Australian Government Department of Education
More Support for Students with Disabilities 2012-2014

Evaluation Case Study

Distinctive Schools supporting learning technology innovations

MSSD Output 3: Developing support centres

Department of Education
Western Australian

Distinctive Schools supporting learning technology innovations

Abstract

The Distinctive Schools model initiated by the Department of Education (DoE) Western Australia includes support centres offering networks to address diverse educational needs of students with disability. They provide expertise and project leadership to groups of other schools that may not have this expertise. This case study describes the approach of an Education Support Centre (ESC) — a Distinctive School — working with Partner Schools in metropolitan and regional Western Australia. The approach adopted is a model for enabling students with disability to participate fully in the Australian Curriculum with tablet technology, predominantly working up to and within the achievement standards of Foundation to Year Two for Mathematics.

Key elements and actions

The case study Education Support Centre (ESC) Assistive Technology Project aimed to provide an engaging approach to addressing student learning needs with professional support in building staff competence and confidence to encourage local planning and implementation in partner schools. The initial impetus came from a combination of local technology expertise and a desire to enhance curriculum differentiation by improving outcomes through iPad support and strategic applications (apps). It addresses the phased implementation of the Australian Curriculum for all schools and the implications for students with disability.

Early trials as action research

Early trials undertaken as an action research project through the Education Support Schools Network, found students tended to be more effectively engaged by the excitement of the technology as well as strategic adjustments to learning programmes that staged specific targets in achieving an overarching outcome. The school examined each sub-strand within each of the National Curriculum Foundation Level 2 content areas, aligning specific apps to every outcome.

External professional learning support was provided by an Apple Distinguished Educator who also had a background as a special needs teacher. The focus was on iPad use and related technologies with the ESC Principal, twenty teacher project coordinators and seven assistants. Additional support was developed with online closed group social media. This allowed project staff to access information on successful apps and track software to monitor student achievement. Applications were initially trialled on twenty students to ensure they effectively accessed the curriculum. The ESC project team also provided on site professional learning by sharing the excitement of their explorations, showcasing successful apps and demonstrating the ease with which the technology may be used.

The action research project matured over a two year period with successful implementation and outcomes. From observations and specific assessments of student learning and engagement, the project team and teachers overwhelmingly cited notable student improvements in both participation and outcomes.

The final stages of the case study trial coincided with the MSSD initiative. As part of DoE MSSD implementation schools were invited to:

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- identify what they were doing well

- consider whether local practice could be adapted or shared with other schools

- consider applying to become a Distinctive School and share their expertise with other schools.

From their action research the ESC knew its iPad project was a distinctively successful programme making a significant difference to customising learning and student engagement. The ESC Project Team then decided they should target mainstream schools lacking expertise to make teaching and learning adjustments for the students with disability. Mainstream teachers have such wide and varied roles and ESC had the capacity to support them with resources that are easy to understand and use.

Working with Partner Schools

The ESC successfully applied to become a Distinctive School and its project success was already well known by many interested schools keen to access support. Fourteen Partner Schools linked to the ESC Project Network — seven metropolitan and seven regional — and initially focused on helping teachers understand how to develop effective student progress as well as how to access the product replicate it in their classrooms.

Following discussions with each Partner School the ESC established a database of identified needs for each school, and their level of understanding and expertise in order to tailor programme support. The process involved providing information on each app describing the purpose, how it works and the mathematic content skills developed. The ESC currently provides support to Partner Schools through webinars, group consultation, individual Partner Schools consultation, group face-to-face consultation, and online access. Applications use often requires ongoing consultation as well as hands-on support and troubleshooting with staff. More than 70 hours of ESC professional learning was delivered to over 60 members of Partner School staff in 2013-2014. The process was challenging, given that Partner Schools were at different starting points and looking for specific elements in their professional learning opportunities. They also had different contexts with respect to students, staff, skill sets and interests.

Regional Education Support Centre

The case study regional Education Support Centre (regional ESC Partner School) had been purchasing iPads prior to the project but use was generally unsystematic and perhaps more often employed as a tool for motivation and reward with no direct focus on the curriculum or teaching-learning relationships. The work with the ESC Project Network offered the Partner School a range of benefits including:

- access to successful practice through the network

- collaboration with peers

- professional learning programme

- ready made products such as needs analysis and applications

- evidence the programme improves learning outcomes and is worth replicating.

The regional Partner School ESC coordinator undertook the Distinctive School training programme and then led the training of school staff with a focus on teacher skills training,

support for developing links between curriculum needs, customising individual education plans, and matching apps with the curriculum and student needs.

Metropolitan Education Support Centre

Another Partner School, a metropolitan Education Support Centre (metropolitan ESC Partner School) had been using apps prior to the Distinctive Schools implementation and had also accessed external professional development with apps providers. The impetus for change came from general ESC communications to all Centres. Being part of the network made things a lot easier for the metropolitan Partner School, saving time finding suitable apps, knowing how to alter settings to match local student needs, and being more strategic in linking apps with specific learning development.

Applications, support and ready assistance were all accessible through the Distinctive School. The immediate response was a review of how iPads were used at the metropolitan Partner School. Initially, these simply provided an incentive or free time reward for students but they subsequently became tools for learning, integral to curriculum delivery, with apps targeted at student needs.

Because Education Assistants had been trained in the use of apps, they also coordinated their introduction across learning areas and skills development in which they worked with students. Applications are now evaluated as part of the overall ongoing curriculum student evaluation, and each app is systematically reviewed in terms of suitability for future reference and planning.

Lessons learned

Key observations

The ongoing engagement and productive collaboration with Partner Schools has substantially embedded the Assistive Technology Project in the daily life of the case study school, with clear signs of emerging positive outcomes and considerable excitement and optimism about the project's success. The two key outcomes have been the successful action research trials, and the development of a practical product as a blueprint for supporting Partner Schools. Both provided critical evidence based experience and expertise to support the 14 Partner Schools.

The profile of the Distinctive School has increased significantly with success, and overwhelming demand for the Foundation to Year 2 Product to be made available for teachers to use in its entirety. Schools outside the partnership arrangement, across all sectors, have requested information, support and opportunities to visit ESC teachers and assistive technology teams.

The key changes that follow have been reported as the most obvious consequences of the project.

Staff competence and confidence

There has been a significant growth in technical competence and capacity to use iPads and apps in customising learning in the Australian Curriculum. Being a funded trial and project also raised expectation levels about accountability that in turn fostered a sense of obligation for staff to up skill themselves and apply their learning in active classroom implementation. Ultimately, professional learning and practice has improved education outcomes as well as a sense of personal achievement. Teachers have also valued the professional learning and

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direction it has given to differentiating curriculum and applications that suit student needs. They feel more confident and appreciate the fact their students are doing things they could not previously do. Being able to tap into shared applications and network with others is also regarded positively.

Student engagement

Staff cite an observable improvement in student engagement and enthusiasm to learn with technology. Consequently, achievement levels have also improved beyond expectations, which in turn has accelerated student learning. A positive aspect of the local product is the capacity for repetitive practice so students can pace their own learning which helps consolidate outcomes. Teacher feedback from the metropolitan case study Partner School is also very positive about the outcomes arising from the Assistive Technology Project, particularly the increased student engagement in learning, noticeable improvements in consolidation of learning, and promotion of spontaneous discussion and activities with staff and among students about their learning.

Partner School commitment

A great deal of interest in the project was generated through networks and informal contacts, and as a consequence, the uptake to become Partner Schools was rapid. As a practical project, Partner Schools committed resources to access local iPads dedicated to classroom learning that promoted active participation with the product and classroom use. Meeting Partner School expectations was a challenge since Partner Schools were mainstream and included students with disability enrolments and each had needs that extended beyond the scope of the ESC project.

Importance of reviewing decisions

The project has highlighted the importance and greater awareness regarding the need to explore and review decisions about appropriate and inappropriate IT applications. Considerations should not just focus on the learning tool, but on applicability, currency and support. Related is the need to constantly and consistently amend and adapt operational plans to improve the Assistive Technology Project, including using face-to-face communication as the most powerful learning forum, and conducting initial pre-needs assessment analysis.

Focus on learning goals

Increased engagement by staff has also created greater awareness about the Australian Curriculum and planning for students with special needs. As a result customised learning is now a more integral part of classroom planning and operations. For the project team, 'the critical factor is not focusing on the technology but focusing on the learning goals then exploring applications'.

New networks

One project by-product has been the emerging network interactions, not just with the Distinctive School, but across Partner Schools. These have assisted with project development as schools share their progress, challenges and successes. Collaboration is a positive indicator, which has potential to enhance project outcomes and promote sustainability by embedding assistive technology in school development planning.

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Sustainability

The learning process for exploring and matching apps to learning is an ongoing ingredient in project evaluation, implementation and improving outcomes. It mirrors an action research approach that provides greater integrity and rigour to explorations that is proving successful. There is, however, a limit to what and how much can be done and it appears that a steady phased approach is more appropriate in terms of manageable customisation to sustain the momentum.

This acknowledges the reality that Partner Schools can only move at a pace with which they are comfortable. While the initial expectation of schools implementing four apps was thought to be too few, they proved to be just enough for schools to manage: any more would have been too big a challenge. As the project evolved and schools sought more support, the issue of project team release and time needed more consideration.

Potential for adoption in other contexts

The Assistive Technology Project model is readily adaptable to other Distinctive School networks, locations and curriculum areas. Likewise, the Distinctive Schools approach — a grass roots initiative — offers a potentially sustainable template for other schools wishing to share their distinctive skills. One of the Partner Schools set out the strengths that should emerge in a successful adoption of the project as follows:

- understandable and targeted professional development of teachers and assistants

- increased staff learning, capacity and confidence to run the project

- annual professional learning updates that not only provide currency but also refresh local ambitions and motivations embedded in the project

- increased learning and improvement visible to staff who wish to continue the development

- parent feedback, high levels of satisfaction with their child's progress, and a desire for access to the apps at home to maintain strategies and development

- allied services personnel who commend the school with implementation of apps promoting speech, language and motor skills development.

Adopting the project will require consideration of a number of factors including the need to sound out prospective Partner Schools thoroughly, and a process where principals discuss possible partnership in the project with key members of staff before committing to the initiative. Typically, the principal will not be involved heavily in the day-to-day implementation of the project so there is a need to ensure local project staff are highly motivated. The development of a partner agreement, setting out clearly the responsibility of both schools, is considered a prerequisite for success.

Notes

The case study included meetings with the Principal and Assistive Technology Project Coordinator at the Education Support Centre (Distinctive School) and the Principal and Project Coordinator at a regional Education Support Centre (Partner School) and a metropolitan Education Support Centre (Partner School). The visits were undertaken over two days in August 2013 with follow up visits in June 2014.

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