

# Nurturing the scientists of the future

**A science teacher shares her passion for educating our future innovators**

## SCHOOL

Rosehill College

## COUNTRY

New Zealand

## EP SUBSCRIPTIONS

English, Science, Social Sciences,  
Languages, Maths

## CURRICULUM

New Zealand

Rosehill College is a New Zealand co-educational state secondary school located in the Papakura area of Auckland. Alana Duckett, Head of the Science Faculty, talks about how Education Perfect helps her achieve her twin goals of inspiring students to love science and reassuring every child that they can have success in science.

Alana Duckett entered the teaching profession with a clear goal. After tutoring first year university science students whilst working as a researcher, she decided to switch careers and teach high schoolers, wishing to ignite their passion for further study, specifically science. Since 2017 she has pursued her ambition, enjoying building learning relationships with students and watching them transform from bright Year 9's to confident Year 13's, ready to continue their academic journeys.

Now Head of Faculty for Science, Alana is committed to providing a programme at Rosehill College that counteracts the preconceived notion that science is hard or boring. She endeavours to ignite a passion for the subject and to instil a belief in all students that they can succeed in science. Introduced to Education Perfect whilst training to be a teacher, EP has played an important role in the implementation of Alana's successful programmes at Rosehill.

## Igniting a Passion for Science

Alana grasped the potential for EP in the science classroom as a trainee teacher and it became an important part of how she does things, "We use EP at every level. At the senior levels, students have been using EP to prepare for external assessments. In Year 9 and 10, where we run courses that are very context-based such as Forensic Science, we have drawn from EP's extensive library of resources to create holistic programmes that support this approach. This helps both teachers and students immensely as there are no textbooks as such."

EP fosters a sense of engagement with science that Alana knows is key to encouraging students into further study, "When I set learning activities, the students will frequently ask if there is a task available on EP that meets the criteria. The EP tasks are really easy for students to follow. There's just the right level of content for them to read, it



assigns additional activities to help them with their learning, and they enjoy the challenge of answering the questions at the end. They often check the leaderboard and I think that encourages them to keep going so that they can get more points and beat their friend in class!”

## Instilling a Sense of Success

Alongside generating an interest in science, Alana uses EP to track students’ progress and to provide further support, either with further activities in EP or through one-on-one time with a teacher, “It takes less than five minutes to put a quiz together using EP’s question banks. As a faculty we are using EP for diagnostic assessments to see where students are at, based on New Zealand curriculum levels, and then via formative assessments monitoring how each student and every class progresses through a course.”

The insights have proven useful, with teachers quickly able to see if it is all classes, one class, or just a few students that are failing to understand a concept. Alana can then apply appropriate solutions to ensure students succeed. This may be professional development for teachers, adjusting the programme so that students can spend more time on an area that is proving challenging, looking again at the teaching and learning resources, or allocating time for small group work.



## Achieving the Literacy & Numeracy Standards

Success is not just limited to science. Tasked with preparing students for the new standardised literacy and numeracy tests, Alana and her team have also relied heavily on EP’s cross-curricula insights, “As science teachers many of us don’t have backgrounds in specific literacy and numeracy teaching, and we have been able to use EP to assess where the students are at and to assign follow up activities for further practice in areas where they are struggling. As

a result, many of our students have seen really great success this year in achieving those standards.”

## The Potential of Artificial Intelligence

Alana is excited about EP’s next iteration and how that can further her goals, “I think there is so much that AI can do to support teachers. Our jobs have become much larger than planning lessons and delivering them to students. AI will give us the space to focus on the other areas that these days are key to student success.”

Rosehill College has trialled the new AI features in EP with senior classes. Both Alana and her students are very enthusiastic about the instant feedback, “As much as I try my best to give them an immediate response, it is impossible to go around every single student, reading long texts such as a biology essays, and give feedback that’s going to support them to make progress and improve their learning. The students have loved that they can write something, get that instant feedback and continue to work on it.”

“I constantly feel guilty that I don’t have the time to read everything and give the feedback that I’d like. I think having that responsibility almost taken off my shoulders and knowing that the kids are getting something really useful is a relief. I can put my energy areas into areas that AI can’t support or areas that require a personal touch.”

## Making More Scientists

At Rosehill College, science becomes an option in Year 12. For Alana, an annual highlight is hearing students who at the start of Year 11 were adamant that they were going to drop science, announcing that they are planning to pick up biology, chemistry, or physics, “I know in that moment that due to our programme they have discovered that success in science is important. That’s why I teach.”

With the exciting new technological developments in education providing more opportunities for teachers to support students to succeed, Rosehill College should be hearing this a lot more.