



MINISTRY OF EDUCATION
TE TĀHUHU O TE MĀTAURANGA

What are they doing?

*The field of study of domestic
students/learners 2008-2016*

This report forms part of a series called Learners in tertiary education. Other topics covered by the series are access, pathways, support, participation, retention and qualification completions.

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All views expressed in this report, and any remaining errors or omissions, remain the responsibility of the author.

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What are they doing?

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SUMMARY

THIS REPORT ANALYSES THE FIELD OF STUDY OF DOMESTIC STUDENTS/LEARNERS IN THE NEW ZEALAND TERTIARY EDUCATION SYSTEM BETWEEN 2011 AND 2016 FOR BELOW BACHELORS DEGREE LEVEL AND BETWEEN 2008 AND 2016 FOR BACHELORS LEVEL OR HIGHER.

Our analysis shows that:

- in Level 1 and 2 certificates, there was an increase in the proportion of students/learners in the Mixed programme field. Changes in the focus of this level of qualification (to give greater emphasis to foundation-level skills) is likely to have driven a change in content
- in Level 3 to 7 certificates/diplomas, the fields of Architecture and building and Society and culture showed increases in share of students/learners
- at the bachelors or higher level, there was an increase in the proportion of students/learners in the broad field of Health
- at the bachelors or higher level, after a number of years of decline, the share of students/learners in Management and commerce and Society and culture have stabilised
- at the bachelors or higher level, universities had the highest number of students/learners in every broad field of study
- women were more likely to be studying in fields such as Health and Education, while there was a higher proportion of men in areas such as Engineering and related technologies
- Māori and Pasifika were relatively more likely to be enrolled in Society and culture
- the largest proportion of younger students/learners were in fields such as Natural and physical sciences and Tourism.

This report analyses the New Zealand Standard Classification of Education (NZSCED) field(s) of study of domestic students/learners in the New Zealand tertiary education system between 2008 and 2016. This is a complementary analysis to a report on the field of study of graduates 2008-2016 – *What did they do? The field of study of domestic graduates 2008-2016* – that looked at the field of study of tertiary education graduates.

In this analysis, we focus on three broad levels of qualification: Level 1 and 2 certificates, Level 3 to 7 certificates/diplomas, and bachelors or higher. For bachelors or higher we look at enrolments between 2008 and 2016, while for levels below bachelors (and in total) we look at enrolments between 2011 and 2016. This smaller window of analysis is due to limitations in the industry training data. We also include the number of students enrolled in tertiary education providers as well as learners in workplace-based industry training to get an all-of-sector view.

The data for Level 1 and 2 certificates shows a significant increase in the proportion of students/learners in the Mixed field programme field between 2011 and 2016, although numbers had peaked in 2014. This result reflects changes to the composition of qualifications, with the introduction of increased literacy and numeracy requirements, as well as changes in provision via the Level 1 and 2 tendering process and the introduction of Youth Guarantee.

In Level 3 to 7 certificates/diplomas, the largest increase in share of students was in the fields of Architecture and building and Society and culture.

At the bachelors or higher level, between 2008 and 2016 there was a trend of increasing shares of students/learners in fields such as Health, Information technology, and Engineering and related technologies. Conversely, the share of students/learners in fields like Society and culture, Education and Management and commerce declined. However, the share of students/learners in Management and commerce and Society and culture has stabilised in recent years.

The profiles of the 12 broad NZSCED fields show a mixed picture. In some broad fields, the numbers of students/learners in the largest fields of study were in decline (Education declined at both the Level 3 to 7 certificate/diploma level and the bachelors or higher level). Others were declining at one level while increasing at another (Information technology, which showed growth at the bachelors or higher level declined at Level 3 to 7 certificates/diplomas).

The profiles also show what narrow NZSCED fields were driving the changes in proportions of students/learners at the broad level. For example, the increase in the proportion of students/learners below bachelors level in the Architecture and building field was driven by an increase in students/learners in Building, while the decline in Education in Level 3 to 7 certificates/diplomas and at bachelors or higher was driven by decreases in the narrow field of Teacher education.

The focus on selected narrow fields of study at the bachelors degree or bachelors with honours level shows a mixed picture. The share of students/learners in fields such as Medical studies continues to increase over time, while it appears the share of students/learners in Nursing has peaked. The share of students/learners in Accountancy and Language and literature has decreased.

The data shows that provision in the fields of study varied across the various sub-sectors. As would be expected, universities dominated provision at the bachelors or higher level, with an especially high proportion of enrolments in Natural and physical sciences (97 percent).

At the non-degree level, industry training organisations (ITOs) had significant proportions of learners in Engineering and related technologies, Agriculture and environmental studies and Food, hospitality and personal services. Wānanga also had a significant number in Society and culture. Polytechnics showed high proportions of delivery in Architecture and building, Health and Creative arts.

In terms of demographic characteristics, the data shows that a high proportion of students/learners in fields such as Health (Nursing and Pharmacy, in particular) and Education were women. Men, on the other hand, had a high proportion of students/learners in the various Engineering and related technologies and Information technology narrow fields.

When we analyse the data by ethnic group, we see that Māori and Pasifika tended to have a relatively high proportions of students/learners in fields such as Society and culture, with relatively lower proportions in fields such as Engineering and related technologies.

Looking at the age distribution across the fields of study, we see that there were higher proportions of younger students/learners in the Natural and physical sciences (especially in narrow fields such as Physics and astronomy). The narrow field of Tourism also exhibited a relatively high proportion of younger students/learners.

1 INTRODUCTION

This report uses the New Zealand Standard Classification of Education (NZSCED) to analyse the predominant field(s) of study of domestic students/learners enrolled in the tertiary education system between 2008 and 2016. This is the second edition of this report and it complements a report – *What did they do? The field of study of domestic graduates 2008-2016* – that looks at the field of study of tertiary education graduates. These reports should be read in unison to get an understanding of the progression of domestic student/learners/graduates as they pass through the tertiary education system.

Using a similar structure to that used in earlier field of study reports, we look at the number of students at tertiary education providers¹ and learners in workplace-based training to get an all-of-sector view. Specifically, we examine trends in fields of study at the broad and narrow NZSCED level and at three broad levels of qualification: Level 1 and 2 certificates, Level 3 to 7 certificates/diplomas and bachelors or higher. For bachelors or higher we look at enrolments between 2008 and 2016, while for levels below bachelors (and in total) we look at enrolments between 2011 and 2016 (this smaller window of analysis is due to limitations in the industry training data).

As well as looking at the distribution of students/learners across fields of study in 2016, we also look at how the distribution has changed over time, to get a sense of the dynamics of change in the tertiary education system.

To derive the field of study of a domestic student at tertiary education providers, we look at the NZSCED code of the courses they studied in that qualification to derive a richer level of detail about their field of study. Specifically, for each student we report the field(s) of study where they had the highest study load.

We do this because some providers offer relatively broad qualifications, which can make it difficult to determine the field of study from the qualification level NZSCED code assigned by tertiary providers. For example, a student who is enrolled in a Bachelor of Science might be specialising in Computer science, but the qualification NZSCED code might report them as being in Natural and physical sciences rather than Information technology.

The method for deriving field(s) of study for student enrolments is now the same as that used to derive the field(s) of study for graduates. This means that the data on the field of study of students/learners may differ from that published in previous years, although the trends remain similar. More detail on the approach used to derive field(s) of study is provided in a methodology factsheet.²

The structure of the report is as follows:

- In chapter 2 we examine enrolments at the broad field of study level and by broad level of qualification.
- In chapter 3 we present profiles of each of the 12 broad NZSCED fields of study.

¹ The students we report here in tertiary providers are enrolled in formal qualifications of greater than 0.03 EFTS (more than one week's full-time duration).

² See www.educationcounts.govt.nz/publications/tertiary_education/occasional-papers/method-to-determine-the-predominant-fields-of-study-of-students-and-graduates-in-provider-based-tertiary-education.

- In chapter 4 we look at trends in selected narrow fields of study at the bachelor's degree or bachelors with honours level.
- In chapter 5 we analyse the field of study by selected characteristics, including sub-sector, gender, ethnic group and age group.
- Finally, in chapter 6 we present some technical notes.

In this report, we use the NZSCED classification to determine a student's/learner's field of study. This has three levels of classification: broad, narrow and detailed. For the purposes of this report we limit the analysis to broad and narrow levels of NZSCED.

Table 1 presents the 12 broad NZSCED fields, along with the narrow fields. Among the largest broad fields is Society and culture, which covers disciplines ranging from Law to Sports and recreation. The Mixed field programme's broad field covers areas such as Employment and social skills programmes.³

³ See www.educationcounts.govt.nz/data-services/collecting-information/code-sets-and-classifications/new_zealand_standard_classification_of_education_nzsced for more detail.

Table 1

Description of the New Zealand Standard Classification of Education (NZSCED)

Broad field NZSCED	Descriptor	Narrow NZSCED fields
01. Natural and physical sciences	The systematic study or body of knowledge that aims through experiment, observation and deduction to produce reliable explanations of phenomena with reference to the material and physical world. Natural sciences are the earth sciences and the life sciences, which study the earth and all living organisms.	Mathematical sciences, Physics and astronomy, Chemical sciences, Earth sciences, Biological sciences.
02. Information technology	The study of processing and transmitting information by various technologies, including computing, telecommunications and microelectronics.	Computer science, Information systems.
03. Engineering and related technologies	The study of the design, composition, manufacture, maintenance and functioning of machines, products, systems and structures. It also includes the measurement and mapping of the earth's surface and its natural and constructed features.	Manufacturing, engineering and technology, Process and resources engineering, Automotive engineering and technology, Mechanical and industrial engineering and technology, Civil engineering, Geomatic engineering, Electrical and electronic engineering and technology, Aerospace engineering and technology, Maritime engineering and technology.
04. Architecture and building	The study of the art, science and techniques involved in designing, constructing, adapting and maintaining public, commercial, industrial and residential structures and landscapes. It involves the study of the planning, art and science of designing and adapting the surrounds of buildings and other external environments.	Architecture and urban environment, Building.
05. Agriculture, environmental and related studies	The study of the theory and practice of growing, gathering, reproducing and caring for plants and animals. It also includes the study of the interaction between people and the environment and the application of scientific knowledge to the environment to protect it from further deterioration.	Agriculture, Horticulture and viticulture, Forestry studies, Fisheries studies, Environmental studies.
06. Health	The study of maintaining and restoring the physical and mental well-being of humans and other animals.	Medical studies, Nursing, Pharmacy, Dental studies, Optical science, Veterinary studies, Public health, Radiography, Rehabilitation therapies, Complementary therapies.
07. Education	The study of the learning process and the theories, methods and techniques of imparting knowledge and skills to others.	Teacher education, Curriculum and education studies.
08. Management and commerce	The study of the theory and practice of planning, directing, organising, motivating and co-ordinating the resources of private and public organisations and institutions. It also includes the merchandising and provision of goods and services and personal development.	Accountancy, Business and management, Sales and marketing, Tourism, Office administration, Banking, finance and related fields.
09. Society and culture	The study of the physical, social and cultural organisation of human society.	Political science and policy studies, Studies in human society, Human welfare studies and services, Behavioural science, Law, Justice and law enforcement, Librarianship, information management and curatorial studies, Language and literature, Philosophy and religious studies, Economics and econometrics, Sport and recreation.
10. Creative arts	The study of creating and performing works of art, music, dance and drama. It includes the study of clothing design and creation and communication through media.	Performing arts, Visual arts and crafts, Graphic and design studies, Communication and media studies.
11. Food, hospitality and personal services	The study of preparing, displaying and serving food and beverages, providing hospitality services, and caring for the hair and body for grooming and beautification.	Food and hospitality, Personal services.
12. Mixed field programmes	Programmes providing multi-field education.	General education programmes, Social skills programmes, Employment skills programmes.

2 BROAD FIELD OF STUDY BY LEVEL OF QUALIFICATION

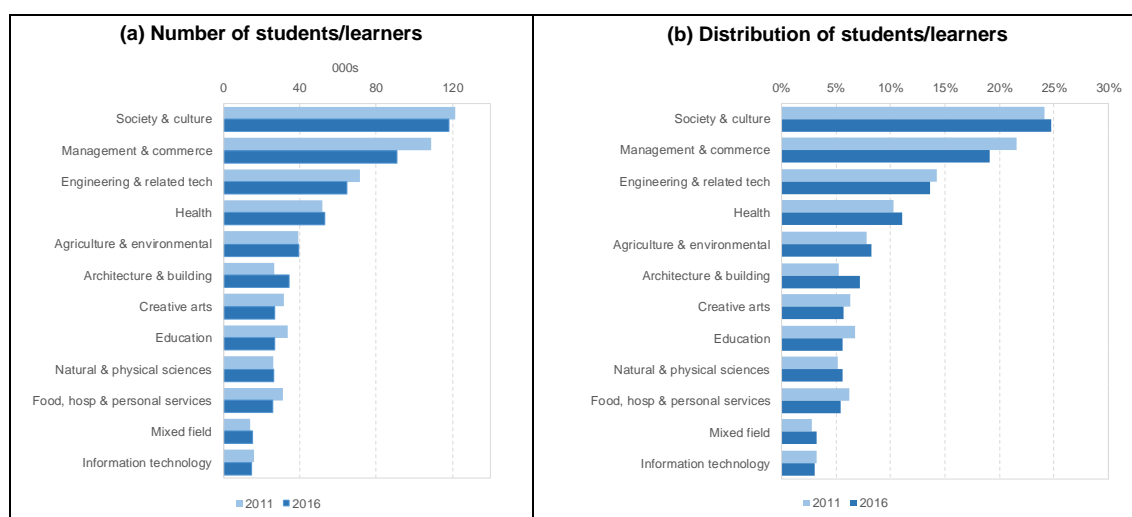
The number of domestic students/learners by broad field of study at all levels of qualifications is shown in Figure 1. In 2016, there were 477,000 students/learners, compared with 504,000 in 2011, a decrease of 5.5 percent. An improving economy (meaning more young people have found work) and demographic shifts were factors in this reduction.

In terms of fields of study, in 2016 the largest number of domestic students/learners were in the fields of Society and culture (118,000) and Management and commerce (91,100).

The distribution of students/learners across broad fields of study is presented in Figure 1, which shows the share of students/learners changed in several fields between 2011 and 2016. The fields of study with increases in the percentage of students/learners included Architecture and building (from 5.3 percent in 2011 to 7.2 percent in 2016) and Society and culture (from 24 percent in 2011 to 25 percent in 2016). The fields with a decline in share included Management and commerce (from 22 percent in 2011 to 19 percent in 2016) and Education (from 6.7 percent in 2011 to 5.6 percent in 2016).

Figure 1

Domestic students/learners by field of study in 2011 and 2016 – all levels of qualifications



The distribution of students/learners across the fields of study varies by level of study. In the sections that follow, we examine the field of study of domestic students/learners at three broad levels of qualification:

- Level 1 and 2 certificates
- Level 3 to 7 certificates and diplomas
- Bachelors or higher

Level 1 and 2 certificates capture foundation-level qualifications, while Level 3 to 7 certificates/diplomas capture the remainder of non-degree provision, including many technical, trades and vocational qualifications. The bachelors or higher qualifications category is the final category that we analyse in this report.⁴

⁴ Although we limit our analysis to these three broad levels of qualification, web tables published on the Education Counts website present the data at a more detailed level of qualification breakdown.

Level 1 and 2 certificates

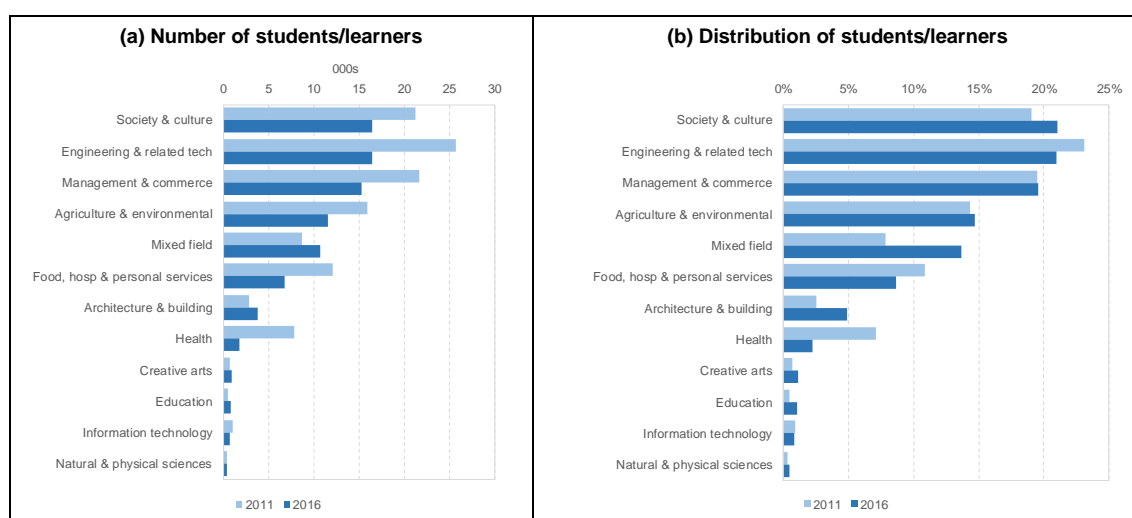
Figure 2 shows data on the broad field of study of students/learners enrolled in Level 1 and 2 certificates. In 2016, Society and culture was the largest field of study (16,500) followed closely by Engineering and related technologies (16,400).

Between 2011 and 2016 there were shifts in the distributions of students/learners among the fields of study. The largest increase in share of students/learners was in Mixed field programmes, which increased from 7.8 percent in 2011 to 14 percent in 2016, followed by Architecture and building (which increased in share from 2.5 percent to 4.9 percent).

The significant increase in share of students/learners in Mixed field programmes mirrors the trend seen in the complementary field of study report on graduates, and is due, in part, to the introduction of the Youth Guarantee and the reallocation of Student Achievement Component equivalent full-time students (EFTS) via the Level 1 and 2 tendering process. Also contributing to this will be the deliberate move to refocus Level 1 and 2 on literacy/numeracy and foundation skills.

Figure 2

Domestic students/learners by field of study in 2011 and 2016 – Level 1 and 2 certificates



Level 3 to 7 certificates/diplomas

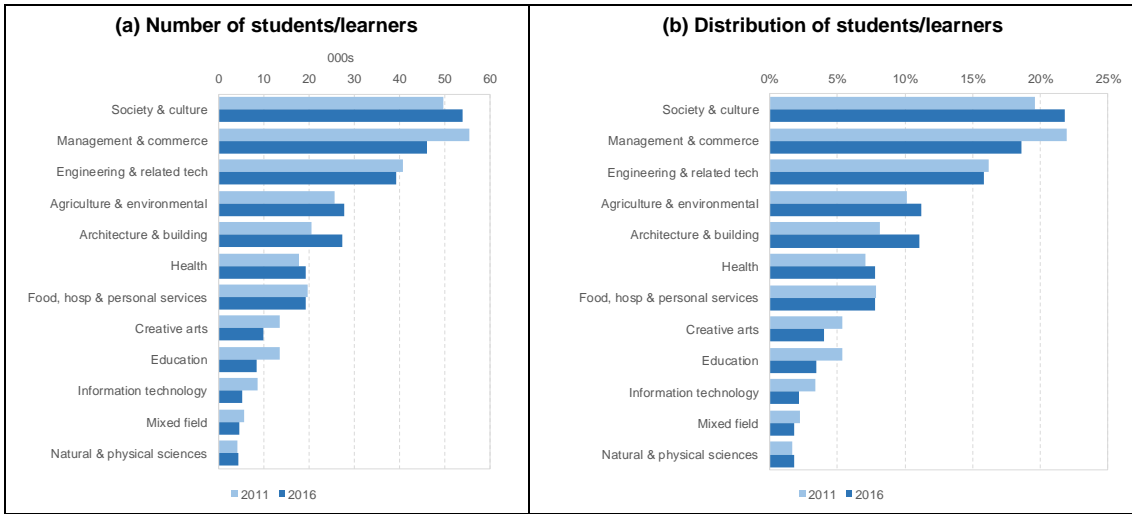
Data on the broad fields of study of students/learners in Level 3 to 7 certificates/diplomas is shown in Figure 3. At this level of qualification, Society and culture (53,900) and Management and commerce (46,000) were the largest fields in 2016.

Between 2011 and 2016, the largest increases in share of students/learners were in the fields of Architecture and building (from 8.1 percent in 2011 to 11 percent in 2016) and Society and culture (from 20 percent to 22 percent).

The largest falls in share of students/learners at this level were in Management and commerce (from 22 percent in 2011 to 19 percent in 2016) and Education (from 5.3 percent to 3.4 percent). In Education, the decline partly reflects a shift in the level of recognised teaching qualifications from the diploma to the bachelors degree level.

Figure 3

Domestic students/learners by field of study in 2011 and 2016 – Level 3 to 7 certificates/diplomas



Bachelors or higher

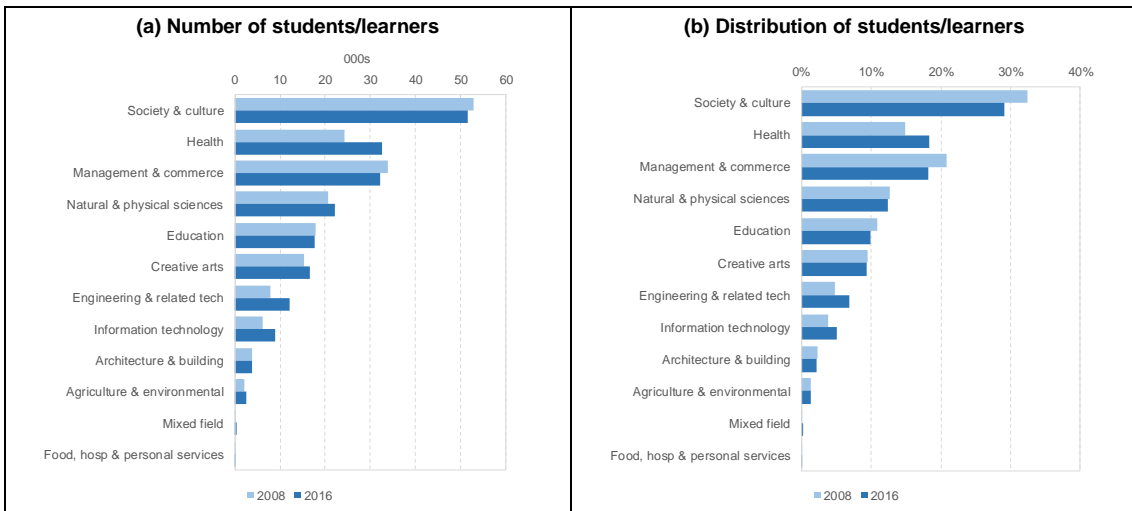
Data on the broad field of study for students/learners at the bachelors or higher level is shown in Figure 4. In 2016 the largest field of study was Society and culture (51,600), followed by Health (32,600).

The field of Health had the largest increase in share of students/learners between 2008 and 2016 (from 15 percent in 2008 to 18 percent in 2016), followed by Engineering and related technologies (from 4.8 percent to 6.8 percent).

Fields which declined in share included Society and culture (from 32 percent in 2008 to 29 percent in 2016) and Management and commerce (from 21 percent to 18 percent).

Figure 4

Domestic students/learners by field of study in 2008 and 2016 – bachelors or higher



3 FIELD OF STUDY PROFILES

In this section we present statistical profiles of the 12 broad fields of study. For each broad field we:

- show the number of students/learners and share of students/learners by broad level of qualification. As well as total enrolments, we also look at the number of students/learners starting a qualification in each year to get a sense of the flow of students in the field. For levels below bachelors or higher, we cannot report starters in 2011 due to limitations in the workplace-based training data. For levels below bachelors level (and in total), we look at enrolments between 2011 and 2016, while at bachelors or higher level we look at enrolments between 2008 and 2016
- show the percentage point change in share of total students/learners at the broad and narrow fields between 2011 and 2016 at levels below bachelors degrees and in total, while for bachelors or higher we look at the change between 2008 and 2016
- present key points identifying the main trends in the data.

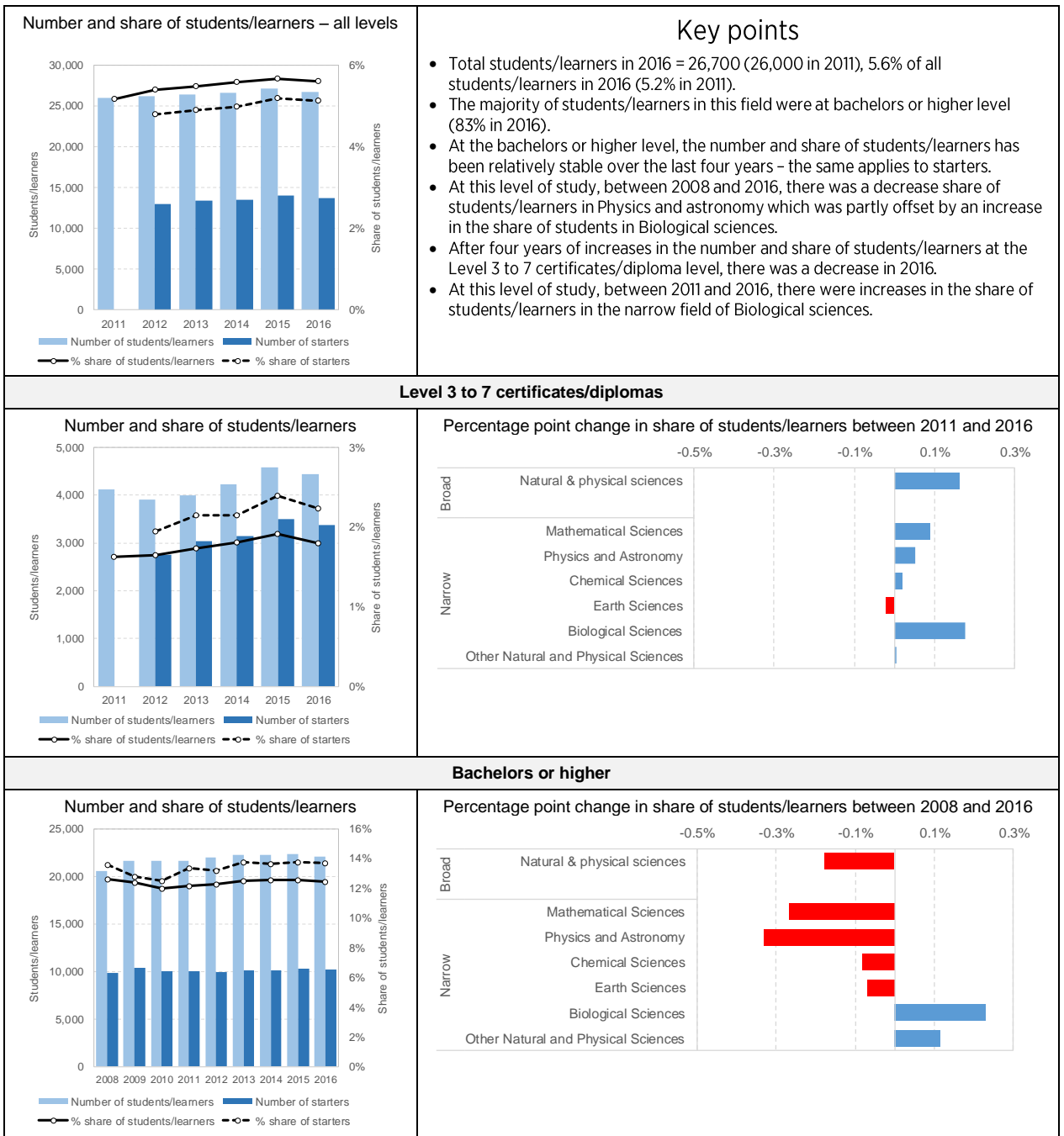
The purpose of these statistical profiles is to identify which narrow fields of study were driving the trends at the broad level. For example, for Level 3 to 7 certificates/diplomas, the increase in share of students/learners in the broad field of Architecture and building was mainly driven by increases in the narrow field of Building, while the narrow field of Architecture was unchanged.

The profiles also make it easier to identify trends in a broad field, such as shifts between levels of qualifications. For example, although the number of students/learners in Information technology at Level 3 to 7 certificate/diploma level has been declining, this has been offset to an extent by a rise in the number of students/learners at the bachelors or higher level.

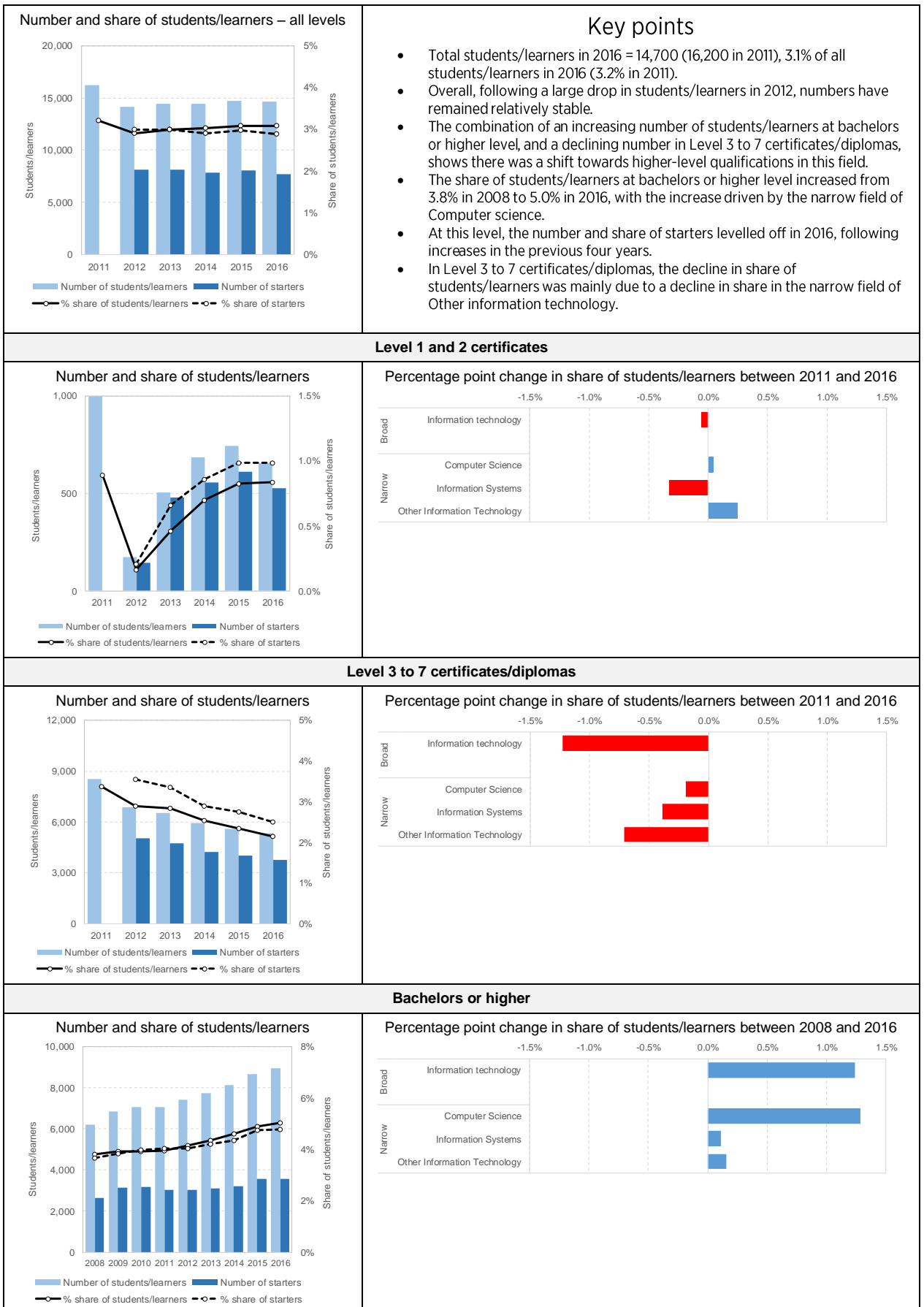
Note that where the number of students/learners at a particular level of qualification was relatively small, we do not report this data in the statistical profiles.

We present the fields of study in order of the broad NZSCED code.

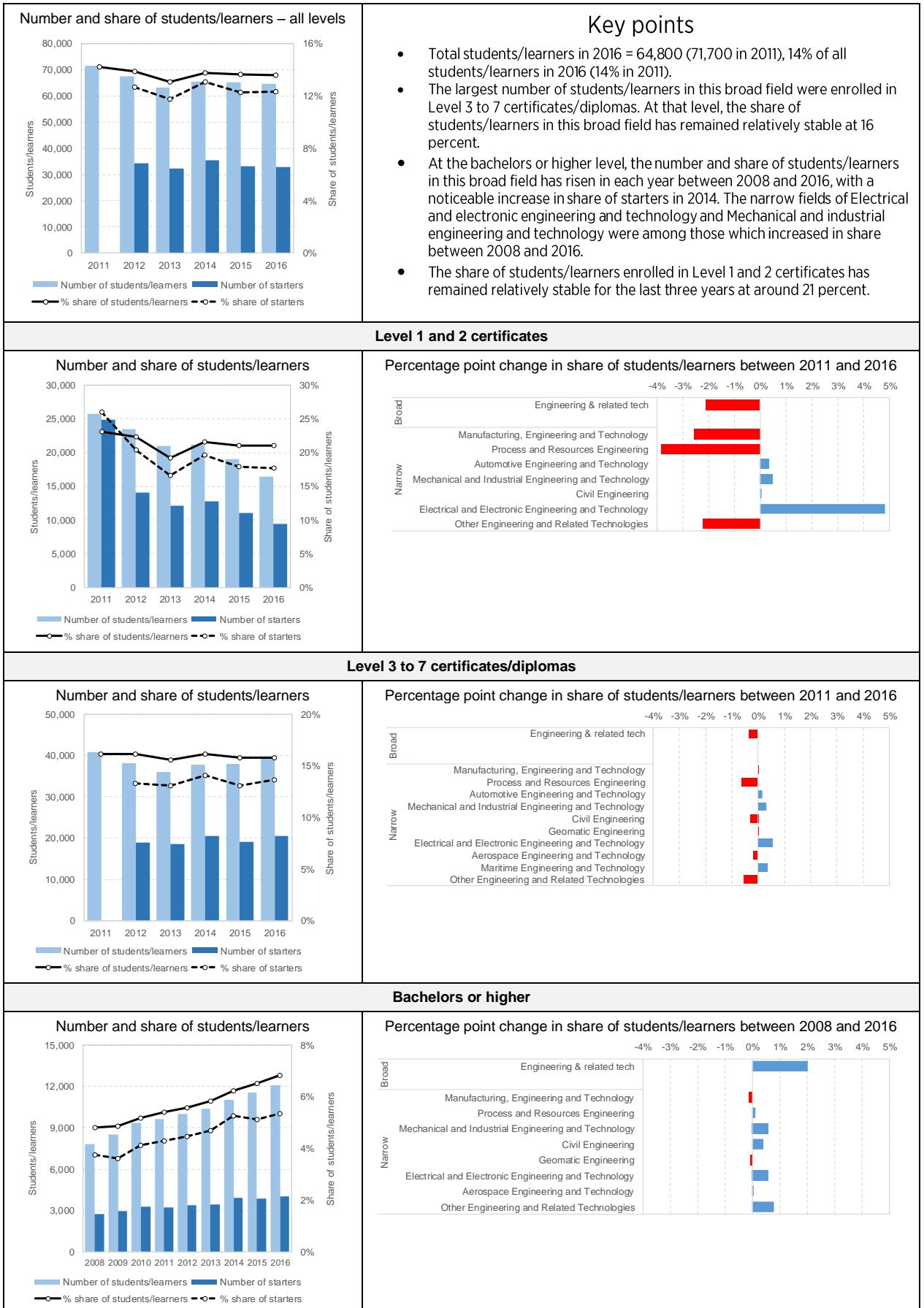
01. Natural and physical sciences



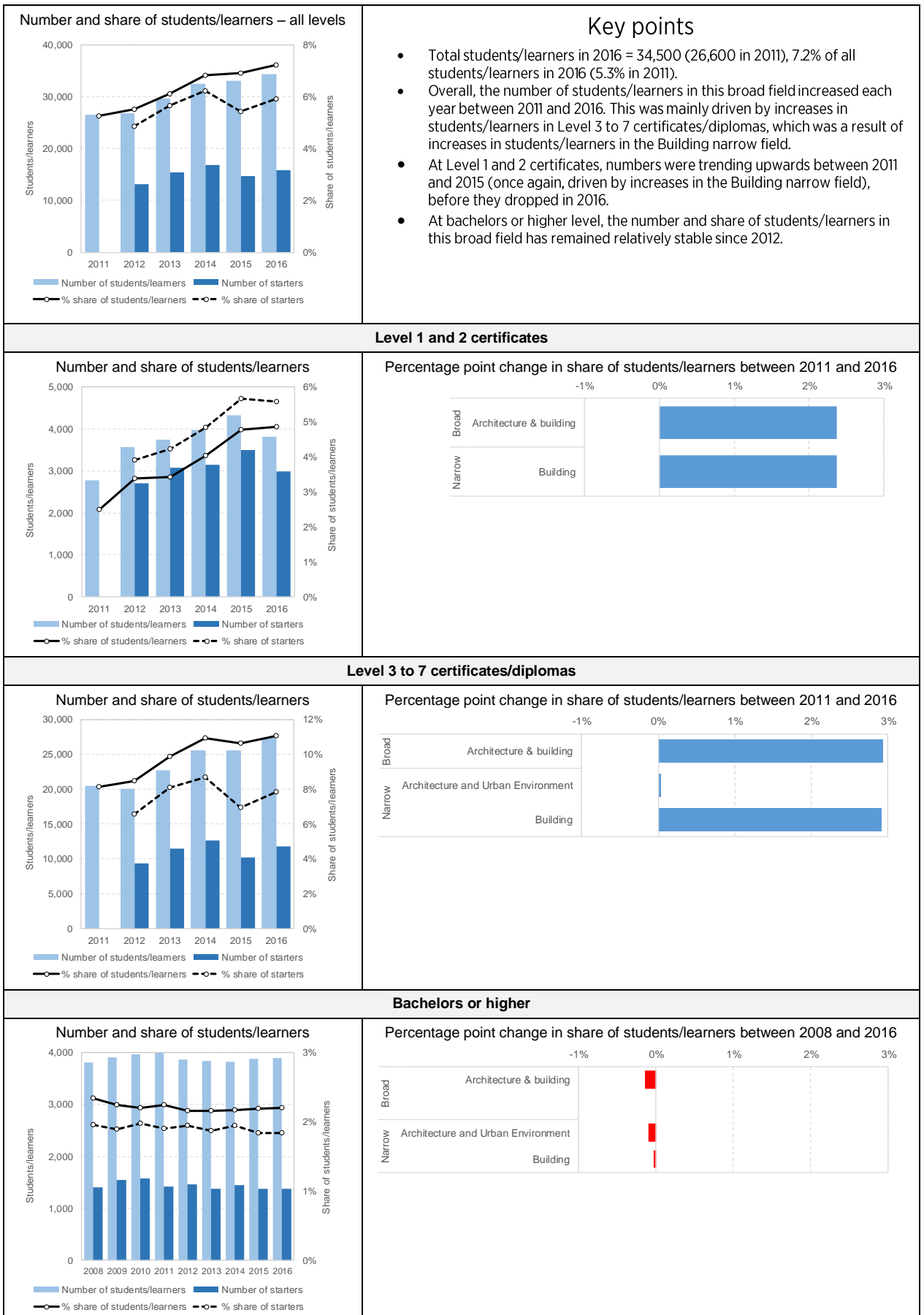
02. Information technology



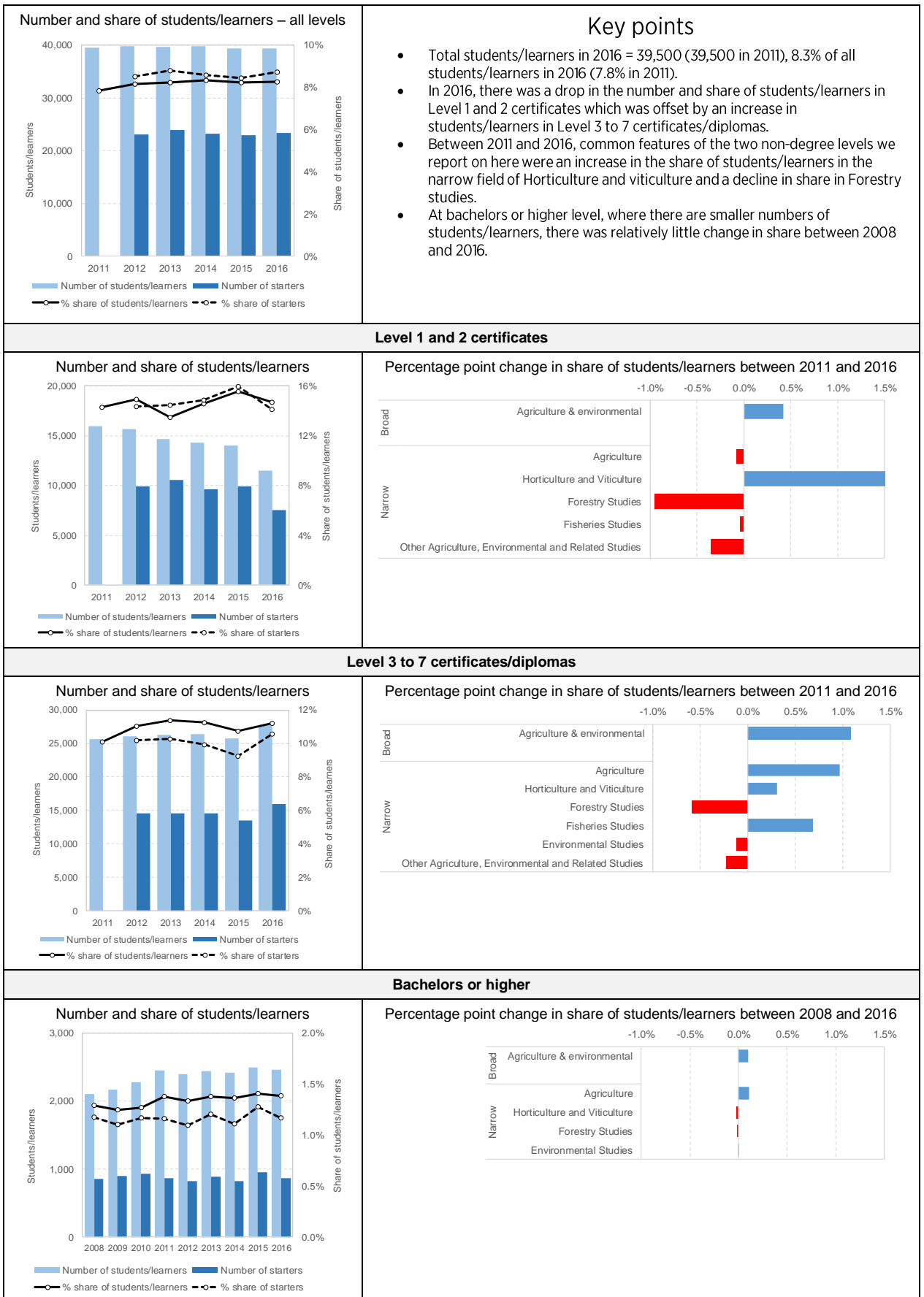
03. Engineering and related technologies



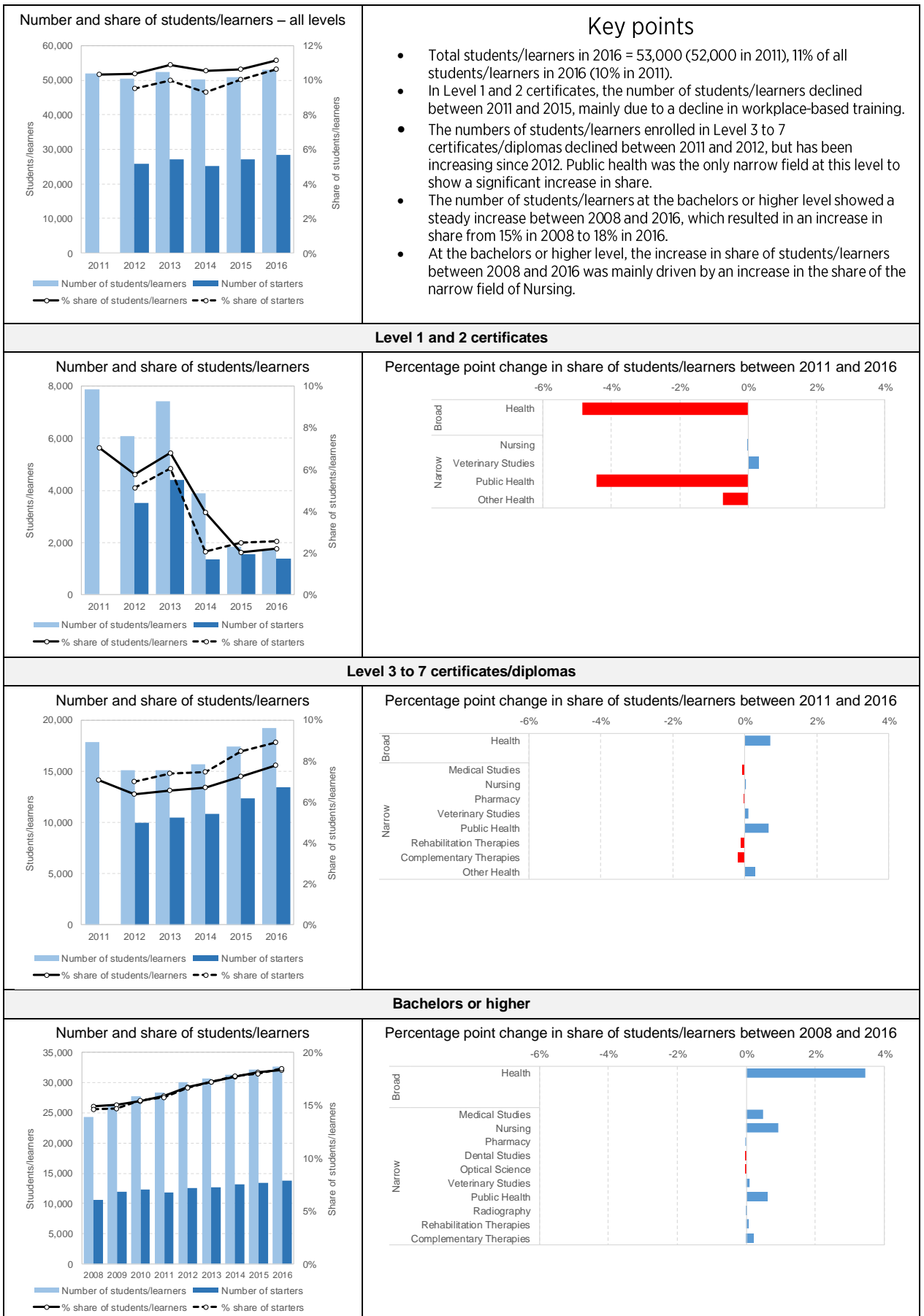
04. Architecture and building



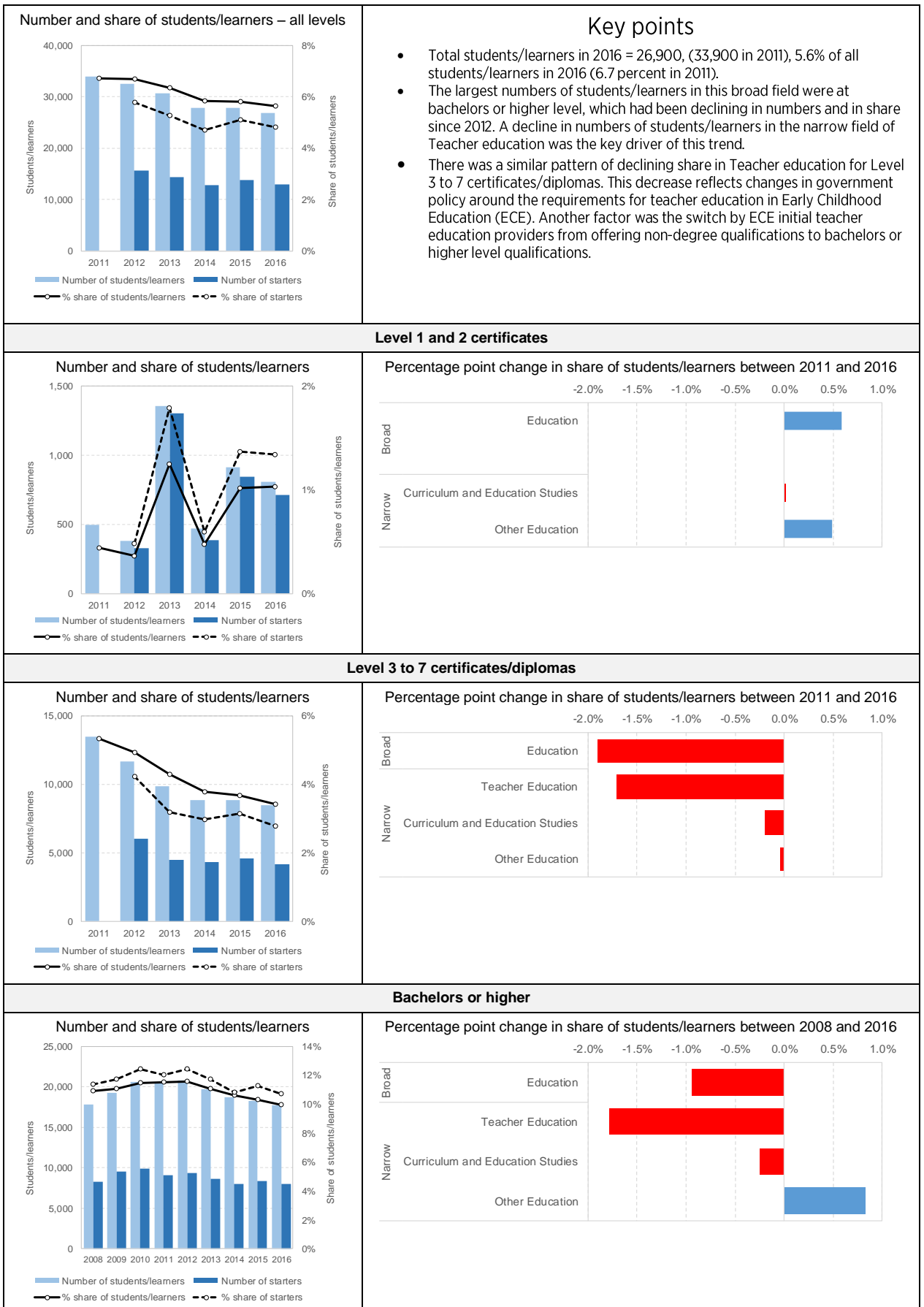
05. Agriculture, environmental and related studies



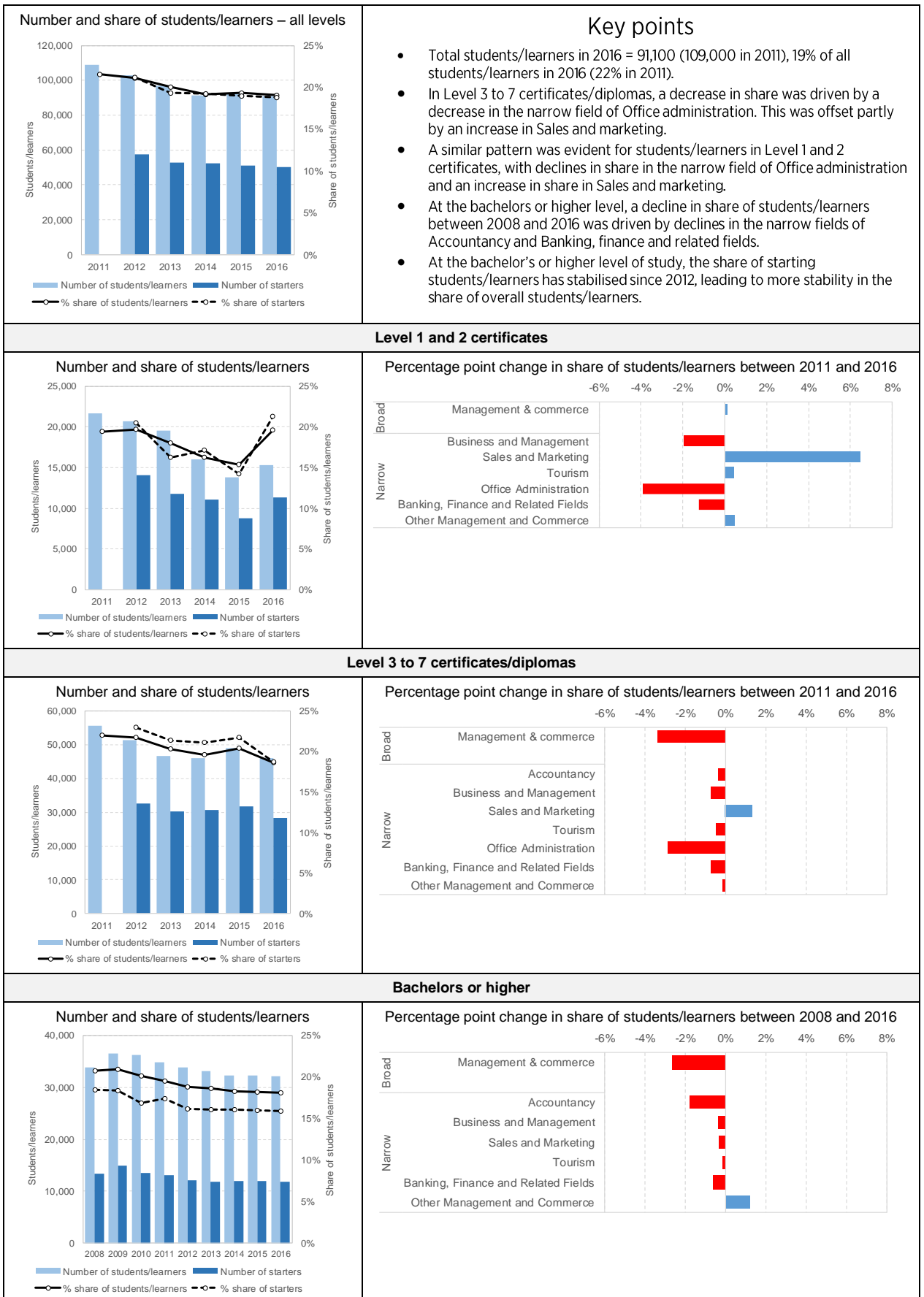
06. Health



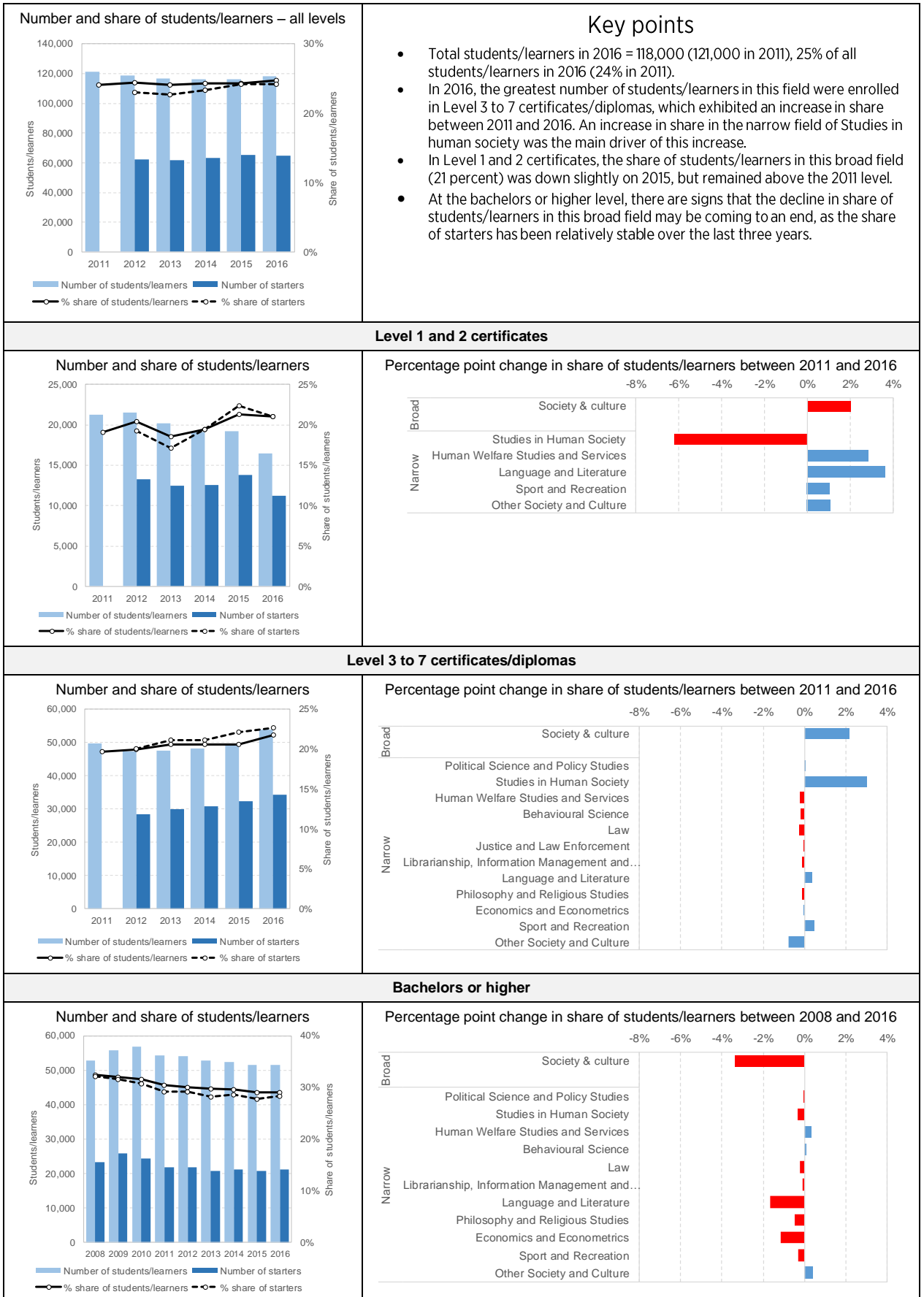
07. Education



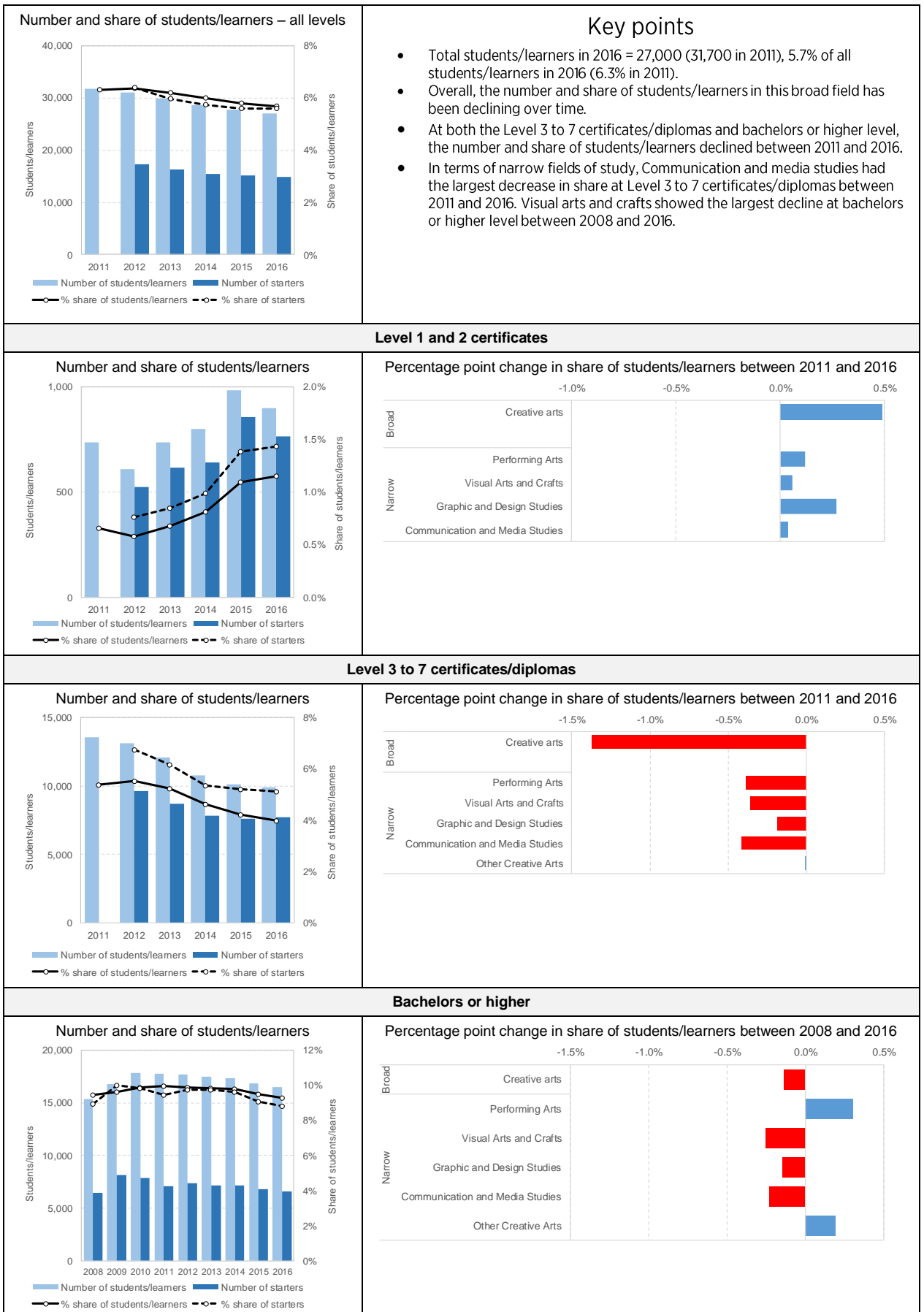
08. Management and commerce



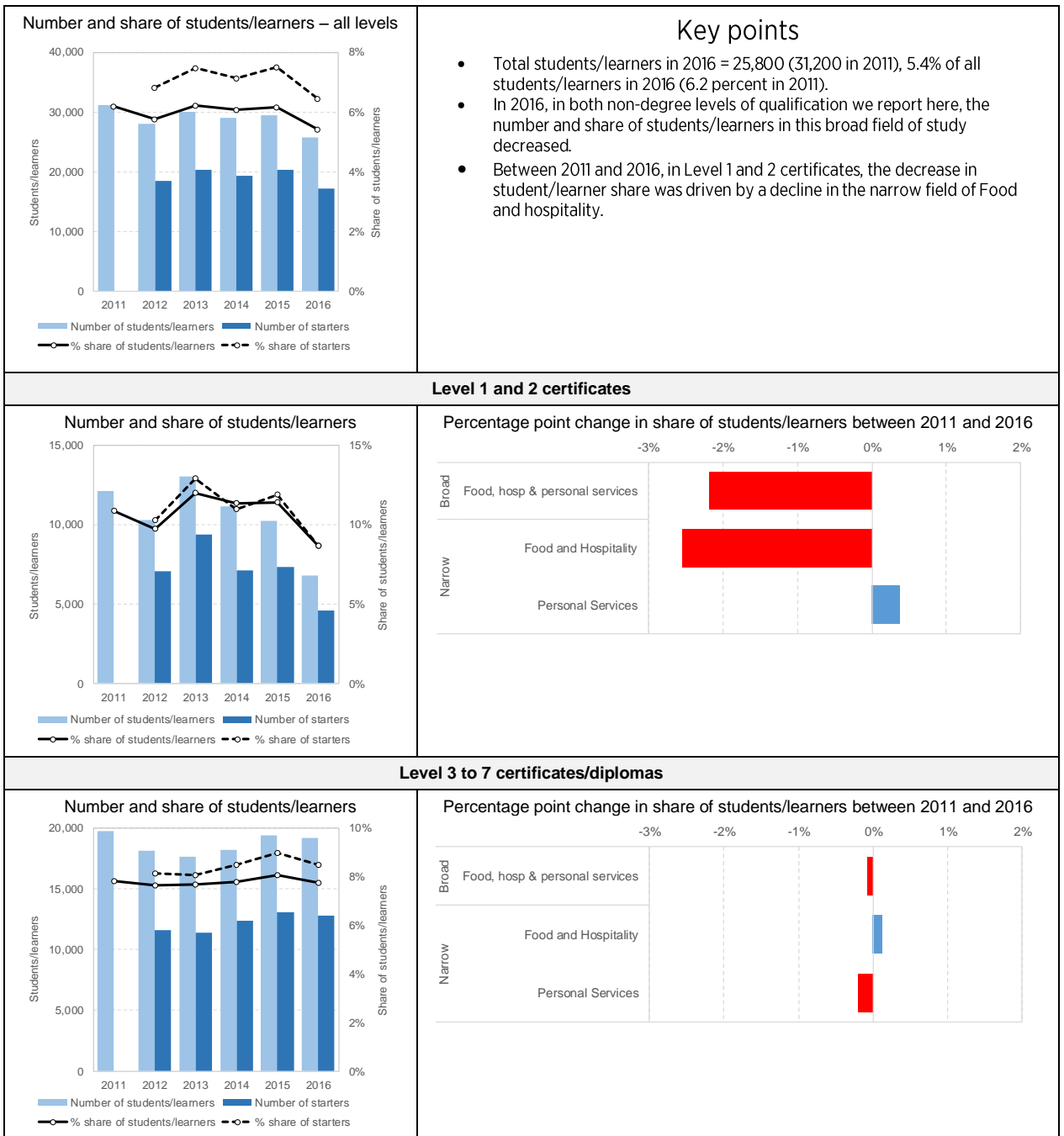
09. Society and culture



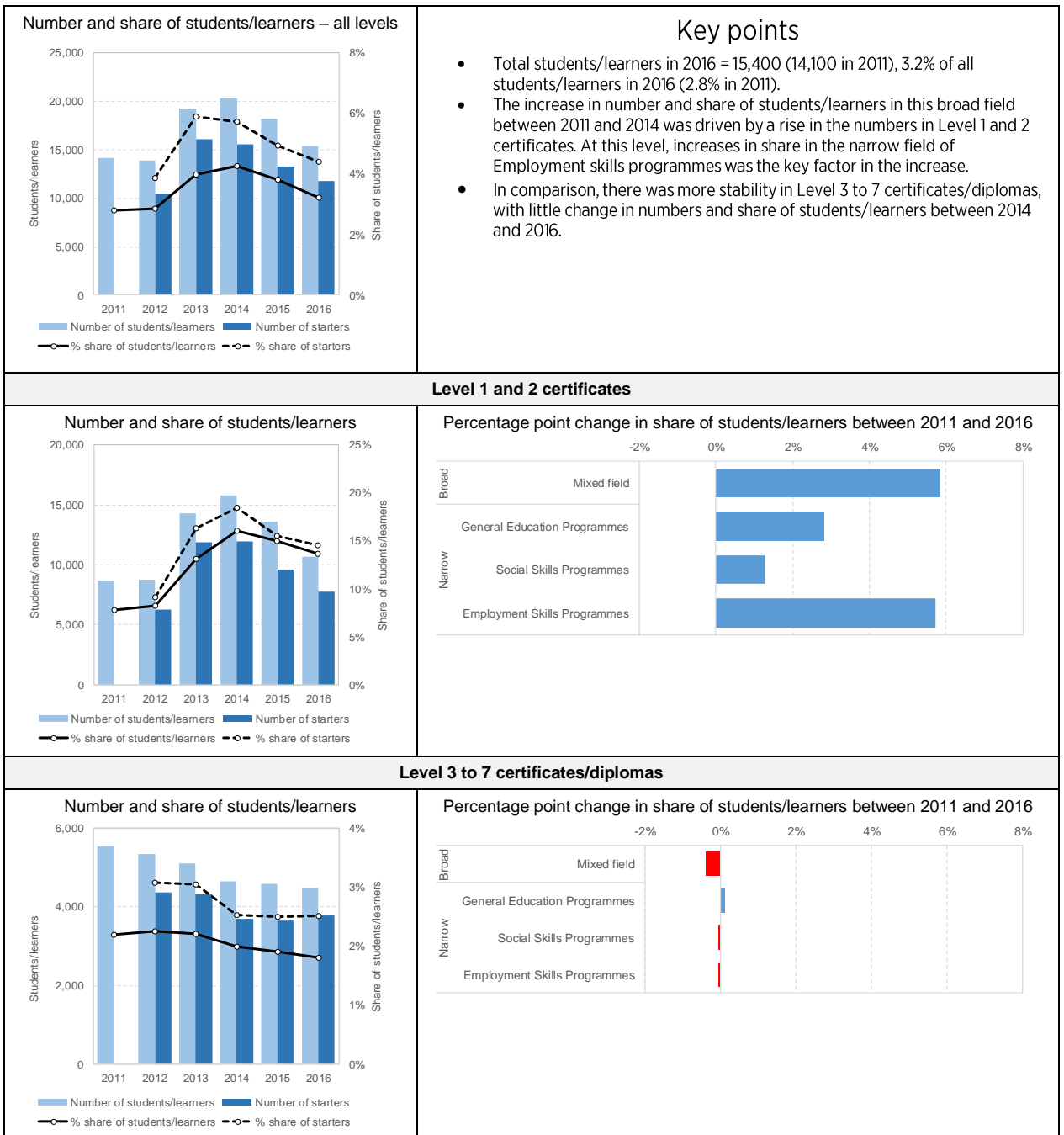
10. Creative arts



11. Food, hospitality and personal services



12. Mixed field



4 ANALYSIS OF SELECTED NARROW FIELDS OF STUDY

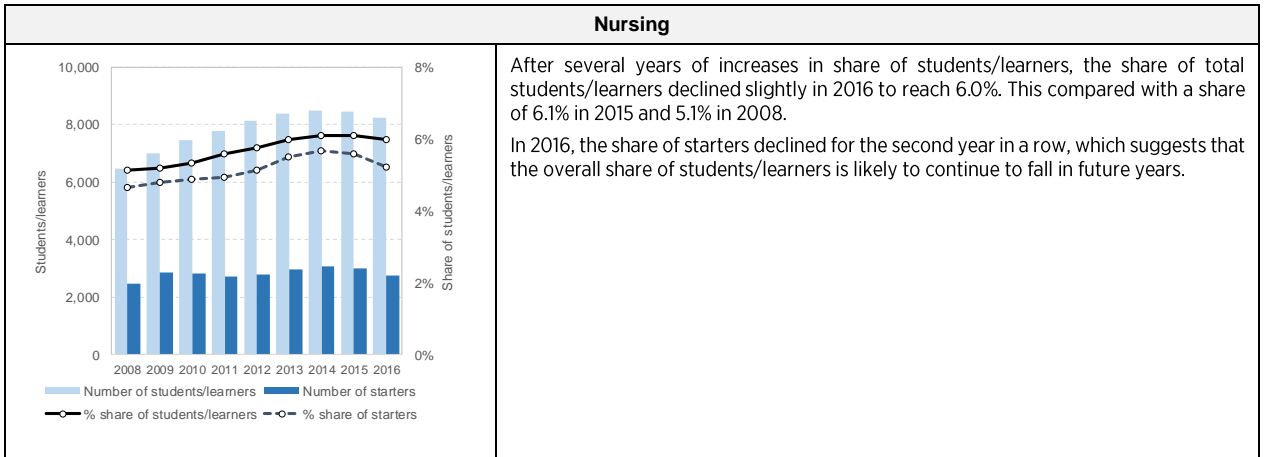
In this chapter, we look at trends in the number of domestic students/learners in selected narrow fields at the bachelors degree or bachelors with honours level. We look at these combined levels of study as some qualifications have shifted between bachelors degree and bachelors with honours level (engineering, for example). So, to understand trends over time, we need to look at them in combination.

The six narrow fields we look at cover a number of vocational areas, as well as being some of the largest in terms of domestic students/learners. For each narrow field, we present data on the number and share of students/learners. This includes a separate analysis of students/learners starting qualifications. Some key points shown by the data are also presented.

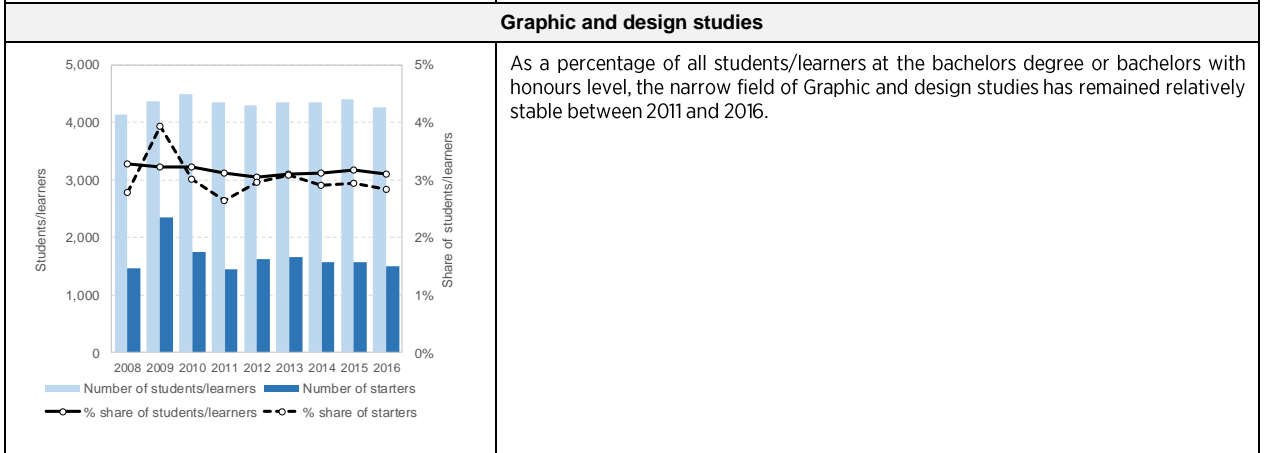
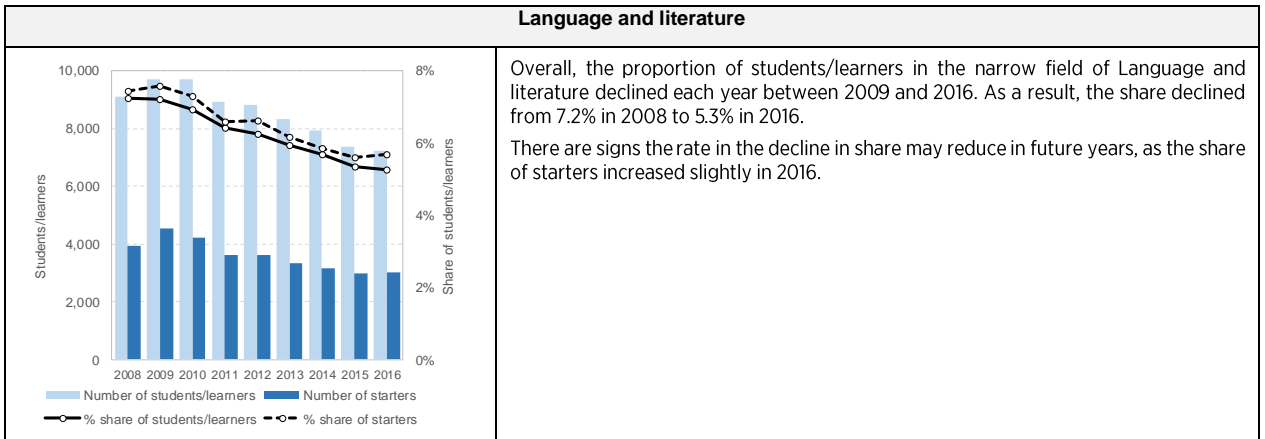
It is important to note that the data presented in this section should not be seen as showing the number of people studying qualifications recognised by professional bodies. The students/learners in these fields can include people in qualifications that are not recognised by professional bodies, but still sit within the NZSCED field of study.

Selected narrow fields – bachelors degree or bachelors with honours level

Accountancy	
<p>Students/learners</p> <p>Share of students/learners</p> <p>Number of students/learners Number of starters</p> <p>% share of students/learners % share of starters</p>	<p>The number and share of domestic students/learners in this narrow field has generally been declining since 2008. In 2008, the share of students/learners was 8.4%, compared with 6.6% in 2016.</p> <p>The rate of the decline in share of students/learners has decreased over time, as stabilisation in the share of starters has flowed through into the data for all students/learners.</p>
Law	
<p>Students/learners</p> <p>Share of students/learners</p> <p>Number of students/learners Number of starters</p> <p>% share of students/learners % share of starters</p>	<p>The share of domestic students/learners in the narrow field of Law increased in each year between 2013 and 2016. In 2016, the share was 6.9%, compared with 6.3% in 2012.</p> <p>In terms of starters, there was a noticeable increase in the number and share of starters in 2016, following a number of years of relative stability.</p>
Medical studies	
<p>Students/learners</p> <p>Share of students/learners</p> <p>Number of students/learners Number of starters</p> <p>% share of students/learners % share of starters</p>	<p>The number and share of students/learners in the Medical studies field increased between 2008 and 2016. In 2016, the share of students/learners was 2.2%, compared with 1.6% in 2008.</p> <p>The upward shift reflects increases in government-funded places in previous years.</p>



Selected narrow fields continued...



5 FIELD OF STUDY BY SELECTED CHARACTERISTICS

In this chapter, we analyse the field of study data in 2016 for selected characteristics. These include: sub-sector, gender, ethnic group and age group. The purpose of this chapter is to give an indication of some of the broad patterns in these characteristics, rather than present a detailed and comprehensive view of the data.

Sub-sector

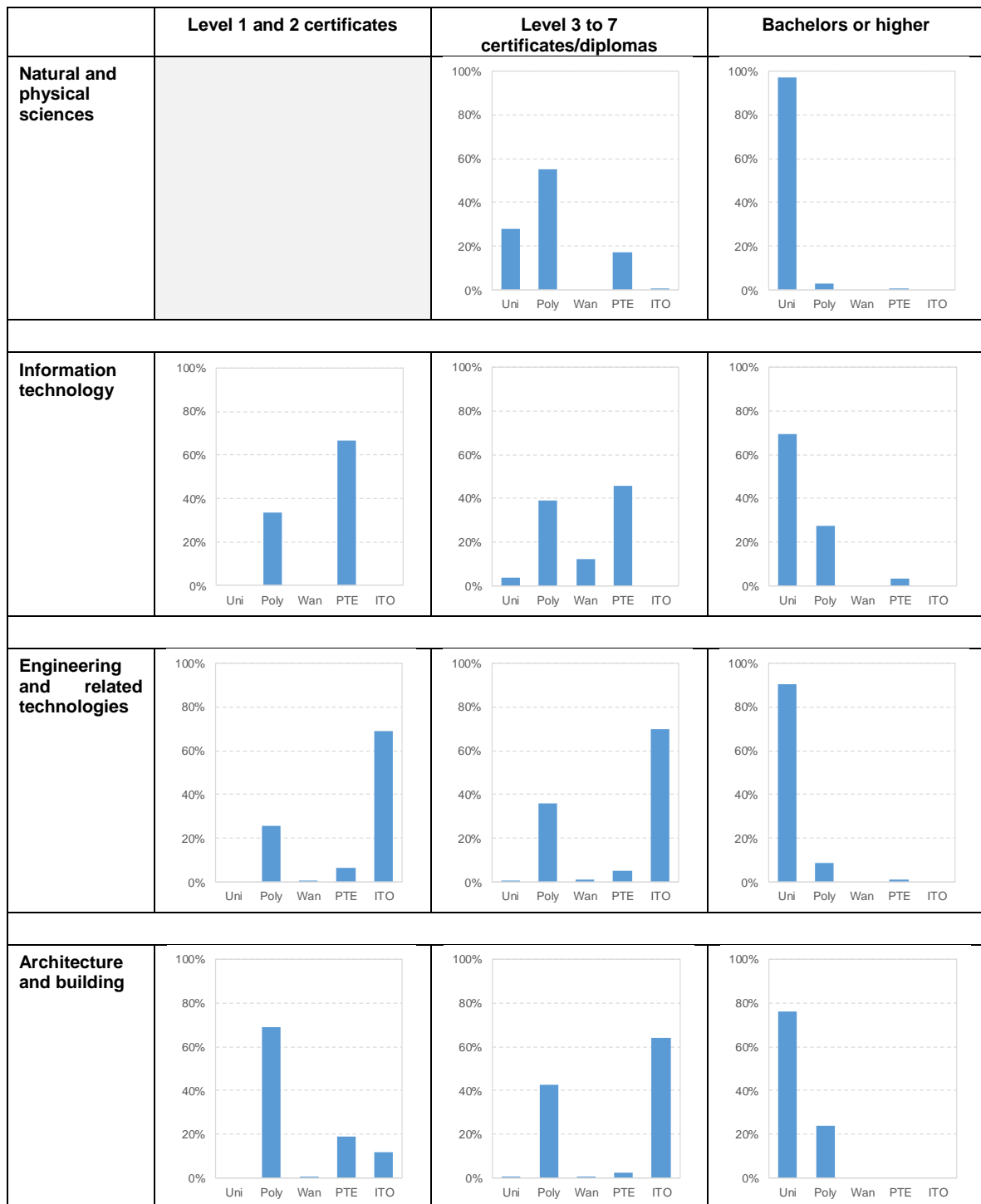
Figure 5 presents the distribution of students/learners in 2016 in each of the broad fields of study. For each broad field we have split the level of qualification into the levels used in the previous sections – Level 1 and 2 certificates, Level 3 to 7 certificates/diplomas, and bachelors or higher.

For Level 1 and 2 certificates, learners in workplace-based learning organised by industry training organisations (ITOs) dominated a number of fields of study. These included: Engineering and related technologies, Agriculture, environmental and related studies, Management and commerce, Society and culture, and Food, hospitality and personal services. At this level of qualification, students at polytechnics were prevalent in Architecture and building, Creative arts and Health, while wānanga produced significant proportions of the students in Society and culture. Private training establishments (PTEs) dominated provision in the fields of Information technology and Education.

For Level 3 to 7 certificates/diplomas, polytechnics had a relatively large share of students/learners in Natural and physical sciences, Information technology, Architecture and building, Health, Education, Creative arts, Management and commerce and Mixed field programmes. Learners from ITOs were largely enrolled in Agriculture and environmental studies and Food, hospitality and personal services. Wānanga provided the greatest percentage of students/learners in Society and culture. PTEs had large proportions of students/learners in Information technology and Education.

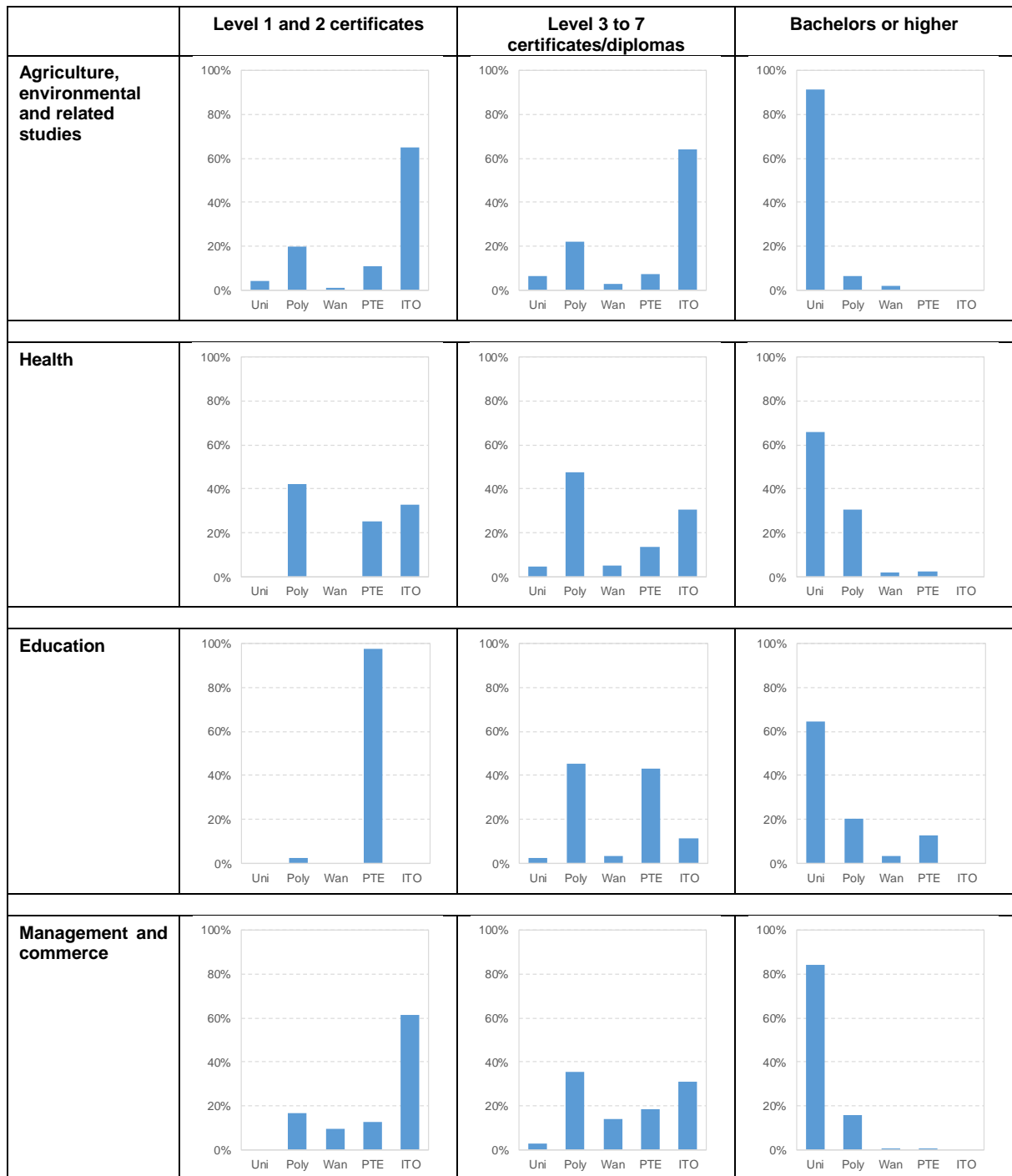
Universities dominated provision at the bachelors or higher level, with an especially high proportion of enrolments in Natural and physical sciences (97 percent). Polytechnics had significant proportions of enrolments in the broad fields of Information technology and Health. PTEs featured most prominently in Education. Wānanga had limited provision at this level of study.

Figure 5
Distribution of domestic students/learners by field of study, sub-sector and type/level of qualification



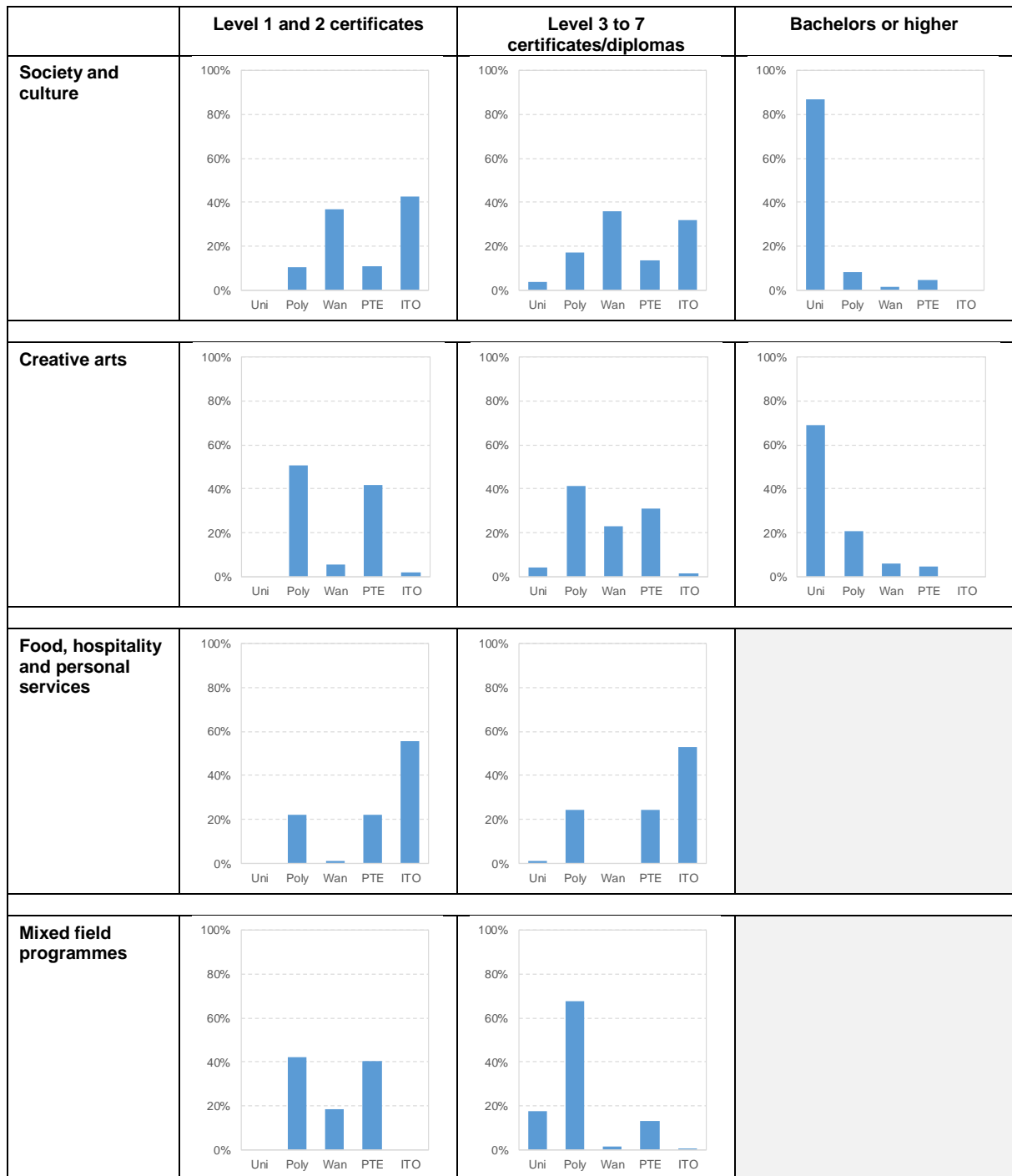
Note: Uni = universities; Poly=polytechnics; Wan=Wānanga; PTE=private training establishments; ITO=industry training organisations.

Figure 5 continued



Note: Uni = universities; Poly=polytechnics; Wan=Wānanga; PTE=private training establishments; ITO=industry training organisations.

Figure 5 continued



Note: Uni = universities; Poly=polytechnics; Wan=Wānanga; PTE=private training establishments; ITO=industry training organisations.

Gender

In this section we examine the proportion of women and men in narrow fields of study. The percentage of female domestic students/learners across narrow fields of study in Level 1 and 2 certificates is presented in Figure 6, the percentage at Level 3 to 7 certificates/diplomas in Figure 7, and the percentage at bachelors or higher in Figure 8.

In 2016, women made up 45 percent of students/learners in Level 1 and 2 certificates, 47 percent of students/learners in Level 3 to 7 certificates/diplomas, and 61 percent of students/learners at bachelors or higher level.

For Level 1 and 2 certificates, the fields of study with the highest proportion of women in 2016 were: Personal services (96 percent) and Visual arts and crafts (92 percent). There was a high proportion of men in the engineering and building fields. The highest proportion of men were enrolled in Electrical and electronic engineering and technology (97 percent).

Between 2011 and 2016, the largest decrease in the proportion of women students/learners was in the narrow field of Other information technology (from 68 percent to 34 percent), while the largest increase was in Other management and commerce (from 13 percent to 60 percent).

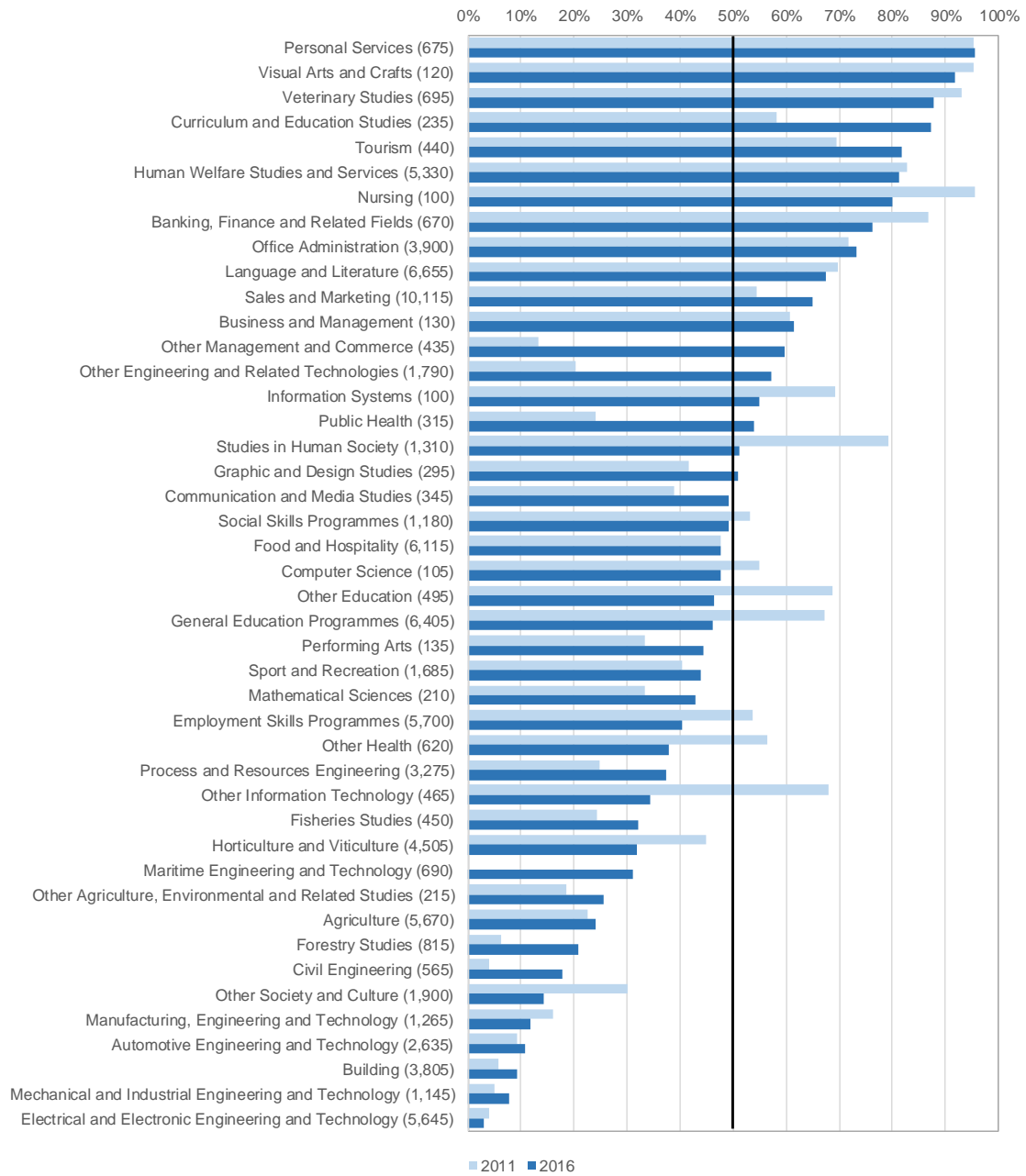
In 2016, in Level 3 to 7 certificates/diplomas, women had the highest proportion of students in fields such as: Medical studies (95 percent) and Pharmacy (95 percent). Men comprised the highest proportion of students in several engineering fields, with the highest share of 97 percent in the narrow field of Electrical and electronic engineering and technology.

Between 2011 and 2016, the largest increase in the proportion of women was in the field of Environmental studies (from 41 percent to 60 percent) and the largest decrease was in Fisheries studies (from 30 percent to 6 percent).

At bachelors or higher level, in 2016 women had a high proportion of students in fields such as Nursing (92 percent) and Radiography (85 percent). Men had a high proportion of students in several engineering fields, the highest proportion being 87 percent in the narrow field of Manufacturing, engineering and technology.

Between 2008 and 2016, the largest increase in the proportion of women students/learners was in the narrow field of Other society and culture (from 61 percent to 72 percent) and the largest decrease in the narrow field of Manufacturing, engineering and technology (from 33 percent to 13 percent).

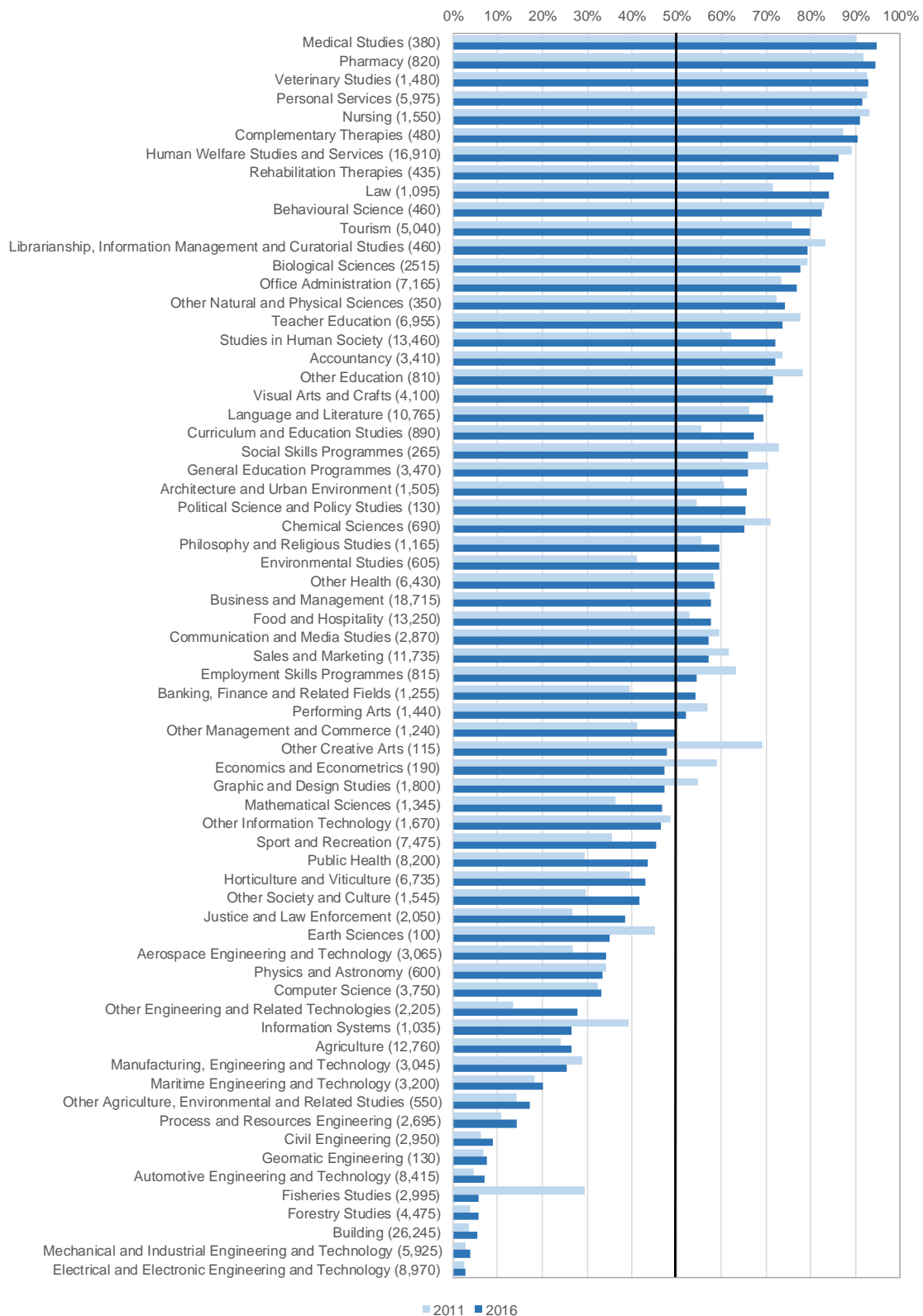
Figure 6
 Percentage of female domestic students/learners in narrow fields of study – Level 1 and 2 certificates



Note: The numbers in brackets after the name of the field show the number of students/learners in that narrow field in 2016.

Figure 7

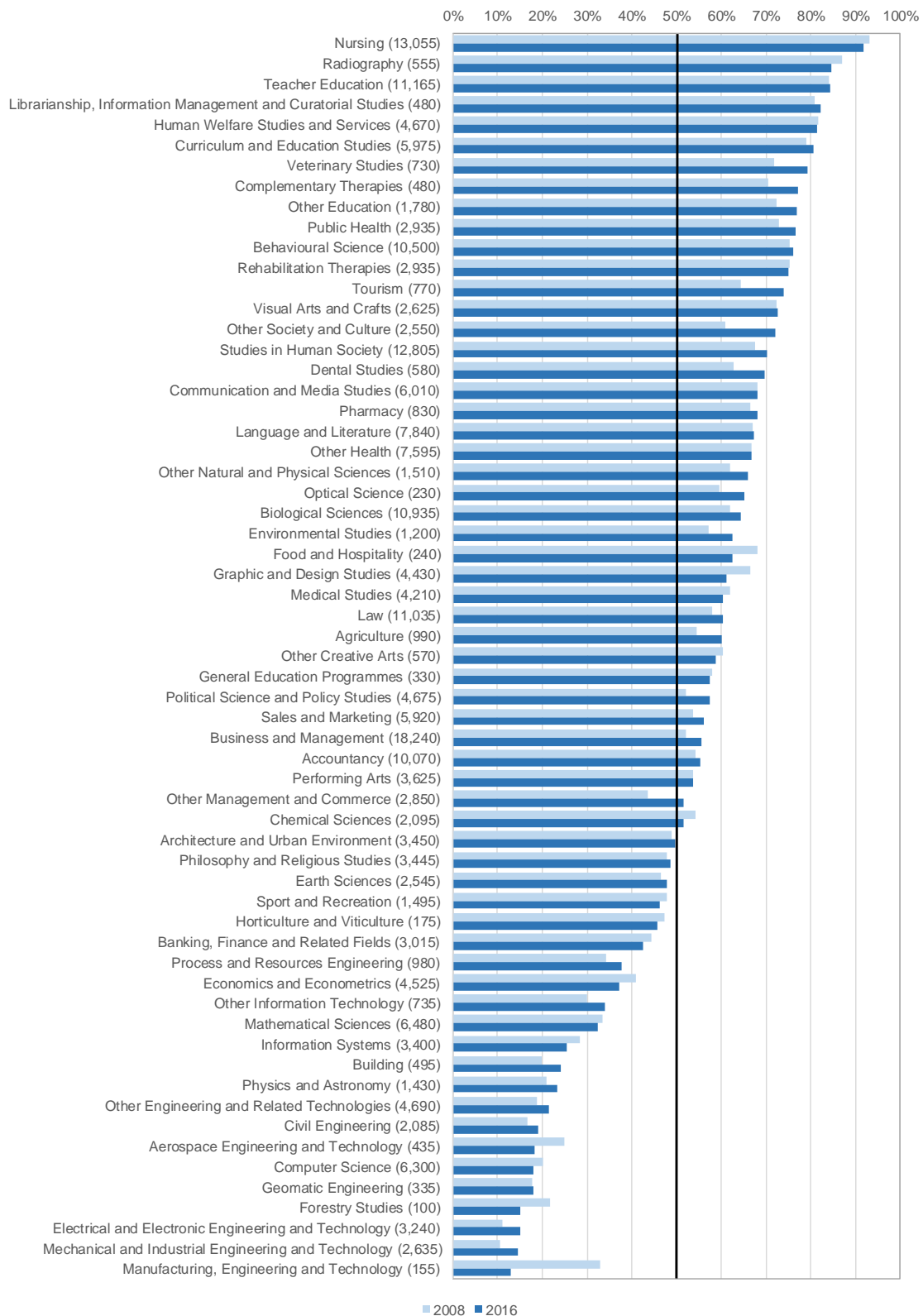
Percentage of female domestic students/learners in narrow fields of study – Level 3 to 7 certificates/diplomas



Note: The numbers in brackets after the name of the field show the number of students/learners in that narrow field in 2016.

Figure 8

Percentage of female domestic students/learners in narrow fields of study – bachelors or higher



Note: The numbers in brackets after the name of the field show the number of students in that narrow field in 2016.

Ethnic group

In this section we look at the distribution of students/learners of four selected ethnic groups (Europeans, Māori, Pasifika and Asian) across the 12 broad fields of study. In each case, we compare an ethnic group's distribution in 2016 with the distribution in an earlier year. As with previous chapters, we look at the field of study at three broad levels: Level 1 and 2 certificates, Level 3 to 7 certificates/diplomas, and bachelors or higher. At each of the levels we report here, the data shows there were differences in the distribution of the ethnic groups by broad field of study.

Figure 9 shows the distribution of students/learners at Level 1 to 2 certificates. In 2016, the data shows that a relatively higher proportion of Maori students/learners were enrolled in Mixed field programmes, while Pasifika had high enrolments in Mixed field programmes and Agricultural and environmental studies. High proportions of Europeans were enrolled in Engineering and related technologies, and the Asian group had relatively high numbers of students/learners in Society and culture.

Between 2011 and 2016, both the European and Māori ethnic groups showed an increase in the proportion of students/learners in Mixed field programmes, with Europeans showing a decrease in the proportion of those studying Health, and Maori a decrease in Society and culture. Pasifika showed an increase in the proportion of students/learners in the field of Agriculture and environmental studies. In the Asian ethnic group there was an increase in the proportion of students/learners in Society and culture and Engineering and related technologies, while there were decreases in the proportions in the fields of Food, hospitality and personal services.

At Level 3 to 7 certificates/diplomas, in 2016 Māori had relatively high proportions of students/learners in Society and culture (see Figure 10). Pasifika had relatively high proportions of students/learners in fields such as Management and commerce. Asians had relatively high proportions of students/learners in the fields of Management and commerce. Europeans had relatively high proportions of students/learners in Engineering and related technologies.

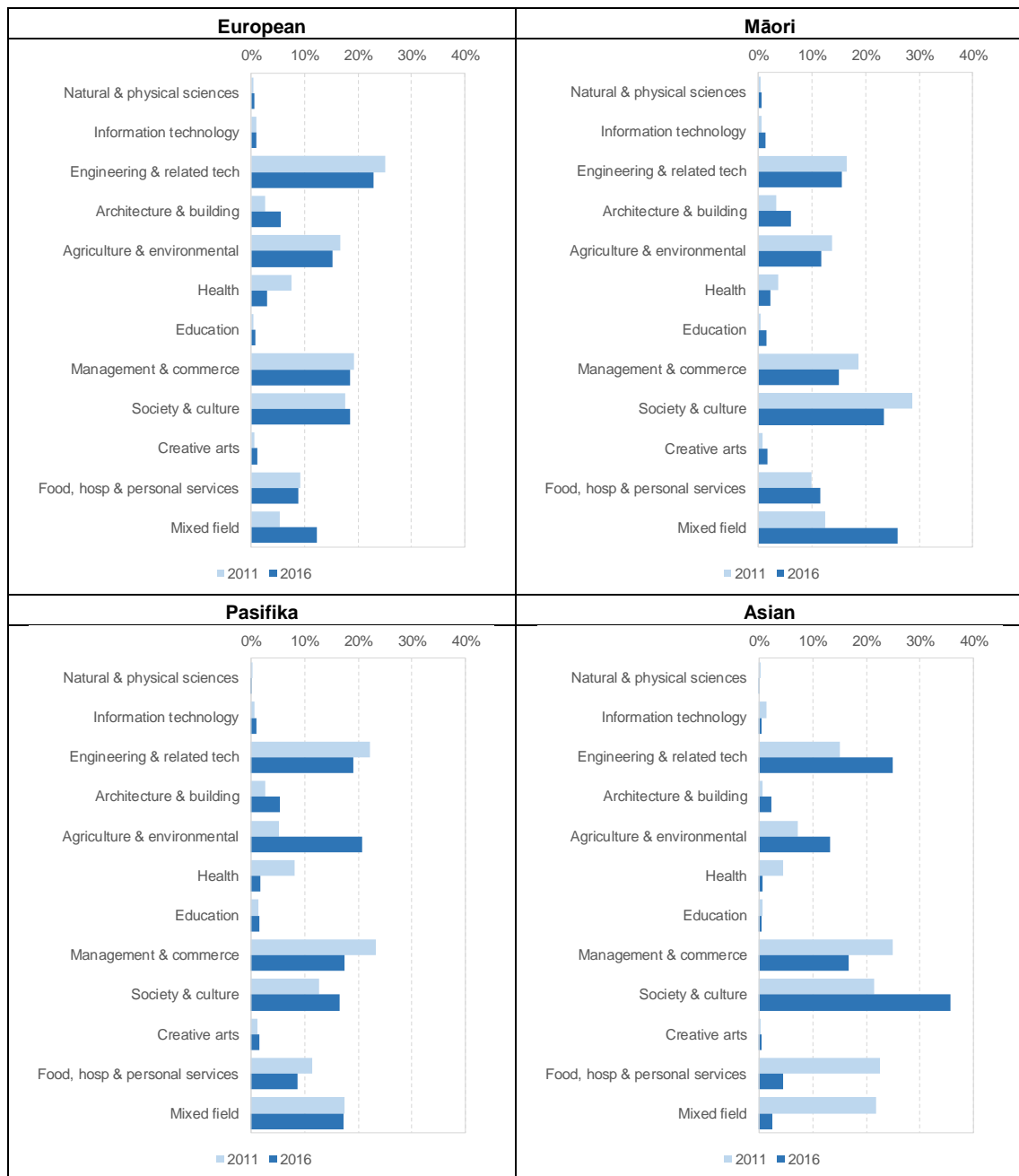
Between 2011 and 2016, there was a decrease in the proportion of Māori students/learners in the field of Society and culture, and a decrease in Management and commerce. Pasifika showed an increase in the proportion of students studying in Architecture and building and Engineering and related technologies, while showing a decrease in Management and commerce. The Asian ethnic group showed an increase in the proportion of students/learners in Agriculture and engineering, with decreases in the proportion in Information technology, Management and commerce and Society and culture. In the European ethnic group there was an increase in the proportion of students/learners in Architecture and building and a decrease in Management and commerce.

At bachelors or higher level, Figure 11 shows that in 2016 the Māori and Pasifika ethnic groups had relatively high proportions of students/learners in the fields of Society and culture. The Asian ethnic group had relatively high proportions of students/learners in Natural and physical sciences, Information technology, and Engineering and related technologies. Europeans had a relatively high proportion of students/learners in Society and culture and Creative arts.

Between 2008 and 2016, there was increase in the proportion of Maori students/learners in Health and a decrease in Society and culture, with the Pasifika ethnic group displaying a similar pattern. Asian showed an increase in the proportion of students/learners in Health and Engineering and related technologies, with decreases in Management and commerce and Society and culture. As with the Asian ethnic group, Europeans showed an increase in the proportion of students/learners in Health and Engineering and related technologies, with a decrease in Society and culture.

Figure 9

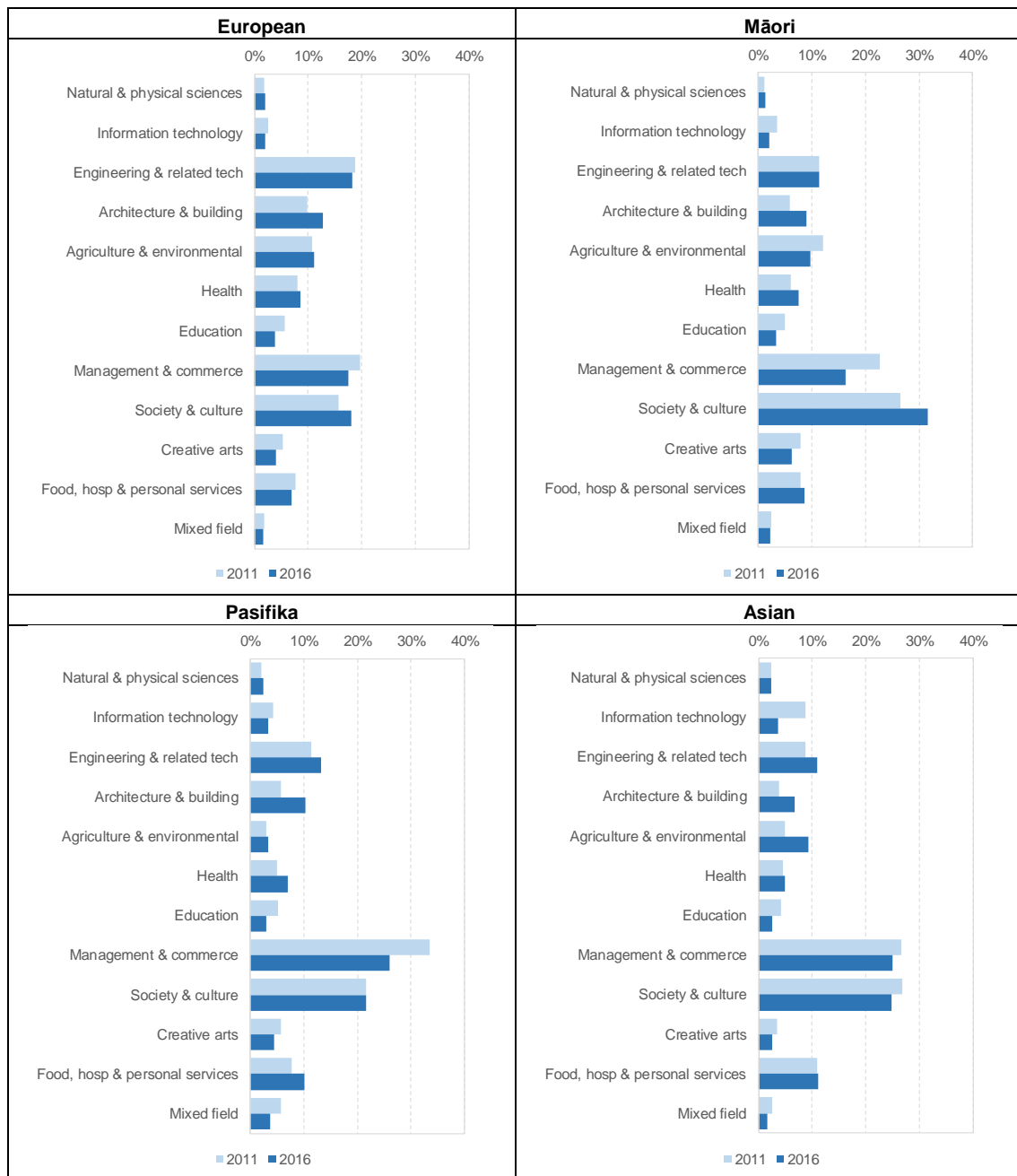
Distribution of domestic students/learners by ethnic group and broad field of study – Level 1 and 2 certificates



Note: In 2016 there were 36,400 Europeans enrolled in Level 1 and 2 certificates; 23,500 Māori; 10,100 Pasifika; and 9,060 Asians.

Figure 10

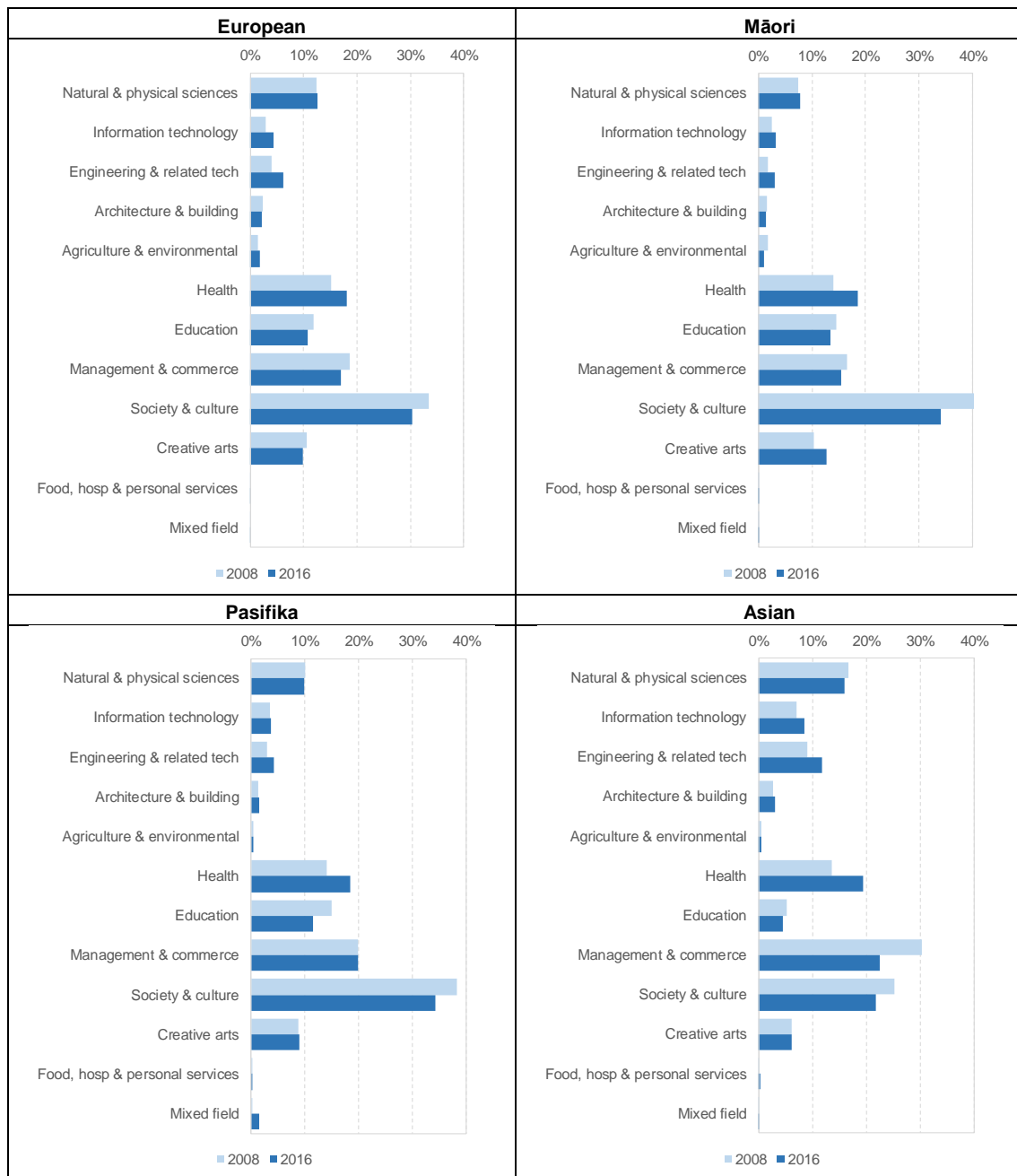
Distribution of domestic students/learners by ethnic group and broad field of study – Level 3 to 7 certificates/diplomas



Note: In 2016 there were 147,000 Europeans enrolled in Level 3 to 7 certificates/diplomas; 60,700 Māori; 23,600 Pasifika; and 23,700 Asians.

Figure 11

Distribution of domestic students/learners by ethnic group and broad field of study – bachelors or higher



Note: In 2016 there were 121,000 Europeans enrolled in bachelors or higher level qualifications; 23,900 Māori; 14,700 Pasifika; and 31,900 Asians.

Age group

In this section we examine the percentage of students/learners aged under 25 years of age across narrow fields of study. We focus on the data in 2016 and also compare that data to earlier years. We use the same three broad qualification levels as in the previous chapters (Level 1 and 2 certificates, Level 3 to 7 certificates/diplomas, and bachelors or higher).

In 2016, 40 percent of students/learners in Level 1 and 2 certificates were aged under 25 years, 34 percent of students/learners in Level 3 to 7 certificates/diplomas were aged under 25 years, and 59 percent of students/learners at bachelors or higher level were aged under 25 years.

Figure 12 shows that in Level 1 to 2 certificates, in 2016 students/learners aged under 25 years dominated fields such as Tourism (100 percent) and Personal services (84 percent). The lowest proportion of students/learners aged under 25 years were in the narrow field of Other engineering and related technologies (8 percent).

Between 2011 and 2016, the largest increase in proportion of students/learners aged under 25 years was in the narrow field of Mathematical sciences (from 31 percent in 2011 to 67 percent in 2016) and the largest decrease was in Other information and technology (from 100 percent to 44 percent).

Figure 13 shows that in 2016, Level 3 to 7 certificates/diplomas, the highest proportion of students/learners aged under 25 years were studying in fields such as Physics and astronomy (79 percent) and Personal services (75 percent). The lowest proportion of students/learners aged under 25 years of age were in fields such as Banking, finance and related fields (6 percent) and Justice and law enforcement (7 percent).

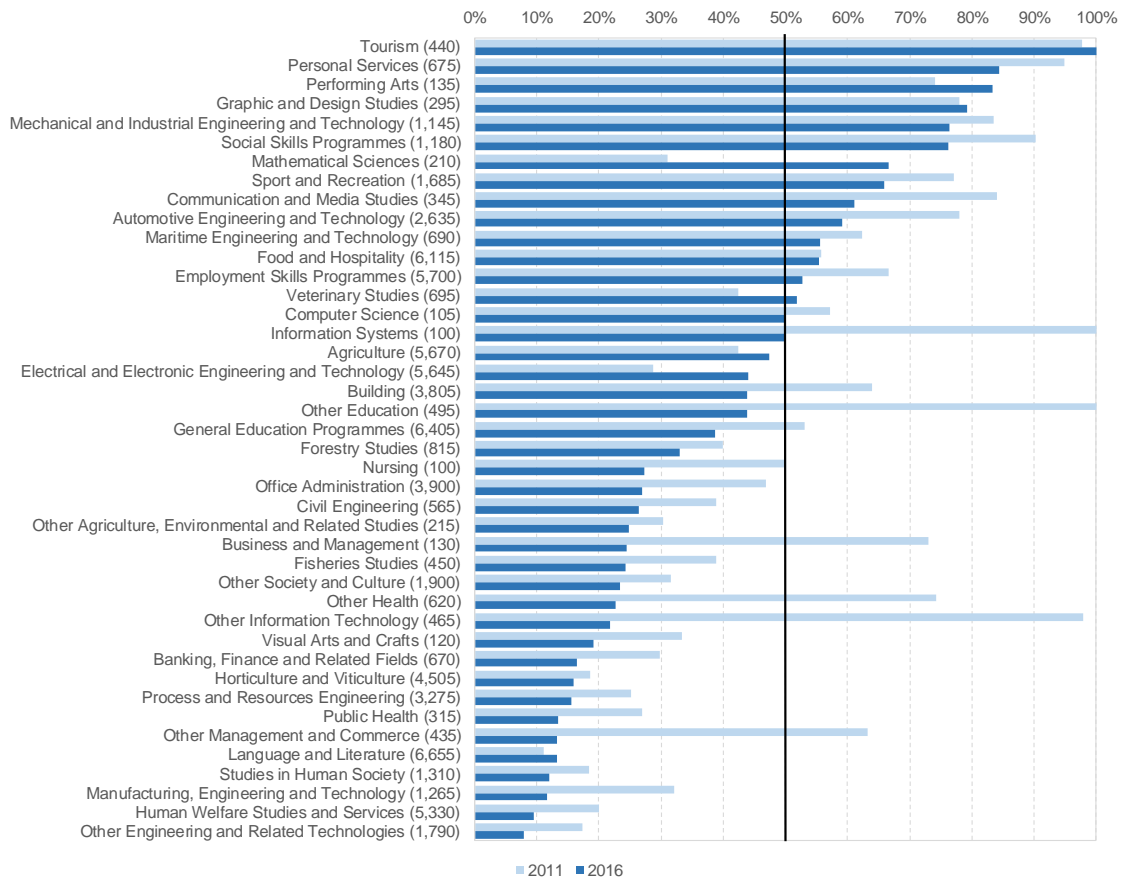
Between 2011 and 2016, the largest increase in the proportion of students/learners aged under 25 years was in the narrow field of Maritime engineering and technology (from 35 percent to 48 percent) and the largest decrease was in the narrow field of Political science and policy studies (from 46 percent to 27 percent).

At the bachelors or higher level, Figure 14 shows that in 2016 the largest proportion of students/learners aged under 25 were in fields such as Other engineering and related technologies (89 percent) and Geomatic engineering (87 percent). The fields of study with the lowest proportion of students/learners aged under 25 years were Other education (5 percent) and Librarianship, information management and curatorial studies (9 percent).

Between 2008 and 2016, the largest increase in proportion of students/learners aged under 25 years was in the field of Other information and technology (from 37 percent to 48 percent) and the largest decrease was in the field of General education programmes (from 86 percent to 42 percent).

Figure 12

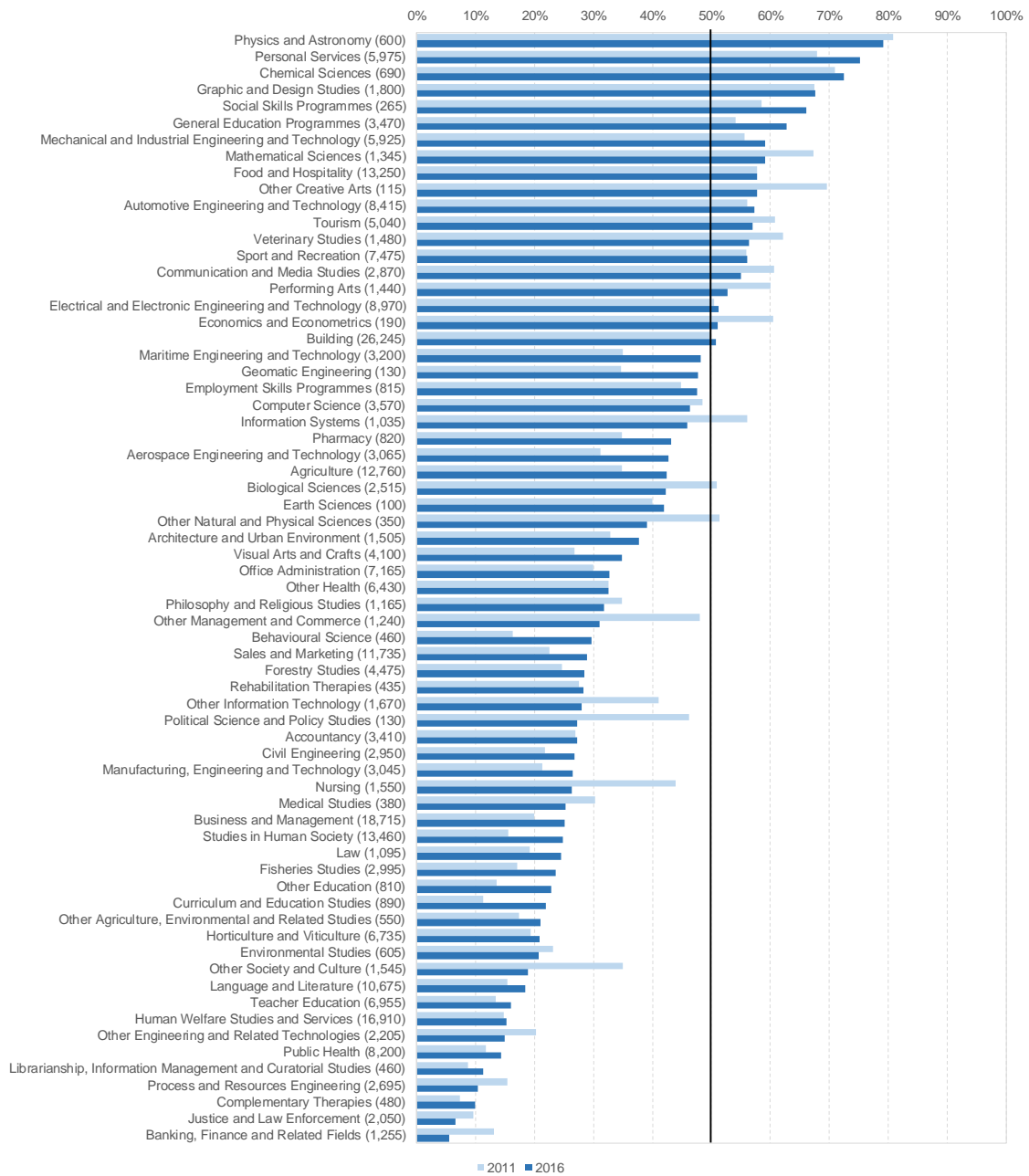
Percentage of domestic students/learners by age group and narrow field of study – Level 1 and 2 certificates



Note: The numbers in brackets after the name of the field show the number of students/learners in that narrow field in 2016.

Figure 13

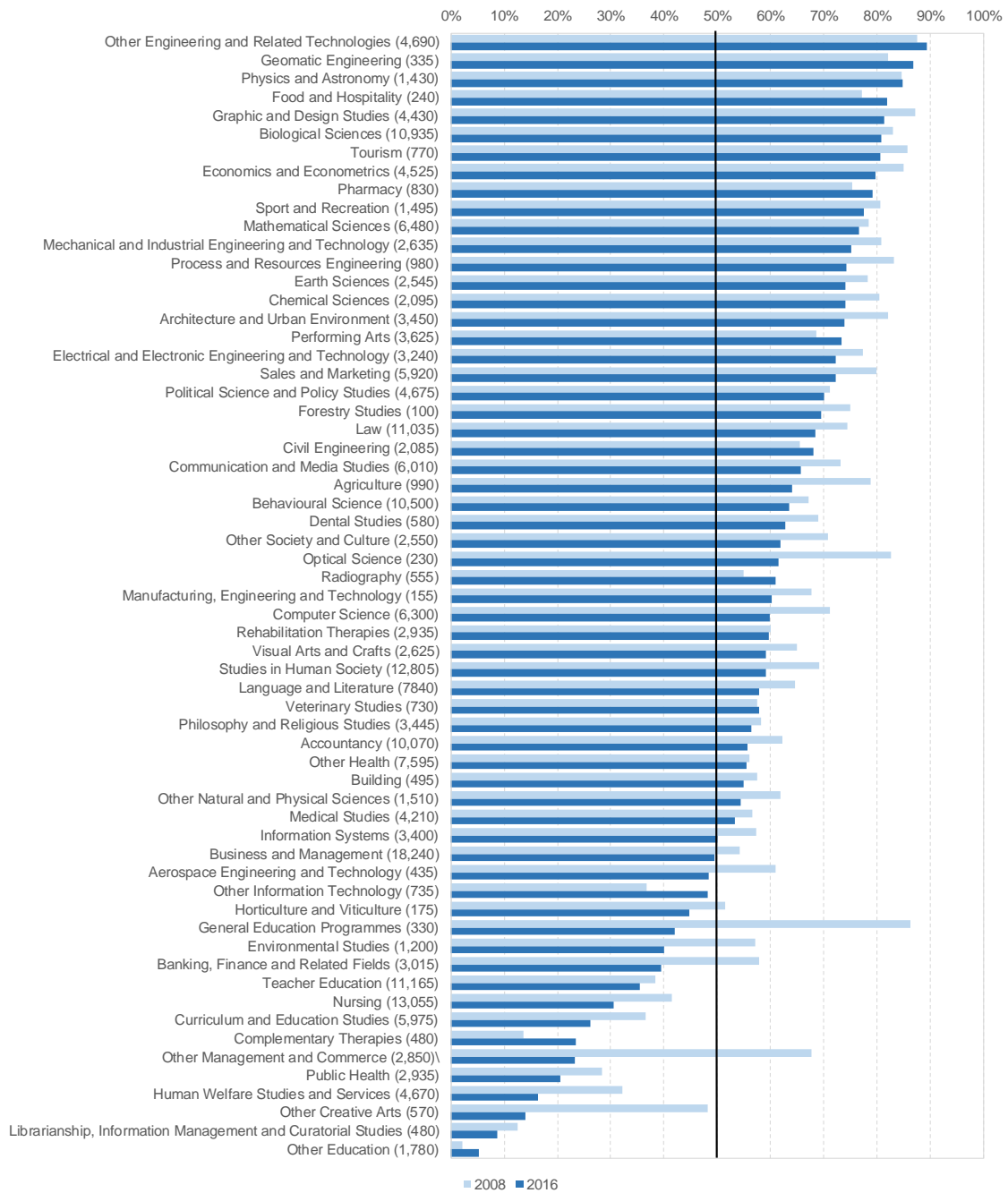
Percentage of domestic students/learners by age group and narrow field of study – Level 3 to 7 certificates/diplomas



Note: The numbers in brackets after the name of the field show the number of students/learners in that narrow field in 2016.

Figure 14

Percentage of domestic students/learners by age group and narrow field of study – bachelors or higher



Note: The numbers in brackets after the name of the field show the number of students in that narrow field in 2016.

6 TECHNICAL NOTES

Year of study

In the field of study profiles, we report the number of students/learners starting a qualification in that year, as well as all students/learners in that year. Deriving the starting year of enrolment is sometimes difficult, however. In some cases, tertiary providers have changed the qualification code in the administrative data supplied to the Ministry of Education, although, essentially the students are enrolled in the same programme of study. Without adjustment, this would overstate the true number of students starting a qualification.

To adjust for these cases, we track students at the same provider and same level of qualification. If a student changes from one qualification to another, and if both qualifications are at the same provider and level of study, and if the qualifications have the same detailed NZSCED at the qualification level, then we treat it as the same programme of study; we would not consider that student to be starting another qualification.

Also, some providers have introduced a new qualification in response to changes in industry requirements (for instance, providers changing engineering qualifications from bachelors to honours level). In these cases, we treat students enrolled in those qualifications as being in the same qualification.

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