



Botany Downs Secondary College



Overview

Country or Region: New Zealand

Industry: Education

School Profile

Botany Downs Secondary College is located in Botany Downs, an eastern suburb of Auckland, New Zealand.

Number of Students: 1,742

Gender: Mixed

Age Range: 13-18

School Leader: Michael Leach

School Website: www.bdsc.school.nz

Botany Downs Secondary College has been selected to be part of the Microsoft Innovative Schools World Tour. Its approach to education is a showcase example of the following Innovation Topics:

- 1. Physical learning environments.** Focus on physical spaces, seating, and atmosphere to encourage collaboration, creativity, and learning.
- 2. Personalized learning environments.** Use of systematic continuous assessment to change the course of student learning and for remediation.
- 3. Professional learning communities.** Technology and programs that support collaboration among teachers and their peer groups in other schools.



“Microsoft as an organization raises educational benchmarks and challenges our staff and students to work outside comfort zones, always pushing for superior outcomes. The Microsoft innovative schooling project has been an inspiration for our college and its community. It sets expectations around raising student achievement through the development of programs that give us access to skills, knowledge, and processes that are easily embedded in our curriculum. We are fortunate to have been part of the Microsoft family.”

Michel Leach, Principal, Botany Downs Secondary College

Botany Downs offers a highly visible environment, featuring glass walls and open spaces, which supports innovative learning strategies.

Physical learning environments

Botany Downs Secondary College (Botany Downs) is, by design, an innovative learning organization. The classrooms are built around a centralized shared space so that students can learn from a teacher, in groups, or by using technology; this supports individualized learning plans and activities. The structure encourages students to learn collaboratively and provides an environment where they can work individually or with their teacher.

For teachers, the highly visible design enhances the opportunity to share good practices and encourages professional dialogue. This supports innovative learning strategies, modelling good teaching and creating a community of support.

Key Technology

- Students have access to both fixed and mobile HP Envy and HP Pro books both in the classroom and in shared common spaces.
- Wireless access is provided throughout the school campus to ensure ease of access, especially for those students who prefer to bring their own devices.
- The learning infrastructure includes a range of technologies, such as data projectors, a 3-D printer and scanner, interactive whiteboards, and access to ultra-fast broadband. Technology is

embedded in the building with the use of AMX (technology control device for teachers in classrooms), wireless devices, mood lighting, touchscreens, and video walls.

Personalized learning environments

The Botany Downs philosophy encourages students and teachers to reflect on their actions and to set goals and targets to improve their performance. The school's Building Learning Power Program and Mentoring Programs promote metacognition over the five years while reflection activities and goal-setting help support the academic focus.

Timetables allow students to personalize courses to their individual needs and aspirations. Teachers personalize learning for individual students by having a curriculum that enables the students to work at their own pace toward the co-constructed set of outcomes. This may involve a range of strategies including:

- Differentiation
- Use of literacy and numeracy strategies
- Collaboration
- Team or group work
- Peer review
- Peer assessment
- Use of appropriate technologies
 - Quality formative learning processes

Key Technology

Botany Downs makes extensive use of its Student Management System in the administration of assessment and pastoral records of students, including electronic attendance and the development of student timetables. The collection and collation of data and its use to inform decisions is extensive. Academic and pastoral data is shared with the mentor (Teacher), student, and



Students follow a personalized-learning curriculum that enables them to work at their own pace toward a co-constructed set of outcomes.



also parents via the Parent Portal on their Learning Management System. Botany Downs also encourages students to use their own devices and to work collaboratively and cooperatively with a range of communities (local and global).

Professional learning communities

Botany Downs is focused on building teacher capacity through its professional learning program, especially by integrating the key ideas from the Partners in Learning survey tool. Botany Downs has aligned the concepts of the Partners in Learning toolkit with the principles outlined in John Hattie's book, *Visible Learning for Teachers*, and Viviane Robinson's book, *Student-Centered Leadership*.

The Botany Downs philosophy is based on professional learning communities where the inquiry model focuses on group discussion, pedagogical practice, and reflection. The curriculum, while aligned with the national curriculum, is innovative in its approaches and is consulted widely by existing teacher professional bodies to ensure they capture the essence of twenty-first-century learning.

Key Technology

- A new teacher assessment process (performance appraisal) was introduced

through Microsoft OneNote note-taking program. This enables teachers to use OneNote as a collaborative tool with their colleagues and classes.

- Teachers have signed on to the Partners in Learning Network, which provides quality online learning and reflective readings.
- Botany Downs has linked to the national Microsoft Road Warriors initiative to support teacher learning and the use of Windows 8 in the classroom.

Improving student outcomes

Botany Downs measures its academic success through the national qualifications, which allows for reflection. The community compares its academic results with other schools throughout New Zealand. It also compares itself with schools of a similar socio-economic status and context (i.e. urban-inclusive coeducational state schools).

Examples of these measures are rates of achievement, including merit/excellence in a standards-based system; rates of literacy and numeracy; university entrance rates; retention rates from entrance to final year; actual progression to university/polytechnic institutes; employment rates; tertiary qualifications gained; roll growth; number of out-of-zone enrollment requests; and more. The parent and student community surveys indicate that student engagement is enhanced through the current use of technologies:

- Senior students, including Māori and Pacific learners, achieve very well in national qualifications.
- The majority of students aspire to university and tertiary education.
- To further improve outcomes for students, the school has set targets to



For More Information

For more information about Microsoft in Education, visit:

www.microsoft.com/education/www/solutions/Pages/index.aspx

For more information about Botany Downs Secondary College, visit:

www.bdsc.school.nz

increase the percentage of endorsed certificates gained in NCEA.

- The school's 2012 annual report reflects the high level of student achievement. In NCEA Levels 1 to 3, students are achieving well above national averages and, in many aspects, their achievements are at or above schools of a similar type.
- In 2012, 84 percent of senior students achieved university entrance qualifications and gained 51 scholarship passes across a wide range of curriculum areas.

Driving leadership and a culture of innovation

Botany Downs prides itself on distributing leadership and giving students and teachers opportunities to lead innovative projects and pedagogical practices. Every teacher is a leader of learning in his or her own classroom and encouraged to take the next step in leading others and being responsible in activities and actions around the school.

Technology Infrastructure

