

Platform Bèta Techniek along the entire Dutch educational chain

While the Platform aims to encourage young people to choose and subsequently pursue Maths, Science and Technology (MST) education, there is much more to it. It takes a comprehensive approach to create a talent base for the future: more people involved in MST with even more skills and greater affinity with science and technology among the general population. In addition, the Platform aims to promote the more effective deployment of the talented professionals already on the job market, particularly women and ethnic minorities.

The Platform pursues an innovative strategy to achieve these goals, the main characteristics of which include:

- a holistic approach;
- bottom-up involvement, as well as the broad participation of schools and organisations;
- a close link between innovation and outcome, as well as a comprehensive approach starting with primary education and running throughout the entire educational chain up to the labour market.

Drawing from its expertise in and experience with the world of science and technology, the Platform has developed programmes for the entire educational chain. Tailored to various sectors of the education and labour market, these programmes offer schools, institutes and sectors the opportunity to take-up the reins in pursuing their ambitions in the field of maths, science, technology and innovation.

The following figure graphically represents the Dutch educational system:

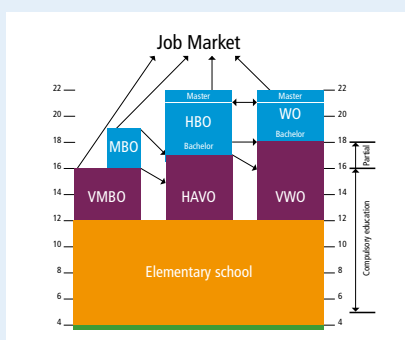


Figure 1 The Dutch Educational System

Primary education

The Netherlands has no formal educational provision for children under the age of four. Although compulsory education begins at the age of five, most children start attending primary school at the age of four. Children remain in primary education until the age of 12, after which they are advised regarding the most appropriate type of secondary education, each of which offers opportunities for further education.

Platform Bèta Techniek: 'VTB Programma', 'VTB Pro' and 'Curious Minds' focus on primary education.

General secondary education

As is shown in the figure above, pupils choose their path, based on their competencies, skills and interests, after completing elementary school. In the Netherlands, compulsory education applies until pupils reach the age of 16.

VMBO

Preparatory secondary vocational education (voorbereidend middelbaar beroepsonderwijs, VMBO) lasts four years and is completed between the ages of 12 and 16. About 60% of Dutch pupils enrol in this type of education. After successfully completing all four years, VMBO graduates then move on to the job market or continue further education at senior secondary vocational education (middelbaar beroepsonderwijs, MBO) level. In addition, young people can choose to transfer to another form of secondary education (e.g. after successfully completing VMBO, it is possible to transfer to the pre-exam year of HAVO).

Platform Bèta Techniek: 'Ambitie Programma' focuses on VMBO- and MBO-level education.

HAVO and VWO

Senior general secondary education (hoger algemeen voortgezet onderwijs, HAVO) lasts five years and is completed between the ages of 12 and 17. HAVO graduates are eligible for higher professional education (hoger beroepsonderwijs, HBO) at a university of applied sciences or for tertiary education. Pupils may opt to transfer to another form of secondary education (e.g. after successfully completing HAVO, it is possible to transfer to the pre-exam year of VWO).

Pre-university education (voorbereidend wetenschappelijk onderwijs, VWO) lasts six years and is completed between the ages of 12 and 18. Although VWO graduates are eligible for academic higher education (wetenschappelijk onderwijs, WO), universities may set their own admission criteria (e.g. profile requirements or subject requirements). In both HAVO and VWO education, pupils select a profile (i.e. a set of compulsory subjects, which comprise the majority of the curriculum in the final two HAVO years or final three VWO years).

There are four profiles:

- Culture & Society (C&M)
- Science & Health (N&G)
- Economy & Society (E&M)
- Science & Technology (N&T)

Each profile prepares students for specific fields in tertiary education.

Platform Bèta Techniek: 'Universum Programma' and 'Jet-Net' focus on HAVO- and VWO level education.

Tertiary education

MBO

Senior secondary vocational education (middelbaar beroepsonderwijs, MBO) focuses on vocational training and lasts between one and four years. After successfully completing four years of MBO education, students can either enrol in the first year of HBO or enter the job market.

Platform Bèta Techniek: 'Ambitie Programma' focuses on VMBO- and MBO-level education.

HBO and WO (higher education)

Dutch higher education consist of academic (university) or applied (professional education) studies. Both types of higher education offer Bachelor's and Master's degree courses.

With a four-year MBO, HAVO or VWO qualification, students are eligible for higher professional education (hoger beroepsonderwijs, HBO). Requiring four to six years to complete, HBO is geared to higher learning and professional training. After earning the required number of credits (ECTS), students will receive a four-year applied Bachelor's degree in science. They may continue their HBO-level studies to obtain an applied Master's degree in science, which requires an additional one or two years. They may also transfer to a university to earn an academic Master's degree.

With a VWO qualification or a certificate of successful completion of the first year of an HBO degree programme (propedeuse), students are eligible for academic higher education (wetenschappelijk onderwijs, WO). WO programmes, which are only offered by universities, focus on higher learning in the arts, humanities or sciences. After earning the required number of credits (ECTS) within at least three years, students may, depending on the programme, receive a Bachelor of Arts, Bachelor of Science or Bachelor of Laws degree. They can then opt to pursue further study to obtain a Master's degree in their current or a different field of study. There are currently four variants: Master of Arts, Master of Philosophy, Master of Science and Master of Laws. A theory-based Master's degree typically takes one year, however, the majority of practical (e.g. medical), technical and research Master's degrees require two or three years of additional study.

Platform Bèta Techniek: 'Sprint Programma' focuses on HBO- and WO-level education.

For more information about the programmes and various other activities of Platform Bèta Techniek, please visit our website (www.platformbetatechniek.nl) or e-mail Beatrice Boots, vice-director of the Platform Bèta Techniek, b.boots@deltapunt.nl.