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## **AN EXCELLENCE INITIATIVE IN LIBERAL ARTS AND SCIENCE EDUCATION**

*The Case of Amsterdam University College*

### INTRODUCTION: JOINING FORCES TO ACHIEVE EXCELLENCE

Amsterdam University College (AUC) was established in 2009 as an excellence initiative jointly undertaken by the University of Amsterdam (UvA) and VU University Amsterdam (VU). AUC is a selective and residential honours college that offers an international liberal arts and sciences bachelor programme, leading to a joint degree from the two founding universities. Both the University of Amsterdam and VU are positioned between 102-150 on the Academic Ranking of World Universities by Shanghai Jiao Tong University (2011), with some 32,000 (UvA) and 25,000 (VU) students, yet quite distinct histories dating back to 1,632 (UvA) and 1,880 (VU). The fact that these two major research universities in Amsterdam joined forces to create AUC and a liberal arts and sciences undergraduate experience was based on the vision that the leaders of the future will have to work together across the boundaries of nationalities, cultures and disciplines, in order to be successful in the globally engaged and culturally diverse society of the 21st century. This paper intends to provide an in-depth analysis of AUC's experience and explain why and how the liberal arts approach is a way to develop excellence in undergraduate education.

From a strategic perspective, the two universities decided to join forces as a way to strengthen excellence, which can be seen as an example of local cooperation for global competition. This approach was supported by the Ministry of Education, the City of Amsterdam, and locally headquartered multinational corporations. Besides and further to this initiative at undergraduate level, cooperation for global excellence between the two universities is being developed or planned for in areas such as graduate education, research, technology transfer, and regional outreach. AUC is considered a successful model in this context since it combines the strengths of both institutions through a process of careful selection and evaluation of students, faculty, staff, and services, based on well-defined principles and criteria for excellence in teaching and learning.

From a systems perspective, the need for an excellence initiative in undergraduate education was fuelled by the general discontent in this area (which will be discussed below), as experienced in virtually all countries with massified higher education systems. The emergence of liberal arts initiatives in Europe can

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be seen as a response to the need to differentiate the massified and (overly) egalitarian European higher education systems, by introducing broader curricula and more selective approaches to admission. Known as “University Colleges” they represent in the Netherlands a new branch of excellence in Dutch university education, addressing the situation which was described by the Organization for Economic Co-operation and Development (OECD) as demonstrating an insufficient level of differentiation, where excellence is underrepresented, the international dimension should be enhanced, and too-early specialization should be avoided (OECD, 2008).

#### UNDERGRADUATE EDUCATION: FROM DISCONTENT TO REDEFINITION

Undergraduate education and its discontent has been intensively discussed and analysed. Central elements of dissatisfaction and critique refer to low performance in terms of retention rates and achieved learning outcomes, student disengagement, stagnant or decreasing graduation rates, and increased time in achieving degrees. These circumstances have come as a result of overcrowded lecture halls, impoverished staff-student ratios, loosening of the research – teaching nexus, and the lack motivation for undergraduate teaching by faculty. Further, despite relentless effort to counter the situation, persistent and/or growing inequalities exist, with higher education being less affordable as a public service. As summarized by Muscatine: “the product of the present curriculum – despite a residue of good learning by good students in good courses – could hardly be called either excellent or economic” (2009:51). Moreover, even in the most elite universities disappointment with the undergraduate achievement has been acknowledged (Bok, 2006).

Contrary to the disappointing record for undergraduate education, research performance has been greatly boosted over the last decades, with growing research dominance to the detriment of undergraduate teaching as a looming consequence. The fact that global rankings seem to enhance this effect has been recognized abundantly (Van der Wende, 2008). Yet, undergraduate education will continue to represent the cornerstone of any higher education system and a key mission of any institution, including research universities. Recognition of the consequent need for reform results in a renewed conversation about the purpose of undergraduate education and the awareness that it is necessary to re-establish a sense of academic mission that emphasizes teaching and the curriculum (Altbach et al., 2009, 2011). Concerns about economic competitiveness and fiscal constraints make a discussion of higher education’s accountability with respect to learning achievement largely inevitable (Arum & Roksa, 2011). In addition, the global debate on world-class universities leads to a recognition of the need to re-balance and differentiate institutional missions in terms of requiring a broader range of dimensions for excellence (Van Vught, 2009; Van der Wende, 2011a).

Clearly, the tide is shifting. Re-defining excellence in teaching and learning implies for institutions the development of a vision on what should be learned, why, and how. That is, a future-oriented perspective on the knowledge, values, and

skills essential for the 21st century is required and this will be illustrated in the next section by considering AUC's vision and its curriculum design.

#### A RENEWED FOCUS ON LIBERAL ARTS AND SCIENCES

In the US, inspiring attempts to formulate the way forward were notably led by the "Liberal Education and America's Promise" (LEAP) report on "College Learning for the New Global Century", which embodied an interesting renewed consensus on liberal arts education (the Association of American Colleges and Universities [AAC&U], 2007). Other important contributions to the reinvention of liberal education in the view of new pedagogies were for instance made by Levine (2006). Altbach (2009) underlines the renewed conversation on the value and potential need for liberal education as a more global trend, which emphasizes a broad interdisciplinary curriculum focused on creativity, critical thinking, cultural awareness, problem solving, and communication skills. In Europe, the (re-) emergence of liberal arts programmes was facilitated by the Bologna Process, which recognized undergraduate education as a phase in its own right. Moreover, it can be explained as a response to the need to differentiate the massified European systems (Van der Wende, 2011b). First, in terms of developing broader and more flexible bachelor programmes, with the aim of overcoming the disadvantages of too-early and over-specialization, by re-establishing the balance between breadth and depth of the curriculum, whilst at the same time enhancing learning effectiveness. Second, in terms of establishing more selective branches of higher education, focusing explicitly on excellence, i.e. redefining elite education in overly egalitarian systems.

A prominent example is the Netherlands, where some five liberal arts colleges were established since 1998 as branches of excellence by leading research universities (including Utrecht, Amsterdam, Leiden, and Maastricht). These "University Colleges" recently obtained special status in the higher education legislation, granting them more autonomy than regular university programmes with respect to the selection of students and the level of tuition fees.

AUC capitalized on previous initiatives in the country and mostly on the American experience, but not without a critical stance. It drew on recent accounts – including candid critiques – of the liberal arts tradition (for instance Lewis, 2006) and based on these "lessons learned" it formulated its own vision on why and how liberal arts and science education is most relevant for the 21st century:

- Today's society is in a constant state of flux, and our future leaders need to be flexible, creative thinkers, able to cope with the complexity of the issues facing the world. A liberal arts and sciences education is an excellent foundation in this context.
- In addition to factual knowledge, a liberal arts and sciences education prepares students to become a multilingual, informed and engaged global citizens, with well-developed intercultural competences, able to read intelligently, think critically and write effectively on the processes shaping our world. Students should become better able to make complex connections across disciplines,

cultures and institutions; be more creative in their problem-solving; be more perceptive of the world around them; and be more able to inform themselves about the issues that arise in their life, personally, professionally and socially, as well as being equipped to transform such knowledge into practical and ethical action.

- A liberal arts and sciences education enhances their personal development as well as their academic and career development, and provides them with a range of skills that they will be able to use throughout their life.
- In addition, the frontiers of knowledge, both in academia and the world of work, now call for cross-disciplinary inquiry, analysis and application. New pathways across the traditional dividing lines between liberal arts and sciences and the professional fields are needed. Students need to integrate and apply their learning, by addressing the “big questions” in science and society through connecting analytical skills with practical experience, i.e. putting their knowledge into use (AUC, 2011).

AUC’s mission: “Excellence and Diversity in a Global City” reflects the belief that both excellence and diversity matter, as both competition and cooperation are key to success in a globalized world. Leadership does not only require excellence, but also the understanding and valuing of diversity. Consequently, AUC’s values express a commitment to excellence, diversity, and the global perspective:

- We seek excellence in all that we do and believe that it is not only the responsibility of each individual to strive for his or her best, but also they need to create the conditions for the success of others.
- Diversity is our strength. Different approaches, ideas, and values are integral to the creation of a vibrant and challenging learning environment. Diversity, however, requires tolerance. Tolerance, understanding, and open-mindedness are therefore expected of every member of the AUC community.
- We believe that a global perspective is central to the success of every student. A global perspective requires active engagement with other individuals, communities, and the world. This engagement is celebrated and valued at AUC (AUC, 2012).

#### AUC’S CURRICULUM CHARACTERISTICS AND LEARNING OUTCOMES

This vision inspired the development of a new curriculum, drawing on eminent scholars in all disciplines from the two founding universities. More specifically, the bare question of what should be taught in order to equip graduates for success in the 21st century led them to outline an engaging curriculum that reaches across disciplinary boundaries, focusing on the “the Big Questions in Science and Society”.

The AUC curriculum aims to create an academic community that is rooted in the very best traditions of the liberal arts and sciences, but actively oriented to the demands and challenges of the 21st century. Students live and study on an international campus, following a three-year English-taught bachelor programme that creates new pathways across traditional dividing lines. AUC attracts students

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from all over the world (50% of its student body is international), who engage on a daily basis in intensive and small-scale seminars with high-calibre international staff (two-thirds have an international background). The curriculum places particular emphasis on:

- Interdisciplinarity: Integrating insights from two or more academic disciplines in order to develop a greater understanding of problems that are too complex or wide-ranging to be dealt with using the knowledge and methodology of just one discipline.
- Scientific Reasoning: The development of academic thinking and strong analytical skills is an integral part of the curriculum for all students. The curriculum offers ample opportunities for students to focus on science and science-related majors in a liberal education context.
- Global Knowledge, International and Intercultural Competence: Understanding of economic forces, interdependence and political dynamics, as well as second-language competence and the ability to respond to cultural perspectives other than one's own.
- Civic Knowledge and Community Engagement: Active involvement with diverse communities and real-world challenges, including in-company internships and off-campus community engagement.
- Research-Based Learning: Multiple opportunities to work, independently and collaboratively on research projects that require the integration of knowledge with skills in analysis, discovery, problem solving and communication, where students are engaged in active learning based on their own questions.

These elements form the main principles of AUC's curriculum, thus shaping a learning experience that aims for the learning outcomes of knowledge acquisition, academic skills, interdisciplinary skills, learning skills, communication skills, engagement at local and global levels as well as personal and social responsibility.

#### GLOBAL TRENDS AND DRIVERS FOR LIBERAL ARTS EDUCATION IN THE 21ST CENTURY

The US and European trends are clearly not isolated from each other, as recognized by Rothblatt (2003), who states that the transnational dialogue on liberal education has become more meaningful since basification of higher education in Europe, because this has forced policy makers to consider more differentiated systems of higher education, including specific approaches to undergraduate education such as the liberal arts. Nevertheless, the US and European models for liberal arts contain both similarities and differences (Van der Wende, 2011b). Moreover, the renewed focus on liberal arts is not limited to these two regions, as pointed out by Kirby (2008), who notes that leading Chinese universities share a commitment to general or liberal education with their US counterparts. A commitment to educating the whole person and not just training the specialist may seem counterintuitive in an age increasingly dominated by science and technology and by pressures for ever-earlier and ever-greater specialization. However, this understanding is now the cornerstone of curricular reform in leading universities in mainland China

(including Peking, Fudan, Zhejiang, Wuhan, and Sun Yat-sen Universities, with further initiatives announced for Shanghai Jiao Tong and Tsing Hua Universities). In the same region, Hong Kong SAR has benefited from the extension of the undergraduate phase from three to four years to give liberal arts a major role in the first two years of the new bachelor curriculum. Similar approaches are being considered by some leading universities in Japan and China Taiwan. In Singapore, the National University of Singapore recently announced a new liberal arts programme in partnership with Yale University. Also, in other regions, such as the Middle East, such initiatives are being undertaken.

Clearly, the renewed conversation on the value and potential need for liberal arts education can be considered an emerging global trend (Altbach et al, 2009) and as an example of curriculum considerations that take place in the light of globalization and internationalization, is an educational concept that is enjoying global migration itself. What exactly are the main aims and rationales driving this development, how does it relate to developing excellence for undergraduate education in the 21st century, and to what extent is it truly global?

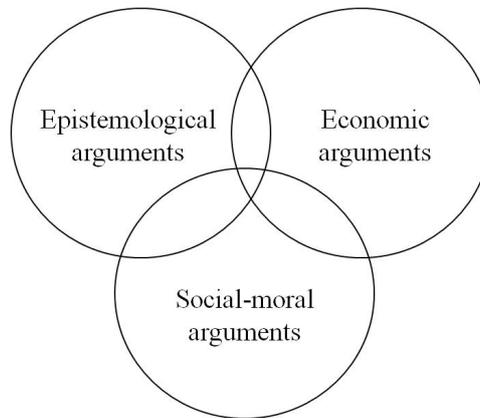
The general underpinnings of liberal arts education are that it should provide students breadth and depth in their academic programmes, ensuring broad knowledge of culture, science and society, as well as in-depth study in a specific area of interest. More specifically, it should help students to develop a sense of social responsibility as well as strong and transferable intellectual and practical skills, including: communication, analytical and problem-solving ability, and a demonstrated competency to apply knowledge and skills in real-world settings (AAC&U, 2007).

Arguments to foster this type of approach to undergraduate education in the 21st century can be described in three broad categories:

- The first type is of an epistemological character and relates to the development of knowledge and the fact that the most exciting science is happening at the interface of the traditional disciplines. That is, the realization that some of the “big challenges” that we face both in science and society are just not solvable by single-discipline approaches and that interdisciplinary work is needed to provide the big breakthroughs. This has led to a substantial focus on cross- or interdisciplinary research into themes, such as: climate change, energy and health and well-being and this needs to be reflected in the curriculum.
- The second type of argument is of an economic and utilitarian nature and relates to the employability of graduates. More specifically, a society characterized by a knowledge economy, innovation, and global competition requires the so-called “21st century skills” which enable graduates to be creative, critical thinkers, and problem solvers who can cooperate in teams and communicate across the boundaries of languages, cultures and disciplines.
- The third category of argument relates to the moral/social dimension and to the humanistic tradition of liberal arts, pertaining to the importance of educating the whole person, including their personal and intellectual development with a view to fostering social responsibility and democratic citizenship.

As depicted in Figure 1, these arguments seem to be to some extent interrelated. It should be noted that the first two categories are strongly driven by the global knowledge economy that is leading to a converging agenda for undergraduate education the 21st century, whereas the third category, the social-moral dimension, may in fact be the most complex one to (re-)define in this “new global century”, as it does not seem to be characterized by convergence in the political and ideological sense. Moreover, tensions may arise between the economic and social-moral arguments, as argued by Nussbaum (2010).

The three sets of arguments will be elaborated upon below and illustrated by considering the case of Amsterdam University College.



*Figure 1. Drivers for liberal arts education in the 21st century*

#### INTERDISCIPLINARITY AND THE ROLE OF DISCIPLINES: COMBINING BREATH AND DEPTH

The focus on interdisciplinarity is recognized as a key component for excellence in undergraduate education. Moreover, the introduction of real-life situations, broad themes and “big questions” from the first year on allows students to develop an expansive intellectual horizon and motivates them to learn, or rather avoid the usual boredom and hence drop out (Elkana, forthcoming). That is, the learning is enhanced, because the students are engaged in the process through the study of challenging problems relating to their backgrounds, history and goals (Muscatine, 2009). Furthermore, this arrangement enables them to decide more effectively upon the subsequent disciplinary courses appropriate for them. However, it is very clear that the interdisciplinary approach cannot replace rigorous teaching of the disciplines, for this type of work requires intelligent collaboration with disciplinary experts, which can only be achieved through in-depth training in at least one (and ideally two) discipline. Or as formulated by Gardner (2008:55) “If no single discipline is being applied, then clearly interdisciplinary thinking cannot be at

work”. It is therefore recommended to teach from the first year onwards seminars that deal with real-life situations in parallel with rigorous introductory disciplinary courses (Elkana, forthcoming), or a combination of “nuclear (interdisciplinary problem-oriented) seminars” and “planetary courses” (Muscatine, 2009). This combination of interdisciplinary and disciplinary learning relates to the concept of “breadth and depth” as an inherent feature of a liberal arts education and transcends, as such, the discussion on disciplinarity or interdisciplinarity. However, questions of balance, timing and sequence remain important, especially in combination with the notion of student choice which is inherently related to the liberal arts aim for personal development and a broad intellectual horizon.

The AUC curriculum combines breadth of experience with depth of knowledge (see Figure 2). In the first semester of their studies students are expected to think about the “big questions” in science and society, by engaging them in far-reaching themes and broad real-world questions. In fact, Big Questions courses are part of the academic core. Another important aim of these courses is to stimulate students to reflect on their own position with respect to the big questions the world is facing, and how they personally can engage with them. Moreover, the choice of Big Questions courses (Big Question in Science, Big Questions in Society, Big History and Big Books) is independent from the (intended) major. This interdisciplinary approach is motivated by the belief that an education that encompasses different disciplinary perspectives is the best foundation for a broad academic orientation that involves an independent and critical way of thinking. However, the interdisciplinary approach, as explained above, also requires a solid grounding in the separate disciplines, as a substantial depth of knowledge is required for successful interdisciplinary debate. This is conceptualized and depicted in the AUC curriculum circle.

In the AUC curriculum this discipline-based knowledge will mostly be acquired through the major courses in the second and third year. At the end of the first semester, students choose a themed course, which will assist them in their choice for their major course of study. That is, six introductory themed courses are on offer: Energy, Climate and Sustainability, Life, Evolution, and the Universe, Health and Well-being, Information, Communication, Cognition, Social Systems, Cities and Cultures, all of which have a broad interdisciplinary character that introduces students to relevant issues and research questions as well as explaining how different disciplines contribute to it. That is, they offer an orientation and background to the choice of courses for the major, which provides them with the necessary depth of knowledge to engage in the interdisciplinary debate at a more advanced level in their third year and to complete a capstone project.

#### 21ST CENTURY SKILLS AND THE TWO CULTURES OF MODERN SOCIETY

The importance of generic skills is presented above as an economic or utilitarian argument related to employability. Employment in the 21st century is expected to be influenced by more volatile labour markets and careers and a changing demand for skills, i.e. an increasing demand for non-routine interactive and analytical skills

as compared to a decreasing demand for routine cognitive and manual skills (OECD, 2010). Typical “21st century skills” would therefore include creativity and innovation, critical thinking, problem solving, communication, collaboration, information, IT, and media literacy, social and cross-cultural skills and leadership and responsibility (Trilling & Fadel, 2009). Regarding these, employers subscribe to the view that graduates need to be creative thinkers, able to communicate, to reason, create, write and speak and to provide leadership. However, many of the skills needed to survive and thrive in modern corporations are those a well-rounded liberal arts education has always provided: depth, breadth, knowledge in context and motion, and the search for deeper understanding. Moreover, liberal arts and sciences graduates are innovative and nimble, can think across platforms, understand society and culture, and see technology as a tool rather than an end in itself (Greenwald, 2010). In the spirit of C.P. Snow (1961), who stated that the breakdown of communication between the “two cultures” of modern society – the sciences and the humanities – was a major hindrance to solving the world’s problems, a 21st century liberal arts approach should be able to bridge and integrate these views. It should draw on its origins, when the seven liberal arts were defined as the Trivium (the literary arts) and the Quadrivium (the mathematical arts). Moreover, the humanities, the study of other cultures, languages, and religions, education in moral reasoning and philosophy, is essential for broad development, critical thinking, and ethical judgment. At the same time, young people must learn to think scientifically, i.e. to understand the scientific method and have some mastery of science and technology. Further, mathematics is without no doubt germane to a liberal arts education, for it facilitates quantitative reasoning and statistical literacy.

### AUC’s Curriculum Circle

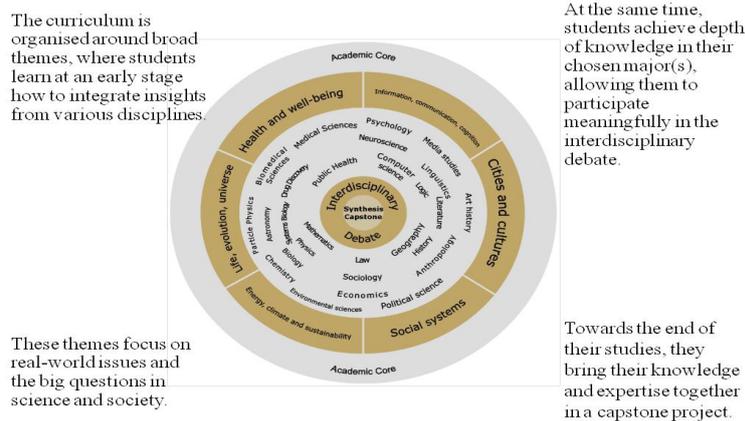


Figure 2. AUC's Curriculum Circle

At AUC, the academic core, ensures that students develop strong skills in mathematics, logic and argumentation, research methods, academic English, a (second) foreign language, and interdisciplinary and intercultural skills. Students take in their first year a set of academic and intercultural skills courses, some of which are compulsory (e.g. Academic English, Logic and Argumentation, and Identity and Diversity in a Global City), or compulsory for specific groups, depending on the intended major (e.g. calculus, statistics or other types of maths courses). A profiling choice made by AUC was to emphasize the sciences and the training of quantitative skills for all students, for in their view the sciences need to be an integral part of an all-round education for the 21st century and they can be successfully taught in a liberal arts context (as demonstrated by Cech, 1999 and Steitz, 2001). Moreover, trends in the Netherlands showed that many potential science candidates are more attracted by broader programmes than by the traditional mono-disciplinary science studies. Producing more science graduates is a strategic need since for AUC's two founding universities and the City of Amsterdam with its major national science research facilities. As many students will later be in a position to make important decisions, whether in business, government, policy, or academia, the scientific way of thinking and approaching life should be valuable if not crucial for their success. Therefore, scientific reasoning, quantitative literacy (numeracy) is part of the academic skills training for all AUC students and consequently, a good level in maths is a key requirement for admission. A high level of proficiency in English is another admission requirement. Regarding this, as the curriculum is taught in English this is not considered a foreign language and so native speakers of English study another language for two or three years. Next to French, German, Spanish and Dutch (not compulsory for international students), the academic core also offers courses in Chinese and Arabic. With respect to the latter two, European students have often learned two foreign European languages already at secondary school relish the chance to acquire these non-European languages. In sum, multilingualism is a genuine notion at AUC.

#### CITIZENSHIP AND THE NEED FOR A TRULY GLOBAL PERSPECTIVE

The third category of arguments in favour of the liberal arts relates to the moral/social dimension, in particular, to social responsibility and democratic citizenship. The notion of citizenship deserves some particular attention, as clearly it has a strong moral dimension. Elkana (forthcoming) describes the "concerned citizen" in this sense as someone conscious of the major problems that confront humanity today and being aware of the limitations of our existing intellectual tools to cope with these. Moreover, such a person expresses a commitment to contribute to overcoming these problems and limitations and thus to responsible citizenship. In democratic societies it will be taken for granted that this implies democratic citizenship, but this may be less obvious in certain other countries. Questions about the scope of citizenship are of importance as well; should it for instance be national ("citizenship for nation building"), regional (e.g. European or Asian), global, or all

of these at the same time? Regarding this, the LEAP report on College Learning in the Global Century (AAC&U, 2007) presented a convincing view on the need for a global perspective for liberal arts education by stating that recent world events have brought into the foreground the importance of linking academic education to issues of democratic citizenship, pluralism, and interculturalism. Influential American scholars also argue that shaping citizens through higher education means that students must be prepared for a culturally diverse and international world, which requires understanding of the perspectives of a wide variety of cultures (Nussbaum, 1997), which fortunately is more evident now as young people rarely leave college as ignorant about the non-Western world as students did some decades ago (Nussbaum, 2010). Moreover, technology has linked humanity in unprecedented ways so we now have a greater opportunity than ever before to become “global citizens” (Gardner, 2011). Nevertheless, accounts on essential learning outcomes in liberal arts demonstrate that intercultural knowledge receives low ratings from both US faculty and students (AAC&U, 2005). In addition, Bok (2006) acknowledges that even the most prestigious US programmes still lack a strong focus on global knowledge, such as foreign languages, international understanding and intercultural awareness. It should be acknowledged, indeed, that the importance of diversity and a global scope in shaping the liberal arts experience in the 21st century has so far been underexposed in the great majority of writings and discussions. It should also be clear that this type of learning can only succeed in a truly intercultural context, which requires a strongly diverse student body and faculty profile, as is illustrated below.

For AUC, the global city of Amsterdam, with its multicultural character (hosting some 180 nationalities) and the strong presence of international businesses and cultural institutions, is a perfect context where excellence and diversity can naturally meet. Its student population (at present 600 in total, growing to approximately 1000 in 2015), as highlighted above, includes 50% international students, from over 35 countries and one third of all the students study for a semester abroad. Over two-thirds of the AUC faculty has an international background (over a third of them hold a PhD from a top-100 university in the Shanghai ranking). Global issues play a central role in the curriculum and the training of intercultural skills is part of the compulsory first year course on Identity and Diversity in a Global City, in which the global city of Amsterdam is actively used as a learning environment. The city features in other courses (e.g. the themed courses on Cities and Cultures, the humanities courses on Literary Cities and Cinematic Cities, social science courses on Urban Life and Society, Urban Economics, etc.) and in community projects that students may undertake in their second or third year. Moreover, AUC benefits from strong ties with the City of Amsterdam authorities, which have resulted in partnerships, opportunities for excursions, guest lectures, internships and community projects. Community outreach is an explicit element of AUC’s external strategy and of faculty engagement. However, although AUC was immediately able to generate diversity in terms of a high proportion of international students, attracting minority students from the local setting, proved to be more complicated. Regarding this, AUC is

aware that liberal arts education traditionally attracts a white middle-class student population, but feels that this would be an inadequate and in fact, inappropriate student profile, because first and second generation immigrants make up half of the city's population. That is, AUC values diversity as an inclusive and rooted concept that is not limited to the children of the "new cosmopolitans", a global elite that increasingly prefers international and bilingual education (Weenink, 2008). With respect to this, globalization is not only generating cosmopolitanism, but is also bringing migration with its less prosperous dimensions, both of which are integral to global cities and thus, need to be reflected in the student population.

AUC's outreach programme is guided by awareness of the role that cultural capital and social capital may play in admission processes (Reumer & Van der Wende, 2010), in terms of the choice of students for a study programme (minority students tend to prefer professional tracks), and that a residential obligation may be an obstacle for certain groups (e.g. Muslim girls). However, the fact that AUC actually transcends the usual (minority/majority) categories and ethnic divides, as found in Dutch universities, encourages minority students to join. AUC students (some minorities, some not) who voluntarily joined the diversity outreach project have advocated the advantages as being part of a diverse blend meeting in a global context, which allows them to meet fellow students with probably the same convictions and religious beliefs, but from very different cultural or economic backgrounds. Moreover, corporate sponsors of the AUC Scholarship Programme (which supports at present 10–15% of students with a scholarship) are in particular motivated to contribute with these targets in mind. For them, the importance of nurturing a diverse workforce seems to be far more obvious than for certain universities seeing the need to educate a diverse student body. Further, partner schools at secondary level respond positively, enthusiastically participating in joint activities (part of community projects or internships), thus helping to build the necessary bridges step by step, for addressing the shortfall in admissions of local young people. However, this endeavour requires a long-term commitment at the most senior level. Data recently gathered in the context of the survey on "A Student Experience in the Research University" (SERU, administered by the Center for Higher Education Studies at University of California, Berkeley) reflect that students greatly appreciate the international opportunities at AUC, finding that the general climate at AUC is tolerant of diversity (94%), and that diversity is important for themselves (85%). In addition, social integration, the overall social experience and feeling of belonging is reported positively by 85-90% of the students. Finally, AUC students' abilities in intercultural communication are no doubt supported by their strong language skills: 80% master between two to four languages at conversational level (14% three or more) and 62% at least two at the level needed to take up studies in that language (34% three or more). As said previously, multilingualism is a genuine notion at AUC.

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### CONCLUSION: A TREND TOWARDS GLOBAL EXCELLENCE BUT NO PANACEA

In conclusion, the liberal arts model would appear to respond to a variety of demands that define the criteria for excellence in undergraduate education in the 21st century. However, the fact that various trends toward global excellence in undergraduate education seem to amalgamate into a liberal arts approach, as adopted at the forefront of a number of leading systems and institutions, does not imply that this model can be seen as a panacea for all the problems of this context. In particular in this regard, the number of students enrolled in these types of institutions and programmes is quite small, especially outside the US. One of the most pressing questions, therefore, is how can this type of undergraduate experience be provided at scale? Furthermore, the global dimension of liberal arts education deserves more attention and would greatly benefit from a truly global platform for debate on liberal arts and on undergraduate education at large. This debate should be guided by a future-oriented perspective on the values, knowledge and skills essential for the 21st century and how fruitful such a discussion can become at the institutional level, has been illustrated by the case of Amsterdam University College.

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