EFFECTIVELY EDUCATING YOUNG PEOPLE WITH LEARNING BARRIERS THROUGH TECHNOLOGY

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Abstract: Inclusivity in education is the golden rule, but every school and educational facility struggles to achieve it while maintaining successful outcomes and engagement. Utilising technology provides an answer to all inclusion in an efficient and cost effective manner that achieves results for students, particularly within the most challenging cohorts. Through the context of the Nisai Virtual Academy and platform, we will show how to achieve inclusivity through the Nisai pedagogy, platform and monitoring process, while engaging our specialist cohorts: Displaced, Disengaged, Detached and Disadvantaged. Topics that will be covered within the oral presentation include: Personalised learning, supporting "At Risk" cohorts, providing continuity of learning, achieving results and positive destinations. Personalised Learning – Creating an environment catered to the individual student. The Nisai methodology includes creating a platform which caters to learning barriers, tracking student progress, adapting academic instruction to match current learning ability and requirements and linking student data, reports and information through a Personal Wellbeing Plan. Supporting 'At Risk' cohorts through virtual education - 99% of our students have some form of learning barrier and have a spectrum of needs including low self-esteem, SEN, difficult home environments and exclusions. We will discuss effective services available for these cohorts using real situations and solutions. Continuity of learning – Partnerships with schools, local government authorities and education facilities to allow education to be embedded for all students who require it, both in-school and out of school. Achieving results - Tracking real-time data for clients, parents and staff to monitor attendance, behaviour and contribution, exemplifying every success. Positive destinations – The Nisai platform enables young people to successfully achieve personal and academic results and progress on to further education or employment.

Keywords: Inclusive Education, Innovation in Special Education, Online Learning

INTRODUCTION

For over 15 years, Nisai Learning has utilised online and virtual technology as an effective and innovative way of granting access to education. Through a custom-built online system called the Nisai Virtual Academy or 'NVA', we're able to provide learners with a bespoke education and curriculum which benefits from a similar structure to mainstream schools with added flexibility for each individual.

As a time-honoured establishment within the education sector, Nisai's approach continues to remain unique; focussing on quality, inclusivity and progression. Malcolm X stated: "Education is the passport to the future, for tomorrow belongs to those who prepare for it today". Through the NVA, we've taught thousands of students classified as 'At Risk', many with Special Education Needs. We've also supported individuals who require a differentiated learning environment or specialist support that cannot be accessed or available in a mainstream facility. Through case studies, results and anecdotal evidence, we aim to provide evidence, research and awareness of the academic and personal success Nisai has achieved through inclusive learning delivered online. This paper compiles internal and external evidence to demonstrate how online learning, focussed wholly on inclusive and specialist support, can provide a high-quality

complementary service to mainstream schooling.

STATMENT OF PROBLEM

Ivan Welton Fitzwater once declared "The future of the world is in my classroom today", a quote that epitomises the global importance of education and teachers worldwide. In UNESCO's July 2016 report¹, they stated that 202 million secondary aged students were missing from school during 2014. That statistic covers a vast range of socio-economic backgrounds, locations and wealth disparity. It doesn't reference the individual needs of each student, learning barriers they may have, or potentially the lack of support they receive.

The mission of Nisai is to target these students - the 202 million children missing from education and deemed 'At Risk'. The term 'At Risk' is used to describe the myriad of students within a school or educational facility who are at higher risk of struggling academically. At Nisai, we organise the students who would fall into this category by distinguishing their needs further, in order to provide specific support for their barriers to learning. These categories are known as the '4 D's:

- Displaced For learners who have become displaced due to factors beyond their control such as refugees.
- Disengaged For learners who have disengaged with mainstream schooling and are permanently excluded or at risk of being permanently excluded/
- Disadvantaged For learners with traditional barriers to learning, including medically ill, diagnosed learning difficulties and mental or behavioural challenges.
- Detached For learners in locations that exclude access to traditional schooling e.g. remote locations.

The 4 D's categorise the students that we can and have provided access to education. We theorise that for any school or educational facility to truly achieve an inclusive learning experience for each student, a successful approach must focus on these factors:

• Personalised Learning – Defined as a holistic curriculum, designed with input from the student, parents and teachers to provide academic, personal and professional development.

- Continuity of Learning Partnerships with schools, local government authorities and education facilities to allow education to be embedded for all students who require it, both in-school and out of school.
- Academic and Personal results Tracking real-time data for clients, parents and staff to monitor attendance, behaviour and contribution, exemplifying every success.
- Positive Destinations and routes from further training or employment.

METHODOLOGY

For the purpose of clarity, the four examples of inclusive learning for 'At Risk' students that have been selected for this paper will be called 'projects'. Each project has been selected to represent students within the 4 D's – Displaced, Disengaged, Disadvantaged or Detached. Each project utilised the Nisai Virtual Academy and other services that Nisai Learning has to offer. Further details about that specific course or service will be outlined within each project. The following structure will be used for each project:

- Background This will provide background information about why this project was necessary, it will also include details about the learning barriers the students have and if other resources were deemed inappropriate for the student/s.
- Analysis of student cohort This will explain why the students selected have been categorised within their respective cohort.
- *Chosen Curriculum* This will explain how and why this student/s curriculum was selected for them, and factors relating to the delivery of the project, conducted by Nisai. Where applicable, this will also include evidence from external projects that have shown similar success for a specific cohort.
- *Statistical Techniques* This will describe how results or qualitative data has been gathered both during and after the project commenced.
- *Results* Results will be gathered through qualitative and quantitative evidence.

• *Feedback from stakeholders* – Comments that the student, parents and



Disengaged Marginalised/drop out from mainstream education

other members of the project wish to add in relation to the success of their project.

Project 1 - Displaced

Background

Following placement in Australia, a large population of refugee and migrant families moved into a housing association in Victoria. Those with school-aged students were enrolled in local schools who conducted joint and individual projects to develop the literacy and numeracy skills of the students, many of whom cannot read or write in their native language. Local entities such as the health and police services were also looking for a way to improve the families' engagement and integration with the local community.

Analysis of student sample



Stakeholders recognised that within the homes of these students, little or no English is spoken, stunting their linguistic growth and isolating them. The solution was to cultivate the English skills of the student's parents – primarily mothers. The majority of these households have a single parent looking after large families, particularly mothers with little or no skills in English or their native language. In data collected by the schools, they found that students from EAL/LBOTE backgrounds, whose parents are not fluent in English, are more than a year behind their peers, even if they have attended pre-school or child care.



Disadvantaged Learners with disability both learning and physical



Detached Due to geography, economic, societal, gender

Chosen Curriculum

Stakeholders decided to create a multi-faceted project designed at engaging the parents, to complement the efforts focussed at their students in local schools. Working alongside other local public services, a website was created that offered three services; ESOL classes for parents, links to support services and videos to aim cultural integration. A partnership with Nisai was formed to deliver ESOL classes online at a convenient time, without draining local resources. Stakeholders hoped that they would see an improvement in the school-aged student's attainment levels and increased support within the home if they provided language classes for their mothers.

Due to the time difference, Nisai teaching staff could complete the class in the morning and the learners access the classes in the evenings. By accessing their classes from the web-based platform, learners can access lessons taught by qualified teachers for an hour a week with relative flexibility to study at home at a library or community centre. Local schools selected the cohort of parents that they felt would most benefit from the ESOL classes, this sample was then chosen for an initial 6-week pilot.

Statistical Techniques

During the pilot, quantitative data was gathered from the teacher staff at Nisai, who for every lesson provided a numerical figure on Attendance, Behaviour and Contribution. Qualitative data was provided through feedback from the teachers, students and relevant stakeholders.

Results

Following the pilot, stakeholders said there was a marked improvement in the language abilities of their sample group. Once other factors in the project have been completed, e.g. a completed website, then a long-term project will commence with Nisai continuing to provide ESOL courses.

Project 2 – Disengaged

Background

5 years ago, in the UK many Alternative Provisions opened across the country, providing vocational and skills training to secondary aged learners. They were populated with students who had been expelled, excluded or who struggled to engage in mainstream schooling. One of the trends that Nisai noticed was that many of these Alternative Providers failed to provide an academic element to their provision. resulting in students leaving their provision with no qualifications which leads to reduced progression opportunities. For Nisai, this structure wasn't good enough and they wanted to create their own prototype to test the success of blending online academic courses with vocational training. Over 4 years ago, they With a capacity for 60 students, the Hub is split into upper and lower groups, separating students by age into a KS3 unit for 11-14 year olds and a KS4 unit for 14-17 year olds.

opened the first Nisai Learning Hub in Nottingham England.

Analysis of student sample

The goal for the Hub was to engage the same cohort of students at their traditional online students at the Nisai Virtual Academy, but who require more support during lessons. Students who are referred by schools in the area, Pupil Referral Units or 'PRUs' and the local authority, who may be dealing with a range of challenging behaviours

- ADHD
- Asperger's or ASD
- SEMH
- Oppositional Defiance Disorder
- Dyslexia
- Dyspraxia
- Epilepsy
- Permanent exclusions

Chosen Curriculum

A student's curriculum normally follows the following structure: such as:

KS3		KS4		
Academics	Topics	Academics		Vocational
3 academic subjects including English and Maths	Additional subjects are topics are covered during each day including world events, history and art	4-day placement: 3 Academic subjects including English and Maths	5-day placement: 4 Academic subjects including English, Maths and ICT	Sports and Fitness * Art * Childcare * Pathway to Construction

All the students are studying long-term academic courses through the Nisai Virtual Academy in differentiated classes by their ability. For a KS4 student, their academic courses are accredited and can lead to qualifications in Functional Skills or GCSEs. All vocational subjects are also accredited through aim awards.

Statistical Techniques

With over 4 years' worth of evidence, there is a colossal amount of additional qualitative data which has not been included in this breakdown. However, there is 4 years' worth of quantitative results for progressions.

Results

After 4 years' the Hub has a record of providing 100% of its Year 11 students with a positive

destination, including further training or employment.

Project 3 – Disadvantaged

Background

A student in the Philippines, Francis, was recuperating from viral meningitis and couldn't attend regular schooling. At just 9 years old but a gifted student, Francis was eager to continue his studies but could only complete work sent home to him. Head Teacher Monica Moreno said: "When we heard about the NVA, we knew that this would be the perfect set up for him: a good way to continue schooling in the comfort of the home. The time difference between the UK and the Philippines also was an advantage, because that meant that Francis family members could be present to facilitate the technical aspects of the program."

Chosen Curriculum

Francis was initially placed Core Curriculum, a rolling 6-week programme at KS3 level to test how well he engaged with the online delivery model of the Nisai Virtual Academy. From there, his current working levels were assessed and he was placed on KS3 English and Science and Year 10 GCSE Maths.

Statistical Techniques

During and after the project, qualitative interviews with Francis's Head Teacher to gather feedback from hers and the family's perspective. Discussions between Francis's teachers and the Student Support Team also lead to changes in Francis's curriculum. In addition, quantitative data was gathered during each lesson to provide information on Attendance, Behaviour, Contribution and Distance Travelled.

Results

Following the initial 6-week Core Curriculum programme, Francis was placed into 3 courses at his current working level. It quickly became apparent to Francis's teachers that he was Gifted & Talented, particularly in Maths. To accommodate his strengths, Francis was moved to a higher-level course and spent the remainder of the academic year, studying Year 10 GCSE Maths and KS3 Science and English, alongside 14-15 year olds.

From her perspective of the project, Monica said: "Without the support of the NVA, Francis would not have been able to move up a grade/level, and would not have been able to return smoothly to regular schooling. NVA made a tremendous difference to the quality of his home study program. I like the fact that NVA matched the program with Francis' needs and capabilities. It was very individualised, very personal. The fact that he made an easy transition to his regular school program speaks of the success of NVA in readying him for this big step."

Following by the end of the 2014/15 academic year, Francis's health had improved and he was able to transition back into his mainstream school.

Project 4 – Detached

Background

One real-life illustrations of the impact Nisai can have on a community is on the Isle of Sark, a small island off the British coast with a population of around 600. With only a single small school to cater to the needs of their children, many students were travelling to England in order access a basic range of GCSEs – a requirement for completing secondary education. Sark also had a limited supply of teachers or specialist provisions for students with Special Educational Needs or learning barriers.

Analysis of student sample

Nisai offered a solution that saved time, money and preserved the island's community by allowing students to remain on the island. Through Wi-Fi available at the island's school, the students could choose which subjects they wanted to study and take part in extra-curricular activities online with the Nisai Virtual Academy.

Chosen Curriculum

This way, without leaving the island they could continuing studying at their current working level and receive specialist support if required.

Results

After multiple years of this project being underway, all the students have been able to complete their exams and continue to higher education or employment.

Conclusion

Across every element of the Nisai Group, in each delivery model and for every cohort there has been success. We conclude that the models Nisai offers effectively educate young people with learning barriers. Our aspirations for the future is to continue to provide every child with an education, catered to their needs.