Abstract

This paper examines the Amsterdam Academy of Architecture (AvBA) and the renewal process of its educational program, as well as setting the century-long background to these changes in perspective. AvBA provides an education to a limited number of students by adhering to its trademark notion of educating architects as independent thinkers and tapping the pedagogical skills of a large number of professionals in architecture and related fields. The case of AvBA is worthy of attention as proof that a systematic program of revision, gradually implemented by and for architects on the part of an organization aware of the dynamics of social change, can succeed. The author's aim is to dissect an acknowledged instance of excellence in keeping with today's fully internationalized context of architectural education. In reviewing and assessing the experience of AvBA, he isolates seven points as the chief factors of its favorable outcome.

Keywords: education; architect; The Netherlands; Bologna Accords; qualification

1. Introduction

1.1 Dutch Architectural Institutions of Education

The present-day system of higher education in the Netherlands includes institutions for formal scientific education (Wetenschappelijk Onderwijs, WO) as well as for vocational training (Hoger Beroepsonderwijs, HBO). HBO designates a specific pedagogical entity in the Netherlands in which a more or less broad range of serious-minded practical training is available. There is no social distinction drawn between these categories, so that graduates are treated equally by Dutch society. Those institutions via which graduates may eventually obtain the title of registered architect are the architectural departments of the two technical universities at Delft (TU Delft) and Eindhoven (TU/e), both WO, as well as the six academies of architecture at Amsterdam, Rotterdam, Tilburg, Arnhem, Groningen and Maastricht, all HBO. While architectural departments of the two technical universities require three years for a bachelor's degree and two years for a master's, academies of architecture require four years for the master's, since their students are committed to a fully integrated, simultaneous curriculum of academic study and practical training in an architect's office.

1.2 Program of Continuing Investigation

In the Netherlands the "holy trinity" of land use policy, urban planning, and housing supply has been jointly attended to since the time of the 1901 Housing Act. As a consequence, the professional status of architects, engaged in the design of housing and public facilities, has been firmly recognized for more than a century. It is also a well-known fact that over the course of the twentieth century the Netherlands has produced a large number of leading modern architects. Moreover, as recently as the 1990s the contributions of young Dutch architects, whether theoretical or practical, were duly acknowledged worldwide as part of a movement referred to at that time as "SUPER DUTCH." In this initial step of his research initiative into architectural education in the European Union, the author wishes to elucidate features of architectural education in the Netherlands. In noting the social circumstances surrounding architectural education during the past quarter century in that country, we can identify major changes relating to the role of the architect and its associated expectations. Many of these issues are related to the attempt to reassess certification in all member countries at an EU level (first felt in 1985), the internationalization of higher education standards subsequently undertaken by the Bologna Accords and beginning with the Bologna Declaration of 1999, dire stagnation in the Dutch economy during the 1980s, an economic boom in the 1990s brought about by an enlarged EU marketplace, and the more recent reappearance of stagnation. The author is convinced that all issues of this sort are pertinent to any consideration pari passu of the future of architectural education, including the reassessment of the role of the architect in the present century in Asia. He intends to clarify how architectural education in the Netherlands

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has responded to social change and achieved a notable relative success.

1.3 A Brief Outline of AvBA’s Formation

The Amsterdam Academy of Architecture (Academie van Bouwkunst Amsterdam, AvBA) was established in 1908 by the older Amsterdam architectural association known as Architecture and Friendship (Genootschap Architectura et Amicitia) as a place where architects voluntarily took it upon themselves to groom younger members of the profession. AvBA is, therefore, a traditional-style institution whose numerous graduates made an extensive contribution to the development of Dutch modernist architecture in the twentieth century. In 1987, AvBA was merged with the Amsterdam School of the Arts (Amsterdamse Hogeschool voor de Kunsten, AHK) to form its architecture faculty, at which time it became a public institution; from the following year onward the resulting school offered a new educational program and has continued to respond in positive ways to social change. In autumn 2003 AvBA completed the shift to its new educational system, a four-year master’s program conforming to the Bologna Accords, with reforms continuously implemented up to the present under supervision of the Netherlands and Flemish Accreditation Organization (NVAO).

Moreover, these educational changes at AvBA have met with praise, specifically on the part of the Visitation Committee for Higher Education Courses in Architecture in 2008. For instance the recent total number of Archiprix awards given to AvBA graduates for superior graduation projects has outstripped the score of TU Delft and several other institutions, even though the size of AvBA is far smaller. In fact, the number of graduates is only around twenty, or thirty, per year. Not surprisingly, then, in 2010 AvBA came to be ranked by an independent education assessor (Het Hoger Onderwijs Persbureau, or HOP) as the topmost master’s degree for architecture in the Netherlands. In this way, and despite its small size, AvBA now stands on a par with TU Delft, a school well known throughout the Netherlands and abroad for the high quality of its architectural education.

1.4 Aim and Research Methods of This Paper

By focusing on AvBA and attempting to clarify the nature of its degree course, the quality of its overall educational program, and the organization and shift in its architectural education since 1988, this paper aims to pinpoint acknowledged excellence in architectural education available at this time in the Netherlands, a catalyst which led the above-mentioned architects to establish AvBA as a place for the systematic practical-based training of young architects and engineers. It should be noted that AvBA was thus founded as a private school, not by any single individual, but rather upon the systematic initiative of a private architectural association—in contrast to TU Delft’s foundation as a Royal Academy in 1842 by mandate of the then reigning monarch Willem II.

The works produced under the VHBO course and by the so-called Amsterdam School style (separate to AvBA) display a striking symmetry. An exchange of exhibitions in the 1920s with the Architectural Association School (originally founded in London as a night school for workingmen and office apprentices but becoming a day school in 1901) emphasized the modernist bent of work by the Amsterdam students. In the mid-1920s, since the Dutch architects’ professional association (Bond van Nederlandse Architecten, BNA) considered a VHBO education insufficient to obtain a Dutch professional title, AvBA did not award its graduates a diploma in architecture (until 1936). Meanwhile, AvBA was perpetually attacked not
only by the architectural establishment— but also by followers of two Dutch modernist movements, Nieuwe Bouwen and De 8. Since that time, into the 1930s, AvBA was growing closer to traditionalist ideology, as was TU Delft.\textsuperscript{(11)}

Until after World War II the number of graduates at AvBA had been only some four students annually. But since the end of the war at which time the VHBO was split into Higher Architectural Education [HBO] and Continuing Architectural Education [VBO] sections owing to postwar reconstruction demands) the number of graduates had increased over time to around thirty by 1970. Around 1960 AvBA students became involved with the Dutch magazine Forum so that AvBA was regarded as the headquarters of Dutch Structuralism. Following the 1968-inspired protest movement, the governors of the school showed a generous attitude to radical democratization and guaranteed "freedom of study" to all. Meanwhile, the near-exclusive concern of the Dutch professional community became the pioneering work of urban renewal. In 1964 VBO and HBO programs were recombined into a single six-year training course. By the early 1970s AvBA consisted of three major degree courses: Architecture (Architectuur), Urbanism (Stedenbouw, since 1957) and Landscape Architecture (Landschap, since 1972). The total number of diploma holders created since AvBA's foundation in 1908 has been 1,040 (as of autumn 2011), which nevertheless remains far fewer than TU Delft.

While Delft is well-known for its analytic and theoretical approach to the discipline, AvBA has pursued a more practical-minded, realistic approach. Thus the two schools have played an opposite but complementary role in the development of Dutch modernist and contemporary architecture\textsuperscript{(12)} and continue to do so.

The educational aim at AvBA is to produce talented individuals able to work on their own as independent thinkers and professionals\textsuperscript{(13)}. This is related not only to ideals dating to the foundation of AvBA, but also to an increasingly perceived necessity to develop young and talented architects able to function in a situation where the social role of the profession is continuously questioned and more or less under fire.

The personnel at AvBA in 2010 were as follows: a director, 23 administrative staff, 82 entering students, 23 successful diploma candidates and a pool of 373 "tutors". All tutors, including the acting head of each department and most administrators, excluding a few core individuals, are employed as part-time teachers/staff on limited-term contracts. In theory, then, this makes it possible to appoint a variety of active tutors and to place the right person in the right job. Indeed, such a system recalls the origin of AvBA as having been founded by independent practicing architects and maintains AvBA as a seat of learning where working architects are charged with education of their younger peers. Core conference meetings, consisting of the current director, the three departmental heads, and divers program coordinators, are convened frequently to thrash out and determine the main strategic direction of AvBA.

### 3. Present AvBA Education: Aims and Curriculum

In autumn 2003 AvBA introduced a four-year (eight-semester) master's course format for each of its three diploma courses (Fig.1.). Candidates must hold a bachelor's degree in architecture, or in some other relevant field of study. The admissions committee examines each application and portfolio with care, and a personal interview is held. At the same time as students are engaged in extramural training at an architect's office (Praktijk), they are also required to attend classes three evenings per week after 7:30 PM (Monday to Wednesday), as well as a half-day on Fridays. This Intramural Curriculum consists of four types of study, namely Projects (Projecten, described as P, total 46 credits), Exercises (Oefeningen, O, total 15 credits), Morphology (Vormstudies, V, total 6 credits) and Seminars (Colleges, C, total 12 credits). Other subjects (total 11 credits) comprise a series of public lectures (Capita Selecta, held on Thursdays at 8:00 PM), workshops, and excursions. All coursework is to be completed by the end of the third year, and students are expected to concentrate on a Graduation Project (Afstuderen, 30 credits) in their fourth year.

The main element of the curriculum is the Project (P), consisting of six phases over three years (one each per semester). In progressing from P1 to P6, students are led from an introductory phase to more evolved professional themes and from single buildings to urban design. A tutor directs each Project with 8-10 students per studio. The main themes evolve via discussion between the director and the heads of department, but each tutor can structure the project and details.
At his or her discretion. As the only studio space is a provisional studio for temporary use in Morphology units during the first two years, AvBA students must work at home. Seminars (C) are structured from C1 to C6 and linked with Projects (P1 to P6) by way of tutorial readings dealing with various themes, such as architectural history, aesthetics, or the questioning of architecture's role in today's complex and conflicted social conditions. Each Seminar aims to offer knowledge, ways of thinking, insights, and logic for future architects. Students are expected to apply such skills in devising their Graduation Project. Exercises (O) improve analytical and writing ability and are also structured from O1 to O6. Through their reading along with Projects and Seminars, students shape their ideas and present them in weekly group tutorials. Exercises seek to improve a student's ability to think logically in preparation for the Graduation Project. At the O5 and O6 stages, students submit a brief paper as preparation for the Graduation Project. Morphology (V) consists of a series of exercises in forms for first- and second-year students that are structured from V1 to V6. A student progresses from small-scale to large-scale objects, ending up with installations in prescribed urban spaces. The aim is to comprehend the organic relationship between form and space and to acquire a sense of scale. Thus, all students experience divers ways of thinking under the direction of various tutors.

For their extramural training students must search out an office on their own. However, if a student so requests, a staff member whose job is to manage all the procedures and assessments for practical training, possesses relevant knowledge to propose a suitable design office. But as students do encounter various practicing architects at AvBA, they frequently make a direct application. Some students change workplaces every semester or every year to experience a different type of firm or outlook. On the other hand, a student may not work for his or her own Project tutor during a given period, in order to avoid being influenced too heavily by one specific architect. Each student must submit a portfolio as proof of practical training in May each year. AvBA appoints a pair of work-achievement assessors for each student. In their first and second years, students submit a simple report (Logbook) each several months. This tracks progress and confirms the ability to tolerate in- and out-of-school workloads.

In the four-year curriculum, the first-year is referred to as Period 1, the second and third years as Period 2 and the fourth year as Period 3. Apart from course evaluation for each subject, special examinations (Tentamen) are set at the end of Period 1 and Period 2, for which examination committees are formed with two or three assessors for each student. Students are requested to present all their work for the period in question, on the basis of which committee members judge whether a student is acquiring the qualities he or she will require as a practicing architect. Unsuccessful students may not advance to the next Period and must retake all subjects under review. Between the second and third years, yet another assessment (Shouw) will be held, but this is not to do with promotion. Instead it provides personalized advice to an individual student. In the Academic Year 2011-12, a new subject called Clinic was instituted and is held for four weeks after P5 in the December of Semester 5. It offers a unique project for each student—one by which a single tutor proposes unique interests or concerns to stimulate the student's progress in a novel "tailor-made" way.

In the second half of the third year (Semester 6) students declare the theme for their Graduation Project (Afstuderen), then concentrate on it for the whole fourth year (Semesters 7 and 8). Each student chooses a dedicated tutor for the Graduation Project, who will direct and support the set-up process, and coordinate the topic and its presentation through to completion. Submission and Evaluation procedures are held twice a year. Once approved, students submit drawings and models and present these in public. A Graduation Seminar Committee of three assessors including the student's own tutor studies the results. Judgment is strict but unsuccessful candidates are given another chance to resubmit and undergo evaluation. However, a second failure triggers expulsion from AvBA. Each year four superior works are chosen from among the AvBA's approved Graduation Projects and nominated for the Archiprix. By the end, it will have been determined whether or not a student has the ability to express and present architectural and urban projects with the skill of an independent architect.

To complete the master's course at AvBA, 120 European Credit Transfer System (ECTS) credits (for Seminars, Projects, and so forth) in the Intramural Curriculum (Binnenschools Curriculum) and another 120 ECTS credits (for practical training) in the Extramural Curriculum (Buitenschools Curriculum)—thus a grand total of 240 ECTS units—must be obtained over four years. Within the Bologna Process guidelines AvBA has set 28 hours as equivalent to one ECTS unit in either curriculum (excluding preparation time and review at home). To obtain the requisite 120 ECTS units for practical training, students must work at an architect's office 20 hours per week for 42 weeks each year, or a total of 840 hours per year, for each of four years. Compared to the average master's course, in Japan, for instance, the onus upon students is great but the master's degree holder can apply immediately to register as a qualified architect without sitting a further examination. Once registered, one is regarded as a fully qualified professional.

### 4. Significance of Physical Renovation at AvBA

Since 1946 AvBA has owned its current premises (four floors, with a partial fifth floor: a total surface of 2100 m2) located on the Waterlooplein in downtown Amsterdam; in 2006, their complete renovation was
undertaken by the firm of Claus en Kaan Architecten. Although total floor area is limited, various ideas pertaining to the curriculum itself are incorporated in the building’s redesign. Apart from the studio for shared use during Morphology, there is no real studio workspace, and meeting rooms for about ten people each occupy much of the building. In addition, there is a lecture hall, library, cafè, and courtyard, as well as limited office space for full-time staff. Moreover, each room is glass-partitioned so that everyone is visible. The cafè is the actual center of communications and is open not only to students and tutors but also to public lecture or student presentation attendees. As this cafè is next to the building entry, all entering the school must pass by it. This in itself embodies the founding principle of AvBA by designation of a communication and exchange area for architects, students and anyone else related to the discipline of architecture.

5. Process of Educational Self-Renewal since 1988

Table 1. illustrates the sequential transition of the pedagogical program and organization of AvBA in three phases since the 1988-89 Academic Year. In 1985 an instruction was handed down by the EC Commission, declaring the minimum term of architectural education to be four years; also each member country was to establish a system to facilitate the mutual recognition of professional qualification titles. In response to these conditions, AvBA, which had been founded and managed by a private association of architects since 1908, took the decision to merge with the Amsterdam School of the Arts (AHK: Amsterdamse Hogeschool voor de Kunsten) and reinvent itself as a public educational institution. This took place in 1987, the same year as the new qualifying regulations.

According to AvBA Study Guide (Studiegids) for 1988-89, the educational program (by following the six-year mode previously in force) consisted of four periods. That former Program was composed of three categories: Projects (P), Exercises (O), and Seminars (C) as well as other items, such as public lectures and workshops. Just as today, students concentrated full-time on their Graduation Project in their final year. All this suggests how the basic elements of an educational program that has prevailed until now were already in partial effect at this time. The underlying scheme, with its three major course categories as built up by Nelly Stam, who served jointly as director with Gerrit Smienk from 1988, seems influenced by the educational program currently in force at TU Delft. Moreover, from this time forward heads of all three departments were changed more frequently (each three or four years) to circumvent stagnancy. "By maintaining a broad overarching framework we aim to create a program that can be continually improved by order of the heads of each department," Stam wrote. Around 1989, Stam and Smienk together instigated a

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Table 1. Sequential Transition of the Educational Program.
curriculum review that would eventually come to cut AvBA's overall period of study from six to four years, beginning in 1993\(^{(20)}\).

So, with half a decade of progressive reorganization set in motion by external causes, AvBA entered a new curricular phase by accepting new students into a four-year program in autumn of 1993. Renewal and reorganization of AvBA's program had been settled for the time being. Nevertheless, Stam and Smienk, having directed the school for a number of years, lost their enthusiasm for a new vision and expressed their desire to step down. By contrast, Dutch architecture was in a mode of major change from the late 1980s to the 1990s. In his study of the editorial methods and ideas of the well-known Netherlands Architectural Yearbook\(^{(18)}\), the author has attempted to explicate this. Dutch architecture may be represented from the final phase of Dutch modernism in the late 1980s as entering upon a new era, one that no longer focused on conventional building types but instead assumed a more inclusive view of architecture, urbanism and landscape. This paradigm change was influenced by the "Supplement to the Fourth National Policy Document on Spatial Planning" (Vierde Nota Ruimtelijke Ordening Extra, VINEX) culminating in a number of large-scale development projects in the mid-1990s. It was also suggested that globalization, media, divers forms of visual expression, and the thinking of young Dutch architects themselves were imbued with both high expectations and increasing confusion after about 1988. Most young architects who devised challenging and quite conceptualist projects at that time had all graduated from the far larger-scale TU Delft, where they had been educated theoretically and idealistically. On the other hand, although AvBA had reformed its educational program by this time, it may be surmised that an educational vision corresponding to the times was lost sight of, as AvBA registered difficulty in taking any real broad advantage of new activity in the Dutch construction market, owing perhaps to its hands-on approach as a comparatively small and personalized school.

In these circumstances, AvBA found itself at yet another turning point. A new director, Aart Oxenaar, had been appointed in the 1998-99 Academic Year. After graduating from the University of Amsterdam in archeology and art history, he made a study of the architect P. J. H. Cuypers and worked for the Dutch Architectural Institute (NAI) as a critic and exhibition planner and curator. As such, he exercised a cultural perspective with regard to architecture and sought to renew AvBA by replacing the three department heads with younger, active individuals aged between thirty and forty. He thus improved the content of education while keeping to the underlying framework of the program. At the same time as Oxenaar sought independent and effective action from the heads of department, he also convened meetings between these heads and the school's core staff frequently enough to reach a consensual modus operandi. Such was the advantage of a small-scale organization in which one could move freely. On the one hand, by reducing the former total of four periods to three the path to promotion and graduation had been cleared. On the other, an evaluation and credit system for extramural training was set up and the overall content of the program enriched, somewhat as had occurred at the Bauhaus, by adding a new category, Morphology (V), to the existing course roster. A number of new and active younger architects, together with related professionals, were taken on as tutors by virtue of this new thinking on the part of the director and his recently replaced heads of department.

Corresponding to the Bologna Declaration in 1999, AvBA adopted a new policy in the reorganization of its program to provide a four-year master's course, while respecting its original principle of treating the Intramural and Extramural (i.e., practical training) Curricula equally. By the 2003-2004 Academic Year, AvBA had launched this master's course, and so entered the third phase of its self-renewal. During this phase the school executed no further changes in curriculum yet once again replaced one after another the three heads of the department. It then followed up with various ideas for managing the program, such as accepting international students, enriching the content of the school's publications series, and renovating the AvBA's physical plant as already described.

Since 2010 newly independent Research Groups (Lectoraten)\(^{(19)}\) have been initiated and now depend on outside sources of revenue. On another front, while the boom in the Dutch national redevelopment and construction market of the 1990s leveled off around the year 2000, the challenging propositions issued by young architects were examined more carefully than before. The author surmises that expectations for the practical and realistic pedagogical approach pioneered by AvBA were now being regarded more favorably than the large-scale approach of technical universities like TU Delft. And just as reforms in all six academies of architecture throughout the Netherlands were brought to fruition, AvBA took the lead initiative\(^{(20)}\).

Here we may note that Aart Oxenaar in his role as AvBA's director revamped educational management but scarcely modified its underlying structure. As newly appointed director, he realized that it would be unproductive to change the fundamental framework with its wealth of experience and adopted a basic attitude of respect. Still more to the point was his practical mindset. Oxenaar maintains,"It would have been unwise to manipulate the fundamental system. At several major universities by attempting to rework the basic system, they wasted enormous time and energy, but failed eventually to execute."\(^{(21)}\)
6. The Present State of Play

Table 2. displays the number of Archiprix-winning Graduation Projects by the various Dutch schools of architecture. After the second phase of its renewal AvBA students took prizes in all years but one. Especially after Oxenaar became director in 1999, AvBA took a majority of the prizes, together with TU Delft. It is patent clear that AvBA has now become pre-eminent, as AvBA students led by taking the first prize seven times out of eleven years (the largest absolute number of first-prize wins), and has occupied a dominant position over TU Delft since 2009. Fig.2. shows the transition in the number of new students and acceptance of international students. Even though since the financial crisis of September 2009 the number of international students has decreased in absolute terms, it has continued to rise more or less steadily over almost the entire first decade of the new century. Thus we may infer that AvBA is now widely recognized not only within, but also outside of, the Netherlands.

As already mentioned, AvBA was ranked by HOP in 2010 as the best architectural master's course in the Netherlands. HOP publishes the booklets, entitled Course Guides (KEUZEGIDS), which rank every educational field and institution of higher learning in the Netherlands each year. The overall assessment is based first on a questionnaire distributed to Dutch students by the National Student Polling Organization (Nationale Studenten enquête, NSE) (67%-weighting) and secondly by visits to educational institutions on behalf of the aforementioned Netherlands and Flemish Accreditation Organization, (Nederlands-Vlaamse Accreditatieorganisatie, NVAO) (33%-weighting).

The objects of assessment in the student questionnaire are: level of the program, tutors, and facilities, and communication between students and the institution; and in accreditation visits: educational mission, level of curriculum, quality of tutors, ultimate professional capacity of the graduates and so on. It is remarkable that, even though AvBA regularly imposes a heavy burden of requirements upon its students, it is ranked foremost by a rating system in which the student questionnaire results are weighted two to one.

The more than 350 AvBA tutors, who also include non-Dutch nationals, are from various schools. Their specializations are divers: not only architecture, but also urban planning, landscape, art, criticism, history and so on. In their interviews both students and tutors expressed the advantage in being part of AvBA as residing both in an active sense of communication and bright prospects for future work.

Recent financial conditions in the Netherlands have become more difficult with each year, and budget cuts in education are frequent. Fortunately, AvBA has been able to respond to such a situation flexibly so far, as it is a small and lean organization. However, further adaptation will surely be required from now on and AvBA will, for example, be expected to acquire more projects, research, and funding from outside the school, cooperating with local authorities or private firms, and also to collaborate with the five other Dutch academies, or other similar institutions, to ensure an ever more efficient school management. As the present organization established by Oxenaar is already nearly fifteen years old, a stock taking of the school's overall resources will have to be completed soon with an eye toward future development.

7. Conclusion

AvBA provides an education full of substance to a limited number of students by respecting its trademark notion of educating architects as independent thinkers and tapping the pedagogical skills of a large number of professionals in architecture and related fields as practical adjunct tutors. In response to such social changes in the Netherlands as the new regulations mandating formal recognition of the architect's professional qualification in 1987 or budget cuts to education recently implemented by the national
government, among other concerns, the continuing effort at AvBA to improve its overall content and delivery of architectural education, as well as the general format of the school, is impressive. Moreover, a virtuous cycle is confirmed here: the generally positive effect of pedagogical practices initiated by the school's organization and management appeared, only to be carefully restudied so as to retool organization and management in ever more effective ways. Finally, the process has raised social value and enhanced reputation at both the national and international levels. The case of AvBA is worthy of attention as proof that a systematic program of revision, by and for architects, has succeeded for over a century on the part of an organization aware of the dynamics of social change.

With reference to the reorganizational experience of AvBA, seven points must be mentioned as drivers of its success: 1) The fundamental idea of AvBA that an architectural school is a place where architects and various professionals meet to communicate with students. AvBA has made a continuous effort to pursue every aspect of this notion. 2) An attitude maintaining the basic shape of the curriculum. AvBA has remained on top of its own pedagogical program by carrying over its fundamentals to key educational reforms promoted by European Union decisions from as early as 1987; these dovetailed with the Bologna Process of the following decade. 3) The approach to flexible pedagogical reform flows from the teaching staff's own discretion in maintaining an overarching framework. AvBA's guiding educational principles are simple and coherent, allowing qualified and concerned individuals to shape and improve curricula over time. 4) A positive correlation with external factors. AvBA has considered the regulation of professional titles or mandates for internationalization as opportunities for the comprehensive reform of the educational system and its environment. 5) A compact organizational matrix for active and quick decision-making. AvBA's organization is nimble and matches the school's needs. Decisions in matters of pedagogy and overall management can be taken quickly at the consultation of its director, three heads of department, and a small core administrative staff. Both students and tutors can easily perceive educational policy, as well as its raison d'être. 6) The existence of a great number of largely external collaborators. These include various and many talented tutors or architects who support the Extramural Curriculum around AvBA. 7) Foresight and leadership on the director's part combining pedagogical flexibility with daily management and leadership. In particular, Aart Oxenaar's foresight and leadership deserves singular mention in the school's recent post-1998 reforms.

The author is convinced that the experiences of AvBA provide insight into the study of architectural education in the current internationalizing situation. Points 1 is fundamental to the experience of AvBA and deserves broad adhesion. Points 2 to 5 are factors for good pedagogical management and may be applied in various situations. Points 6 and 7 are issues of human resource that call for thoughtful adjustment in given local contexts.

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Notes

1) Reference 1.
2) Reference 2.
3) The Bologna Declaration was signed by the Ministers of Education conference of twenty-nine European countries. It aimed to achieve the internationalization of higher education by requiring participating nations to adopt a common educational system based on bachelor's and master's programs and culminating, eventually, in the full ECTS credit system.
4) This award for superior graduation projects in all institutions of higher learning for architecture in the Netherlands has supplied an index of design ability since 1979.
5) By contrast, the number of graduates from the architecture department of TU Delft was 416 in 2009 and 389 in 2000.
6) Notably reference 3 among others.
7) Reference 4.
8) Preparatory studies (in August and October, 2010) and the main investigation (November, 2011).
9) Reference 5.
10) Interview with Dave Wendt (November 2011).
12) Interview with Herman Hertzberger (November 2011).
13) Interview with Aart Oxenaar (November 2011).
14) 85/334/EEC.
16) Dave Wendt, idem, p.185.
17) Dave Wendt, idem, p.181.
19) In 2011 there were three such research groups: Material & Design, Living Landscape, and Design in Urbanism.
20) Cf. note 13.
21) Idem.
22) Idem.
23) The blank spaces (shaded) indicate that the relevant data were unavailable to the author in the current investigation.
24) Participants in Archiprix are the two technical universities and the six academies mentioned in the text, and Wageningen University. Shaded blank spaces indicate that data was unavailable. Numbers in parentheses refer to potential entry numbers for each institution.

References