. 2018. Humtank Rapport #3: Den ljusnande framtid. Om arbetslivsanknytning i humanistisk utbildning. Humtank.

Harari, Yuval Noah. Homo Deus: a Brief History of Tomorrow. HarperCollins, 2017.

Harvard University Report of the Task Force on General Education. 2007. Retrieved from: http://projects.iq.harvard.edu/files/gened/files/genedtaskforcereport.pdf

Harvard General Education Review Committee Final Report. 2016. Retrieved from: https://www.generaleducation.fas.harvard.edu/files/gened/files/gerc_final_report.pdf

Higher education in Sweden: 2017 Status Report. 2017. Published by the Swedish Higher Education Authority (UKÄ). 2017. Report 2017:9

Hoff, T. & Kontowski, D. 2017. *ELAI database*. Retrieved from: www.liberal-arts.eu

Hvistendahl, M. 2019, March 28. *Can we stop AI outsmarting humanity?* Retrieved from: https://www.theguardian.com/technology/2019/mar/28/can-we-stop-robots-outsmarting-humanity-artificial-intelligence-singularity

Jung, Insung, et al. 2016. *Liberal Arts Education and Colleges in East Asia: Possibilities and Challenges in the Global Age*. Springer.

Kandidatprogram | *Filosofiska Institutionen*. Lunds Universitet, March 15 2019, www.fil.lu.se/utbildning/kandidatprogram.

Kiley, Kevin. 2011. Better Than Yours – Survey by private college group shows areas where liberal arts colleges outperform private and public universities, to reinforce differences among institution types Inside Higher Ed. November 16, 2011. https://www.insidehighered.com/

Kontowski, Daniel. 2016. *The Paradox of Practical Liberal Arts. Lessons from the Wagner College Case for Liberal (Arts) Education in Eastern Europe*. Educational Studies. Issue 3, pages 80-109. Higher School of Economics, Moscow.

Kuben – ett verktyg för uppföljning. Database analysis toolset. Lunds Universitet. http://kuben.lu.se/

Lang, Eugene M. 1999. *Distinctively American: The Liberal Arts College*. Daedalus 128(1): 133–150.

Lewin, Tamar. 2012. *Faculty Gives Yale a Dose of Dissent Over Singapore*. The New York Times, April 4, 2012. https://www.nytimes.com/.

Liberal Arts. Liberal Arts, Kandidatprogram, 180hp. Göteborgs Universitet, February 21 2018, flov.gu.se/utbildning/grundniva/liberal-arts.

Liberal Arts and Sciences Institutions in Europe. (n.d.). Retrieved February 18, 2019, from: https://www.ecolas.eu/eng/?page_id=226

Long, Kyle A. 2018. *The Emergence of the American University Abroad*. PhD Dissertation. Columbia University, 2018. https://doi.org/10.7916/d8vh7588

Mariuzzo, Andrea. 2015. *Why the US liberal arts tradition failed to take hold in Europe.* March 11, 2015. In: The Conversation. https://theconversation.com/uk/topics/universities-at-the-crossroads-15320

Mehrens, Patrik. 2006. *Learning from Liberal Arts Education: Ideas for the Improvement of Undergraduate Education in Sweden*. Avdelningen För Utveckling Av Pedagogik Och Interaktivt Lärande, Uppsala Universitet.

Rie, Mori. *In Defense of Japanese Liberal Education*. Liberal Education. Association of American Colleges & Universities. Fall-Winter 2016.

National Science Foundation - Where Discoveries Begin. NCSES - US National Science Foundation (NSF). November 08, 2017. Accessed February 08, 2019. https://www.nsf.gov/statistics/.

Oakley, Francis. 1992. Community of learning: the American college and the liberal arts tradition. New York: Oxford University Press.

Online Study-Choice Assistant for the Program Liberal Arts and Sciences. University College Freiburg, 2019, www.osa.uni-freiburg.de/las/index.html.

Olsson, Jesper, Anna Sofia Rossholm & Jesper Enbom. 2018. Humtank Rapport #4: *Kunskapens nya arenor. Humanistiska utbildningar i ett föränderligt samhälle.* Humtank.

Paradiso, Darragh. *College, Liberal Arts, Swarthmore.* Telephone interview by author; email correspondence. April 01, 2019.

Programme Structure - Leiden University. Universiteit Leiden. Retrieved February 28, 2019 from: www.universiteitleiden.nl/en/education/study-programmes/bachelor/liberal-arts--sciences-global-challenges/about-the-programme/study-programme.

Program. Litteraturvetenskapliga Institutionen, Uppsala Universitet, 2018, www.littvet.uu.se/utbildning/program/.

Seltzer, Rick. 2019. *College endowments returned 8.2 percent in 2018*. Retrieved April 3, 2019 from: https://www.insidehighered.com/

Seven-Course Breadth Requirement. (n.d.). Retrieved March 3, 2019, from: https://ls.berkeley.edu/seven-course-breadth-requirement

Strategisk plan för Lunds universitet 2017–2026. 2016. Lunds Universitet. Retrieved from: https://www.lu.se/om-universitetet/vision-mal-och-strategier

Sök i Universitets- Och Högskolerådets Antagningsstatistik. UHR, Universitets- Och Högskolerådet, 2019. statistik.uhr.se

The NCES Fast Facts Tool Provides Quick Answers to Many Education Questions. National Center for Education Statistics (NCES) Home Page, a Part of the U.S. Department of Education, Retrieved February 20, 2019 from: nces.ed.gov/fastfacts/display.asp?id=372.

Pathways. Arts and Sciences. UCL. 2018. www.ucl.ac.uk/basc/current/pathways.

University College Freiburg. University College Freiburg, 2 Apr. 2019, www.ucf.uni-freiburg.de/college.

van Bommel, S.P. 2016. *Classics between prosperity and crisis: Greek and Latin education in 21st-century Holland*. Retrieved April 1, 2019 from: https://www.addisco.nl/blog/classics-between-prosperity-and-crisis-bas-van-bommel.htm

van der Wende, M.C. 2011. *The Emergence of Liberal Arts and Sciences Education in Europe: A Comparative Perspective*. In: Higher Education Policy. Vol 24, pp. 233-53.

van der Wende, M. C. 2013. An Excellence Initiative in Liberal Arts and Science Education: The Case of Amsterdam University College. In Q. Wang, Y. Cheng, & N. C. Liu (Eds.), Building World-Class Universities. Different Approaches to a Common Goal (pp. 89–102). Shanghai: Sense Publishers.

Vonk, Demi, Jasper Homminga, and Ans Netjes. 2018. *ATLAS Self-Evaluation Report*. University College Twente, University of Twente.

Wealth Inequality and the Retrenchment of the Liberal Arts. Kathryn D. Blanchard. Letter to The Editor. July 23, 2018. In: The Chronicle of Higher Education. https://www.chronicle.com/blogs/letters/wealth-inequality-and-the-retrenchmentof-the-liberal-arts/

Wikipedia contributors. *Philosophy, politics and economics*. Wikipedia, The Free Encyclopedia., 5 Jun. 2019. https://en.wikipedia.org/wiki/Philosophy,_politics_and_economics

Wong, Pei Ting. *Move over Doctors and Lawyers, There's a New Rich Kid in Town*. Today, February 28, 2018. <u>https://www.todayonline.com</u>.

Yale-NUS College. Yale-NUS. Retrieved February 18, 2019, from: www.yale-nus.edu.sg/curriculum/common-curriculum/