

Kindy Uplift Under - the Microscope - Magnification

RESTA Reptile Education & Safety Awareness Training Kindergarten Uplift Priority Area Adherence

RESTA has been providing reptile education and safety training in Australia for more than 15 years and is considered Queensland's premier reptile entertainment and education service. Our reptile safety presentations have been saving lives and delighting people of all ages for over 15 years; we are one of the longest-running snake shows in Queensland!

RESTA offers a range of educational programs tailored for kindergarten age and beyond, designed to complement existing curricula and bolster learning outcomes. These programs serve as valuable tools for educators to enhance their teaching strategies and delve deeper into subjects already covered. By utilising RESTA's resources, educators can pinpoint children's interests and leverage them to foster a love for learning.

Moreover, by consistently engaging with RESTA's programs, educators can cultivate trust and confidence in their teaching methods, as children become accustomed to familiar faces in their learning environment. The hands-on components of RESTA's workshops actively encourage exploration and facilitate experiential learning, aligning with the Queensland Kindergarten Learning Guidelines (QKLG) and the Early Years Learning Framework (ELF) outcomes.

RESTA's programs extend beyond traditional subject areas, encompassing STEM disciplines and other curriculum domains. By integrating these workshops into their teaching practices, educators can effectively address learning and development objectives outlined in both ACARA and QCAA frameworks. Additionally, RESTA offers tailored mapping for specific year levels, ensuring seamless integration with syllabus requirements.

Furthermore, RESTA plays a pivotal role in enhancing educator capability and fostering the acquisition of essential knowledge for teaching biology and scientific concepts including executive functioning and enhancing children's language & communication skills. Through comprehensive training and support, educators can expand their proficiency in delivering engaging and informative lessons, thereby enriching the learning experience for children.

As RESTA travels to various locations throughout the year, educators can take advantage of its accessibility and flexible packages to enhance their professional development and enrich classroom experiences.

The following pages and table identify how this program offered by RESTA adhere to the priority areas of the Kindergarten Uplift program and meet the Queensland Kindergarten Learning Guidelines.





Kindy Uplift Under - the Microscope - Magnification

Under the Microscope

RESTA's Under the Microscope workshop provides students with a captivating exploration of magnification, offering insights into the fascinating world of microscopic observation. Through interactive activities, participants learn about the concept of focusing on subjects for enhanced viewing, fostering curiosity and inquiry.

Utilising LCD screen microscopes, this workshop ensures ease of use and accessibility for students of all ages and capabilities.

In addition to indoor activities, outside discovery time is incorporated, providing opportunities for students to utilise microscopes and magnifying glasses to examine their surroundings. This hands-on exploration encourages engagement with the natural world, promoting a deeper appreciation for the unseen wonders around them, and enhancing children's connections to the natural environment.

Samples are carefully selected to highlight the transformative power of magnification, showcasing ordinary objects that reveal extraordinary details when viewed up close.

This incursion serves as a valuable opportunity for educators to enhance their capability and confidence in utilising technology to enrich learning experiences. By integrating digital microscopy into their teaching practices, educators expand their pedagogical toolkit, by being able to create with confidence dynamic and engaging lessons that cater to diverse learning styles.

Participation in Under the Microscope deepens educator knowledge about the unseen world, fostering a deeper understanding of microscopic organisms and structures. This newfound understanding enables educators to facilitate meaningful discussions and inquiries, promoting scientific literacy and critical thinking skills among students.

By engaging in microscopic exploration, both educators and students enhance their executive functioning skills, such as observation, analysis, and problem-solving. Additionally, language development is supported as students articulate their observations and findings, strengthening oral and written communication skills.

Aligned with the Kindergarten Uplift capability areas, Under the Microscope promotes culturally safe, inclusive, and responsive kindergarten programs by fostering curiosity and appreciation for diverse perspectives.

This workshop also contributes to social and emotional learning by encouraging collaboration, resilience, and curiosity. Physical engagement in microscopy activities promotes fine motor skills development, while the integration of mathematics and numeracy concepts enhances mathematical understanding and reasoning.

| Priority Area | How this is met | QKLG Outcomes Achieved |
|--|---|----------------------------|
| Culturally safe, inclusive, and responsive kindergarten programs Embedding Aboriginal and Torres Strait Islander perspectives | Children and educators develop knowledge around the importance of sustainability, caring for and connecting with country Children and educators learn about the unseen and | Identity Connectedness |
| Equity and Access for all | the importance of | |



| Priority Area | How this is met | QKLG Outcomes Achieved |
|-------------------------------|--|--|
| | acknowledging how the 'unseen' can impact our native flora and fauna Discussion of the importance of native species to country Children form connection with familiar faces entering their environment | Acmerea |
| | RESTA's Under the Microscope program also focuses on developing children's understanding of sustainability, caring for the environment, and connecting with country. Through the workshops, children and educators learn about the unseen aspects of our environment and how they impact our native flora and fauna. There are discussions around the importance of native species to country, which helps children develop a sense of connectedness and appreciation for the natural world. By engaging with RESTA's programs, children also form connections with familiar faces entering their learning environment, which can foster a sense of trust and community. | |
| Social and emotional learning | Children develop resilience in times of challenge Children learn to regulate their emotions with support from educators when in uncertain and challenging situations. Children form connections with a community organisation Children become aware of how their emotions can be triggered during an event | Identity Connectedness Wellbeing |



| Priority Area | How this is met | QKLG Outcomes Achieved |
|---------------|---|------------------------------------|
| | Children learn to adhere to expectations in a challenging social situation | |
| | RESTA's Under the Microscope program also focuses on developing children's emotional resilience and coping skills. Through the workshops, children learn how to regulate their emotions and handle challenging situations with the support of their educators. By forming connections with community organisations, children also gain a sense of belonging and learn about the importance of community involvement. During these events, children become aware of how their emotions can be triggered, and they learn to adhere to expectations in challenging social situations. These experiences help children develop resilience and the ability to navigate challenging situations with confidence and composure. | |
| Physicality | Children are supported to use their fine motor skills such as finger control, coordination, and strength to focus microscopes and change slides RESTA's Under the Microscope program also supports the development of children's fine motor skills, such as finger control, coordination, and strength. Children are encouraged to use these skills to focus microscopes and change slides, allowing them to explore the world around them in a hands-on and engaging way. By incorporating these activities into their learning, | 3. Wellbeing 4. Active Learning |



| Priority Area | How this is met | QKLG Outcomes |
|-----------------------|--|--|
| | children can develop essential motor skills while also expanding their knowledge and understanding of scientific concepts. | <u>Achieved</u> |
| Executive Functioning | Educators and children become aware of how their observation skills can impact their discoveries Children learn to pose questions Children link to prior experiences Children and educators expand their knowledge on how technology can enhance understanding of ecosystems, flora, fauna, etc. Children recall their learning and use to independently explore using technology (microscopes) Children share their learning with parents/caregivers and the local kindergarten community Children and Educators become aware of the importance of science and what science gives us, especially the use of microscopes. Educators become aware of how they can embed and use microscopes to enhance children's understanding of the world around them. It is important for educators | 3. Wellbeing 4. Active Learning 5. Communicating |
| | and children to develop their observation skills to enhance their discoveries. Through RESTA's Under the Microscope program, children learn to ask questions and link their experiences to their learning. Additionally, RESTA's workshops use technology, such as microscopes, to deepen children's | |



| Priority Area | How this is met | QKLG Outcomes Achieved |
|--------------------------|---|-----------------------------------|
| | understanding of ecosystems, flora, and fauna. By using microscopes, children can explore and recall their learning, and even share their discoveries with their parents and the wider kindergarten community. Educators also become more aware of the significance of science and how they can integrate the use of microscopes to enrich children's learning experiences. | |
| | Children and educators enhance and expand their vocabulary around science. Children challenge their listening and responding skills Children and educators pose questions and answer them Children share their thoughts and ideas with others | |
| Oral Language & Literacy | RESTA's educational Under the Microscope program enhances children's vocabulary around science, challenges their listening skills, and encourages them to share their thoughts and ideas. The workshop encompasses STEM disciplines and content, supporting educators in developing confidence in delivering engaging STEM focused lessons to the children. | Active Learning Communicating |
| Mathematics & Numeracy | Children use positional language to complete activities | Active Learning Communicating |