



# QuickSmart in a Nutshell

- ✓ Evidence-based
- ✓ Proven outcomes
- ✓ Australia-wide
- ✓ Ready-to-use resources
- ✓ Accredited professional development

The low-achieving students in middle school continue to decline as they progress through their schooling.

Students who experience ongoing failure in upper-primary and lower-secondary school face a myriad of difficulties in pursuing post-school options and contributing to society through employment and aware citizenship. Those who exhibit consistent weaknesses in basic skills, such as the recall of number facts, or who experience difficulty with reading and comprehension are particularly vulnerable. These students are usually caught in a cycle of continued failure, as it is particularly difficult to bring about sustainable change within the usual classroom environments for students who by Year 4 are persistently at or below national benchmarks.

Well-documented evidence reports a substantial systemic decline in achievement for vulnerable students in terms of reaching National Australian Benchmarks from Year 3 to Year 5 and on to Year 7 and Year 9. Data from national assessments e.g., NAPLAN, underpin a compelling case for the need to develop instructional programs that improve the

numeracy and literacy outcomes for Australian students performing in the lowest 30% of the achievement spectrum – students performing at or below the national numeracy/literacy benchmarks.

Many Indigenous and geographically isolated students, and students from families within the low socio-economic range, are particularly in need of support. This consistent low-equity feature of Australian education was a catalyst for the development of *QuickSmart*.

*QuickSmart* is available in two separate programs - Numeracy and Literacy.

QuickSmart programs offer students a second (or last?) chance to become active and confident learners in the classroom. Improving speed, accuracy and understanding of basic mathematics or reading accuracy, vocabulary knowledge and comprehension performance enables the students to perform at levels comparable to those of their average-achieving peers.

# The QuickSmart Pedagogy Explained

The pedagogical approach adopted within *QuickSmart* is considered at three levels:

- 1. as an intervention program that withdraws students from their classes in pairs for three 30-minute lessons a week for a recommended total of 90 lessons or more:
- 2. within *QuickSmart* lessons where instruction builds on the existing knowledge and understanding of students, encourages self-belief through providing genuine quantifiable success, and focuses on developing and practising essential foundational skills in basic mathematics or literacy; and
- 3. through providing an extensive professional learning program that equips teachers to competently coordinate and teacher assistants to instruct, provide feedback and monitor student performance during *QuickSmart* lessons.

Within *QuickSmart* lessons, the emphasis is on targeted instruction and subsequent student performance that is linked to success. *QuickSmart* provides extensive support materials, including a variety of hard copy and electronic teaching and learning resources. Use of the computer-based Cognitive Aptitude Assessment System (OZCAAS) is incorporated into each lesson as formative assessment and as a motivating activity. In a typical *QuickSmart* lesson students are engaged and on task for the full 30 minutes.

QuickSmart programs in schools are supported by a program of professional learning directed at principals, senior school executives, teachers, and teacher assistants. For example, in the first year of QuickSmart instructors participate in six days of professional learning where they practise using specially constructed teaching materials and computer-based resources. Professional learning workshops also explore ways to encourage students to demonstrate a 'can do' attitude and the confidence to 'trust their heads'.



- ★ Research data collected from over 60,000 *QuickSmart* students
- **★** QuickSmart consistently delivers



Students work in pairs with one instructor for thirty minutes at a time, three times a week

# Research Outcomes

Independent assessments (federal, state-wide or standardised tests) gathered from *QuickSmart* and comparison students over thirteen years consistently show that *QuickSmart* students make substantial academic improvement. Research data collected from over 60,000 *QuickSmart* students across Australia report:

- effect-size results of 0.60 to 0.94 translate into very strong to substantial improvement when compared to the gains made by average-achieving students. (An effect size of above 0.4 is desired);
- substantial improvement on standardised test results in the first year of implementation that increases, and sometimes doubles, during the second year of implementation as schools and instructors become more experienced;
- academic gains are maintained or enhanced in subsequent years; and
- Indigenous students receive great benefit from the program, with their results mirroring those of non-Indigenous students, and reports indicating increased student engagement in class and improvements in school attendance.

Verbal and written comments from principals, teachers, teacher aides and parents confirm the positive impact of the *QuickSmart* programs.

"The majority of QuickSmart students achieved fantastic academic results, some advancing three bands in the Basic Skills tests."

# Frequently Asked Questions

- One instructor
- > Two students
- > Three lessons per week
- Thirty minutes each lesson
- > Thirty weeks of instruction
- Lesson structure provided
- Progress at the students' pace

## When do we start QuickSmart?

Most schools are able to begin *QuickSmart* instruction within about two to three weeks of the completion of the first two-day workshop. Time is needed to prepare the room, select and pair the students, develop a timetable, inform the staff and parents, and undertake an assessment of all *QuickSmart* students as part of pre-test data collection. Pre-test data also helps establish where *QuickSmart* instruction might most appropriately start for each student.

# When do we finish QuickSmart?

We recommend that students receive a minimum of 90 lessons of *QuickSmart* instruction. When delivered three times a week, this is 30 weeks of instruction. More time needs to be allowed to make up for usual school disruptions, like excursions and illness. It takes about two weeks to close the program down at the end of the year.

# What happens if a student requires two years' support?

For most students 90 lessons is sufficient time to complete *QuickSmart*. However, there are some students who may require additional help and, hence, a second year of instruction. The data thus far show that those students who do require a second year usually improve at a far greater rate during the second year than was the case in the first year.

## What staff time is involved in QuickSmart?

For 12 students the staff commitment of a *QuickSmart* Instructor is a minimum of ten hours a week, i.e., 6 pairs x 3 lessons x 30 mins = 9 hours, plus one hour for preparation. Some time allocation for the *QuickSmart* Coordinator is also necessary, unless it is built into the expectations of their roles, as in the case of a Head of Department AP/DP/Principals.

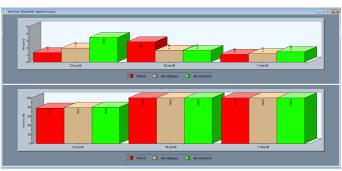
There is no maximum number of students that a school can select for *QuickSmart* in any one year. It is recommended that a minimum of 12 students (6 pairs) undertake *QuickSmart* in order to provide an adequate sample size for data analysis. It is acknowledged, however, that in small schools this number is not possible.

# What does the school need to run QuickSmart?

A room or private area set aside for *QuickSmart* lessons must include at least one workstation. A workstation involves a desk, three chairs, shelving for worksheets and student folders, storage space for the games pack and resource kit, and a PC computer. Some schools have accommodated five workstations in a traditional classroom. In such cases, ten students and five *QuickSmart* Instructors would be working at any one time. Some schools also include a white board for extended activities and wall display space to celebrate student success.

# What are the IT requirements for QuickSmart?

QuickSmart requires one PC desktop or laptop computer to run. You will be supplied with a three-year software licence for the OZCAAS software. OZCAAS is used for the pre- and post-testing of students as well as for one lesson component in the QuickSmart lesson. The program allows the teacher and the student to monitor progress and helps determine when students are ready to move forward in the program.



The OZCAAS software provides detailed graphs on students' progress. This information is available and visible to both the instructor and the learner after each session.

## What other expenses would be expected?

Photocopying of worksheets is necessary, as is the purchase of a student folder for each student. Schools are supplied with one microphone. The purchase of additional microphones if using more than one workstation is at the school's own expense. There may also be some costs associated with promotion of *QuickSmart* to parents and the wider school community.

# Who makes up the QuickSmart team in a school?

The Principal or AP/DP/Head of Department provides overall oversight of the program.

A teacher takes on the role of *QuickSmart* Coordinator and manages the day-to-day issues, as well as mentors *QuickSmart* Instructors, prepares the *QuickSmart* timetable, supervises the pre- and post-testing, facilitates communication of student progress with class teachers, and assists with the reports about the implementation of *QuickSmart* delivered to the second and third workshop. It is valuable if this person is able to instruct a pair of *QuickSmart* students.

QuickSmart Instructors provide the lessons to students, monitor their progress and trouble shoot with the QuickSmart School Coordinator. Instructors are drawn from staff across the school, however, currently about 75-80% of QuickSmart Instructors are teacher assistants.

# What are the professional learning demands on staff?

The *QuickSmart* professional learning involves six days made up of three two-day workshops in the first year of implementation. Workshop 1 is typically held in Term 1, and Workshops 2 and 3 are conducted at three to four month intervals after the preceding workshop. Advanced-skills *QuickSmart* training

- Up to five staff attend training
- Training locations determined by demand
- Training offered to both teachers and teacher assistants
- NESA accredited training (NSW) for teachers

## Where can we attend training?

QuickSmart is a not-for-profit program and every attempt is made to look for savings for schools implementing the Numeracy and/or Literacy programs. For this reason, schools from the same geographic regions/areas are organised to form a cluster. This spreads the cost of the program and means that the financial burden on individual schools is contained. Locations vary from year to year, depending on numbers.

# Who should attend the training?

The focus on aspects of quality teaching and neuroscience in education means that there are insights available for all educators committed to



While one student works on an independent worksheet or does independent reading, the other student completes the OZCAAS computer assessment with the instructor.

improving student learning. It is critical that those people expected to assume the roles of *QuickSmart* Coordinator and *QuickSmart* Instructors attend all professional development workshops. Teachers, teacher assistants/paraprofessionals and specialist teachers can act as instructors. School executive staff are strongly encouraged to attend Workshop One to familiarise themselves with the support requirements of the program and equip themselves to enhance the effective implementation of the program.

# How many staff should I send to the PD?

Schools are invited to send up to five staff members to the professional development series, with a minimum of three highly recommended. Additional places may be offered depending on the total number of participants and the capacity of the workshop venue. Please note that *QuickSmart* Instructors in your school do not have to be qualified teachers.

# Is there recognition for the PD workshops?

All staff members who successfully complete the *QuickSmart* workshops are awarded a *QuickSmart* Certificate. We also provide extensive documentation of the teaching standards addressed for executive staff and teachers, and documentation of the professional competencies addressed is detailed for teaching assistants and paraprofessionals.

"QuickSmart has had a huge effect on our daughter's performance at school – most notably the Basic Skills results. In Year 3 she was in the bottom 30% of the state. This year, in Year 5, she was in the top 30%."

#### What resources are included?

Every school that signs up for *QuickSmart* will receive a resources kit, a three-year *QuickSmart* OZCAAS software licence, access to online worksheet generators, folders containing master copies of all resources, and access to printable resources online (including flash cards),

"I definitely got better at maths.

QuickSmart still helps with maths
even though I'm in the bottom class,
I'm one of the smartest there."

- QuickSmart Student



All flash cards come in their own boxes according to operation/level.

## What support is available to schools?

### **Annual Reports**

QuickSmart schools are invited to submit pre- and post-test program data for QuickSmart and comparison students to SiMERR for analysis. Each school then receives an annual report detailing the performance of students as a group. The report includes program-specific tests and standardised tests measuring improvement (e.g. speed and accuracy from pre-test to post-test intervention).

# HelpDesk - Educational and IT Support

SiMERR offers educational program support by phone and email, from 9am-5pm (EST) five days a week. IT support for the software aspects of *QuickSmart* is also available.

## **Online Resources and Private Area**

Each school that signs up for *QuickSmart* will receive full access to all online resources, which include additional texts for Literacy, a worksheet generator for Numeracy, resources from other schools that are shared, links to educational websites, and printable copies of all folders and flash cards.

# QuickSmart earned recognition of national impact by the Australian Research Council in 2018 and received the HTB Harris award from the Australian College of Educators in 2020

The Australian Research Council (ARC) undertook the 2018 assessment of the research conducted by all Australian universities, ranking them 'low', 'medium' or 'high' across three indicators: 'engagement', 'impact' and 'approach to impact'.

The process for analysis involved the presentation of case studies that showcased the benefits research programs have delivered to the broader community and the economy. Each submission from an Australian university to the ARC was limited to a single case study for each broad field of research. The Education case study submitted by the University of New England (UNE) detailed the *QuickSmart* program.

The national **Engagement and Impact** 2018 assessment, evaluated three key facets associated with impact of university-based research between 2011-2016:

- Engagement the interaction between researchers and research end-users outside of academia, for the mutually beneficial transfer of knowledge, technologies, methods or resources.
- Impact the contribution that research makes to the economy, society, environment or culture, beyond the contribution to academic research.
- Approach to Impact the mechanisms used to encourage the translation of research into impacts beyond academia.

Only four universities in Australia received a ranking of 'high' across each indicator for Education and we are proud that *QuickSmart* achieved this ranking.

In 2020, QuickSmart was awarded the HTB Harris Award for an innovative program that has proven to successfully fulfil an educational need or problem over time by the Australian College of Educators.

The *QuickSmart* program shows low-achieving middle school students who complete the program consistently achieve up to three years of academic growth over the normal course of the program.

Professor John Pegg said: "The idea of *QuickSmart* is that if at-risk learners are given a genuine second-chance to succeed, the results can be life-changing. Many tens of thousands of learners in Australia can now testify that this statement is true for them."

# QuickSmart Products and Prices

The initial purchase of one of the *QuickSmart* programs costs the following:

PRICING OF THE <i>QUICKSMART</i> PROGRAMS		
	SCHOOLS WITH OVER 100 STUDENTS (total enrolments)	SCHOOLS WITH UNDER 100 STUDENTS (total enrolments)
NUMERACY PROGRAM	\$10500	\$7000
LITERACY PROGRAM	\$10500	\$7000

#### PRICES EXCLUDE GST

Included in the price: *QuickSmart* kit, all folders and user guides, all online resources, three-year OZCAAS software licence, IT-support, educational support and professional development training for up to 5 staff members for six days in total over the first year.\*

# How to Sign Up for QuickSmart

**Step 1:** Decide if you would like to start *QuickSmart* Numeracy, Literacy, or both.

**Step 2:** Go to our Workshop Calendar on our website and choose a location that suits you for training.

**Step 3:** Register for the program and the training session by filling in the *QuickSmart* order form.

**Step 4:** You will be sent all relevant information that enables you to participate in the workshops.

**Step 5:** Your school attends Workshop One over two consecutive days in February/March. You will be given your flashcard kit and other resources to take back to your school. You will then be able to start implementing the program.

**Step 6:** Your school attends Workshop Two over two consecutive days in August/September.

**Step 7:** Your school attends Workshop Three over two consecutive days in October/November.

**Step 8:** You will receive your *QuickSmart* training certificate once you have completed your six days of professional development.



"My students have made great strides while participating in the QuickSmart Numeracy program. It really is a great program and the children themselves appreciate seeing their own progress."

<sup>\*</sup>Additional cost at a pro-rata, cost recovery basis: Contribution towards venue hire and catering costs in the amount of \$25 per person per day.

