Empowering Teacher Effectiveness – Two schools in Lebanon share their stories

Promethean Education Strategy Group
Teacher Effectiveness

Promethean

Case Study: Makassed Khalil Shehab Primary School, Beirut, Lebanon | 270 students | K-6

Makassed Khalil Shehab Primary School

Technology has the capacity to truly transform the learning experience of young people. Makassed Khalil Shehab Primary School tells a story of how well planned professional development programmes are critical and support teachers to become more effective in their practice. Teachers leverage the appropriate technology in making the right choices to help students develop critical skills for the 21st century.

The next case study (Al Hadi Centre for Deaf, Blind and Learning Disabilities) tells another story of how technology can support teachers to become effective and make learning accessible for all students, especially those with special needs.

Background

A few years ago, Makassed Khalil Shehab Primary embarked on a journey to transform their teaching practice in order to ensure pupils received a more rewarding and relevant education. Improving teacher effectiveness underpinned a subsequent programme of professional development aimed at making learning more meaningful, rewarding and interactive. It also focused on enabling teachers to utilise technology more effectively in order to foster the development of critical and higher order thinking skills amongst pupils.

Makassed Khalil Shehab Primary is one of forty eight Makassed Association schools found throughout Lebanon. It is a '21st century school' and is committed to providing a modern education for its students, taking a holistic approach to developing their moral, social, physical, and creative abilities. The school is currently involved in numerous partnerships and is collaborating on a number of key international projects. The school gained recognition from the British Council for its partnership activities and received an International School Award for International Collaboration and Innovative Teachers Award and has become a Mentor School for Microsoft's Partners in Learning Network.

Over the last six years the school has taken significant steps in developing its ICT infrastructure and is now harnessing technology to enhance both administration and teaching and learning practices. There had been a clear recognition amongst staff that pupils were becoming more familiar with new technologies and that they needed to harness these skills and technologies to develop more effective teaching strategies.

There was a feeling that most children were now 'digital natives' and that more traditional learning approaches were considered monotonous and dull in comparison. Moreover, there was the belief that pupils learning experiences outside school were becoming increasingly incompatible with more traditional learning practices inside. The Makassed IT directorate quickly developed a strategic five year plan to integrate technology into its schools alongside a professional development plan that would ensure each staff member recognised the benefits and potential of the technology. The school now incorporates a vast array of technology to support learning and is increasingly being recognised for effectively utilising technologies in the classroom.

Addressing the challenge: Effective teaching and purposeful training with educational technology

After strategic decisions were made to enhance teacher effectiveness and to fully embed technology within the classroom, a rich and varied set of both Association wide and school specific professional development and ongoing training programmes were put in place.

The school wanted to ensure staff thoroughly understood broader educational foundations and principles so that the technology would be more effectively applied in the classroom. The foundations and principles focus on theories and evidence around areas such as educational development, the psychology of learning, multiple intelligences, assessment, and critical and higher order thinking, to name a few. To ensure the technology was used appropriately and effectively to develop students' wider skills and competencies, staff undertook

projects that utilised technology and focussed on the development of higher order and critical thinking skills. As part of this professional development, teachers were graded and given feedback on their projects based on the quality and extent to which it addressed wider educational objectives and shared experiences.

"It's not about using the technology alone, it's a combination of teacher methodology, understanding skills development requirements and using the technology to address these. That's why we focussed on 'dual training', around wider aspects of education and technology to ensure staff were more informed about how the two interact to produce the best results for the learners."

Ghina Al Badawi, Principal

Staff were given basic and advanced training with a clear focus on developing key skills amongst learners. For example, they prepared flipcharts to use on the interactive whiteboard as part of their training, focussing on the type of skills and learning styles that the resources were addressing. As enthusiasm grew, they started uploading lessons to Promethean Planet and began incorporating a range of other software, hardware and other 'add ons' to enhance their practice. Staff now feel technology is an embedded and integral part of their wider teaching methodology and pedagogy.

As a result they feel they are reaching the children and stimulating their interests in more appropriate and engaging ways, supported by a wider range of resources that can be more readily adapted to particular learning needs and styles.

Effectively addressing diverse learning styles

The staff feel that interactive technologies have since made a significant contribution to learning and teaching. This is largely due to the multi-functional capabilities and the potential created for customising teaching and learning with regard to student needs, learning styles and capability levels. One significant benefit of the technology has been in allowing teachers to deliver teaching in different ways and to provide learning materials that better address visual, kinaesthetic and auditory learning needs.

"The first time we used the boards, it was challenging because the children knew as much, if not more than us. It was an experience that changed how we approached things. Making more use of the boards and content became a pleasure. We could adapt teaching on the basis of learning styles more easily and find the right resources for the learning aims we required."

Rawaa Shehab, Mathematics and Science coordinator

There is now a clear recognition that it is teacher effectiveness and capability that drives learning and ensures technology is targeted and used to good effect. Initially, teachers were trained in utilising a range of basic tools to address learning needs, such as Microsoft® Office®, Producer, Photoshop, Photo Story and Microsoft® PowerPoint®. As training progressed, staff then began to use the interactive boards and use the feature rich 'flipcharts' to promote interactivity allowing students to participate in the learning process, by voting, recording their voices, adding comments, and using and creating videos.

Teachers share resources with one other, editing and storing them for later use. This not only creates a bank of targeted and pooled resources but helps teachers save time so that they can focus on improving lessons and developing the best quality resources for children's learning needs. The technology also allows teachers to incorporate different methods for formal and informal assessment, including teacher and peer assessment, which helps them gather a more diverse range of data regarding children's levels of understanding. This enables more targeted teaching approaches and resources to address specific needs. The shift in practice has also resulted in students interacting and collaborating more in lessons, resulting in a better understanding of their learning goals, which has had a notable impact on learning outcomes.

The school emphasises the need to develop 21st Century learning skills and provide children with lifelong learning capabilities. They are committed to ensuring that students develop important digital literacy skills and informed technological dispositions that will help them research, collate, understand and critically analyse information, as well as create digitally produced artefacts and learning materials. Whilst there is an acknowledgement that such skills can be developed without the use of technology, it is felt that digital tools engage students and enable them to develop such skills more quickly. Moreover, these skills can be developed in a more interactive and intellectually challenging manner due to the wealth of rich and varied content and tools for processing, storing, editing and creating content.

Changing practice: Engaging learners

Staff feel that the focussed use of technology has helped children develop critical thinking skills as they are far more active in creating and analysing content rather than merely learning by repetition. They have developed team-working and collaboration skills and are working together with their peers on a number of collaborative projects. They are also engaged in a number of international collaborative projects the school has set up, using the interactive whiteboards and communication technologies to share information, see and hear one another's views and collaborate. For example, a British Council project involved schools working together around Human Rights and citizenship issues. Students prepared activities and developed a huge 'wall' where they drew and wrote their thoughts down around a particular Human Right. Schools exchanged information, collaborated on learning activities, discussed key issues and concluded which particular Rights were being explored and what their responsibilities were in relation to them.

Staff have noticed a range of other positive impacts and learning benefits for pupils, but perhaps the most notable change has been the increase in motivation. Pupils have become much more confident and actively involved in the learning process, with many children now manipulating the technology to exhibit their understanding in ways not previously possible. The visual and dynamic elements have also enhanced involvement and enabled pupils with different needs to enter fully into learning activities. Whilst staff had received significant training in using the technology, it

was apparent pupils of all ages and levels were soon keen, confident and experienced in using the technology. They quickly began self teaching and experimenting with the functionality and rich content and became engaged in peer to peer teaching and learning.

"Many times when I passed the classrooms I saw the children standing up, telling others and demonstrating what they knew… I now see them recording their voices because they want to send their project and share their thoughts with pupils from other schools in another country. It's so interesting… it's made the international collaboration so much better. It's put technology in their hands and they are so motivated…"

Ghina Al Badawi, Principal

There is a feeling that the relationship between teachers and pupils has changed for the better. There is a broad acceptance that a more effective and relevant educational experience can only be achieved if they tap into the knowledge and skills of everyone in the classroom, whether they are a teacher or a pupil. They also feel that the introduction and embedding of technology has partly facilitated this process because of the recognition that students were often more knowledgeable about the technology, and also because the interactive capabilities encourage greater participation, which in turn requires a different set of pedagogical practices. The teachers are focussing more on developing pupils' skills and less on providing specific pre-defined or prescribed knowledge. They continue to develop pupils' skills appropriately, which in turn will help to develop and utilise the acquired knowledge more effectively tailoring materials to learning needs.

Just at the beginning…
Clearly, the increased teacher effectiveness that has arisen following the introduction of a targeted and continuous professional development programme has transformed and improved learning throughout the school. The school is, however, only just at the beginning of what has to date been an exciting and rewarding journey. They intend to continue to share expertise with other schools and teachers across the globe. They aim

to develop their profile as a world renowned school engaged in purposeful and innovative technology to enhance learning and hope to use their role as a 'mentor school' in the Microsoft Partners in Learning Network to share their practice with others. The school will also continue to provide a constant and evolving professional development programme and is seeking meaningful opportunities to extend this further and develop wider networks to improve learning and teaching.

Case Study: Al Hadi Centre for Deaf, Blind and Learning Disabilities, Beirut, Lebanon | 570 students | 3-18 yr olds

Al Hadi Centre for Deaf, Blind and Learning Disabilities

"We have a belief that we must do our very best to help our students, to provide a qualitative, dignified and respectful education that develops the full range of their abilities. We also strive to educate and motivate students, raise aspirations and develop their self confidence, empowering them to become fully active and engaged citizens. We help them to understand their rights, responsibilities and entitlements and believe that new technologies represent a powerful mechanism to help us achieve these goals".
Sukaina Shaheen: Human Resource Manager

Background

The Al Hadi Centre is a Non-Governmental Organisation committed to developing the comprehensive abilities of its special needs students. The clear challenge for the centre is to provide rich, diverse and engaging learning experiences for students with a wide range of learning needs. Teachers at the centre are encouraged to harness tools and technologies to ensure learning is tailored, dynamic, interactive and appropriate to need. In doing so they can effectively help students develop the skills and competencies that will enable them to become fully independent, active and integrated citizens capable of participating and engaging in all aspects of society.

The centre provides an excellent learning experience for students, many of whom are from poor backgrounds and who might otherwise be unable to receive such an enriching education were it not for the charitable donations on which the centre relies.

The centre consists of three schools: The Al-Nour School for the Blind, The Al-Raja School for the Deaf, and The Al-Bayan School for Language and Communication Disabilities. Alongside the three schools, the centre also has a vocational school, an employment office, and a range of different specialist departments that provide various education and health care services. It also has a department that works closely with high schools and Universities to support students progression and transition.

Bold steps in enhancing teacher effectiveness: Evaluating impact

As well as recognising that a more diverse range of learning content and experiences were required to meet student needs, staff felt they had to find more effective ways to monitor and stimulate the progress of each learner. More traditional educational content and assessment methods were felt to be inappropriate to cater for the diverse needs of students and were also not flexible enough to account for the rich array of skills development and learning gains being exhibited in the classroom. A radical plan was required.

The Centre set its sights on becoming one of the best institutions in Lebanon, providing access to technology and embedding it in all aspects of learning and teaching. Comprehensive teacher training is offered for staff at the centre, and for those from other institutions. A UNESCO initiative aimed at raising levels of computer literacy across Lebanon saw the Centre being chosen as a licensed centre to address such issues amongst students with special needs. It also has Braille Computer Training Centre on site.

On top of such significant developments, the Centre provided comprehensive training for staff, students and others, using a range of devices and software. One particularly effective development was the training of teachers in the use of ActivBoard, accompanied by a programme to evaluate the impact of the technology in the classroom.

Gathering data that compared achievements around learning aims, it also included obtaining the views of both students and teachers. Findings demonstrated a number of benefits for students and teachers alike. Not only did teachers feel that the interactive whiteboards and software were easy to use and efficient, they also reported that the technology helped students in their comprehension and knowledge acquisition. There

"Some students were shy but the technology, the interactive boards, and the appropriate content has meant that they are now participating more than in the past and they are confident and involved in the lessons."

Sukaina Shaheen, Human Resources Manager

were positive impacts with regard to pupil behaviour, attention and attendance, which was attributed to students being far more motivated and engaged with a wider, more appropriate and dynamic set of learning materials. Once these impacts were identified and established, a wider roll out of technology throughout the Centre was undertaken, alongside further training. In evaluating use and identifying impacts and benefits at a relatively early stage, staff and pupils alike clearly understood the reasons for further embedding technology in learning and teaching practices.

Teacher effectiveness and technology: Greater engagement and participation

Teachers feel that the technology has helped them better address learner's requirements and bring learning to life. For example, for students struggling with attention issues, especially those with hearing difficulties, staff have developed a range of activities to help their concentration and provide greater motivation for learning. They have utilised photos, images, video, dynamic, rich and colourful content, and have added text to materials to help students, understanding. To support those with visual impairments, it has been possible and easy to make materials using better and larger fonts, more effective colour contrasts (such as black backgrounds with white font), adding audio commentaries and magnifiers. This is in addition to using maps in Braille to support students knowledge acquisition.

In subjects such as English, teachers have used audio storytelling, videos, puzzles and photos to enable students to learn more effectively. In Mathematics, the flexibility and additional features enabled through digital content has enabled them to convey concepts and learning goals to students with specific needs in more appropriate and meaningful ways. In Science, teachers have utilised the "sunflower" software programme with its significant audio-visual content, to help students learn about the human body and blood circulation. Technologies such as ActivBoard, ActiVote and ActivSlate have also enabled new ways for students to participate in lessons and gain skills in a more interactive and effective way than was previously possible.

Overall, staff feel they have been able to ensure that they can provide students with more effective stimuli and content suited to specific needs. This has had significant benefits and positive impacts on the student's willingness to engage in lessons and has improved their self confidence. Staff see students are more satisfied and happy in lessons and feel that learning is more fun. The interactions between students and teachers have become more positive and students now actively seek to find out more about learning and how technology can enrich it because they are more engaged and motivated. Teachers are now beginning to see notable improvements in student's achievements in formal tests.

More students are taking work home, working on laptops and engaging their parents in the learning process. Parents have also been providing greater support for their children, expressing a greater interest in learning activities and the technology. All this has combined to enhance the talents and the skills of the students.

"Promethean believes that education is the fuel that drives economic growth and social progress. Effective teaching is the key to successful, collaborative and personalised learning-which in turn creates better prepared students, more prosperous nations, more secure societies, and more engaged global citizens."

"Parents are now seeing a difference, you can see that. We did the assessment of children's learning with technology and parents can see the results. We were very happy and also shocked and surprised sometimes by how the children use the technology. The parents are surprised by the benefits too and encouraged by it. They then encourage their children more because they can see the difference and changes in attitude. The parents are happy with what we have achieved up to now."

Jamal Shehimi, Information Technology Manager

Targeted teaching

Teachers have found that the technology has helped them become more efficient, enabling them to easily save and adapt learning materials, and share their lessons with other teachers. Being able to use existing libraries of content to add and edit materials has provided a flexible means for them to tailor materials to specific needs. Ultimately the increased professional development has enabled teachers to harness technology, which in turn has helped them provide richer, more diverse, stimulating and appropriate sets of learning resources. All lessons are categorised by subject and level and stored centrally for re-use. This is not only a more effective way to utilise and share content but also ensures there is a better contingency should teachers be absent or move. Helping teachers to be more effective and efficient, staff also report feeling happier in their work. Teachers not only share resources, they also teach one another new practices and more effective ways to utilise the technology.

A small committee of teachers have taken responsibility for developing professional development and advice around the use of ActivBoards. They devise and organise teacher training sessions, observe lessons and provide constructive and supportive feedback relating to strengths and weaknesses, gaps and opportunities, in order to help improve teaching practice. Training must be focussed, targeted and meaningful and first and foremost focussed on learning goals. They believe this

has already had a significant impact, helping them to meet organisational aims and to key challenges.

Sharing the benefits

The Centre has also been active in encouraging knowledge sharing and partnerships with teachers from other schools. There is a strong ethos around sharing what they have learned and achieved with other practitioners. This is based on a firmly held belief that best practice has to be shared and diffused so students with learning challenges and difficulties receive the best possible education.

The Centre intends to develop an 'advocate programme' to support staff in becoming accredited trainers so they can share their skills, knowledge and best practice with other teachers from different institutions in Lebanon, and across the Middle East. Staff at the Centre feel they have a duty to not only help one another and the students at the Centre, but to also help all of those working with students with similar needs in order to help them learn more effectively and reach their full potential.

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