

## FACTSHEET ON CONSORTIA'S SOLUTIONS

## CIVICA CONSORTIUM'S SOLUTIONS FOR JURONG SECONDARY SCHOOL: REDEFINING LEARNING - THE COMMUNITY AND THE WORLD IS OUR CLASSROOM

<b>Consortium Lead</b>	Civica Pte Ltd
<b>Members</b>	<ul style="list-style-type: none"> <li>▪ G Element Pte Ltd</li> <li>▪ Heulab Pte Ltd</li> <li>▪ Learning EDvantage Pte Ltd</li> <li>▪ Microsoft Singapore Pte Ltd</li> <li>▪ Playware Studios Pte Ltd</li> </ul>
<b>Summary of Solution</b>	<p>The Civica-led consortium supports Problem-based Learning and Authentic Learning grounded on three key building blocks: Enriching with Interactive Digital Media (IDM) Contents; Engaging Community Participation and Enabling Adaptive Learning. In a knowledge society, it is important that students develop skills in information and media literacy, knowledge creation, critical and creative thinking skills and deeper meta-cognitive skills and the Civica solution addresses this learning.</p> <p>Civica consortium's solutions for Jurong Secondary School (JSS) are centered on an interactive 3D learning environment that supports the school's unique brand of problem-based learning, called Problem-Based Learning-Authentic Learning (PBL-AL). The proposed virtual environment is unique and innovative in its use of problem-based learning scenarios to challenge students to work collaboratively with peers to solve problems.</p> <p>Based on a cohesive approach to learning with extensive processes and tools that actively support engagement, collaboration and regular assessment of effectiveness, some of the applications that would be developed include :</p> <ul style="list-style-type: none"> <li>▪ <b>Personality, Behavioural, Cognitive and Humanising (PBCH) tool:</b> A learner profiling tool with its own engine drawing on data and information from teacher, parent and student inputs to facilitate adaptive learning and provide feedback on the students' learning progress, cognitive development and humanise the interactions with students. The PBCH tool provides input into the artificial intelligence support for MavenWorld and the student's progress through the PBL-AL learning process.</li> </ul>

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	<ul style="list-style-type: none"> <li>▪ <b>Maven World:</b> Each student has an avatar (called the Maven) which is tailored by the student to suit his/her style and personality. The Maven will support and personalise the research/learning process, providing an engaging learning environment, which includes virtual friends, advisors and tutors. The Maven will be able to progress into 3D virtual worlds in the future.</li> <li>▪ <b>3D Virtual Field Trails:</b> Development of trails anchored in the Taman Jurong community will be used in conjunction with Earth@SG. Students can access 3D learning content as well as data from specific GIS solutions in real time mode, using mobile devices and can create new content on the fly for upload and inclusion into the learning trails.</li> <li>▪ <b>Content Classification Engine with Smart Search:</b> A classification and search engine that facilitates meta-tagging and formulation of sophisticated search strategies to aid students in their investigative research, with a high level of flexibility and control of research and knowledge creation.</li> <li>▪ <b>Learning Management System:</b> This system integrates the learning processes of the student, based on dynamically defined learning methodology that guides access to contextualised relevant learning resources. It also integrates classroom management, collaboration, communication as well as parent and community interactions.</li> </ul>
<p><b>Jurong Secondary School: FutureSchool Programme Highlights</b></p> <p><b>Principal</b> Miss Tham Yoke Chun</p> <p><b>Key Focus</b> Networked learning community</p>	<p>JSS aims to leverage the powers of technologies, to engage the community actively to provide our students with authentic learning experiences. Our vision as a future school is that the world and the community is our classroom.</p> <p>JSS' proposal aims to provide students with authentic learning experiences by engaging the community actively. The objective is to enhance students' development in a broad range of cognitive and affective domains and equip them with the necessary 21<sup>st</sup> century skills.</p> <p>Teaching and learning in various subjects will be anchored on JSS' unique brand of problem-based learning, called Problem-Based Learning-Authentic Learning (PBL-AL). Besides content knowledge, students</p>

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	<p>learn various life skills, such as critical thinking skills, problem solving skills, and communication skills.</p> <p>JSS plans to collaborate with industry partners in the development of a unique set of e-PBL tools. Infocomm technology will be deployed to support students' self-directed learning and collaborative learning in a 3D virtual learning environment. An avatar will provide guidance and feedback to the students as they work through the various PBL stages. At the same time, the learning activities of each student will be recorded digitally. An engine with Artificial Intelligence (AI) capacity will then process the data and identify the learning dispositions of the student. This will in turn provide valuable reference for teachers to give constructive feedback to the student.</p> <p>Recognising media literacy as an important component of 21<sup>st</sup> century skills, JSS proposes to develop a media literacy curriculum to teach its students the skills to:</p> <ul style="list-style-type: none"> <li>(i) evaluate sources of information and media products critically;</li> <li>(ii) communicate ideas through the appropriate use of a variety of media tools effectively; and</li> <li>(iii) make use of technology and information with responsibility and ethics.</li> </ul> <p>Through unique school based media programmes such as Digital Video Drama and Internet Radio, students' mastery of language concepts and skills are enhanced as students learn to express themselves beyond print material.</p> <p>JSS proposes to create a network of community of learners. Students will plug into learning communities as part of their learning process, drawing upon the knowledge of researchers and fellow learners from different institutions and organisations around the world. JSS students will work on projects for the creation of a community portal called LifeMaps@Jurong, which is open to the public. Through projects based on different subjects, students will conduct their own research through field work, using spatial locational technologies like GPS and GIS, and contribute information to create learning trails on the Jurong community's history, geography, economic development, lifestyle activities and current developments in the portal. Students can also apply their knowledge and skills in media production to create media products as a contribution to the</p>
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	community through the portal.
<b>Quote by Lead Consortium MD/CEO</b>	<p>“The FutureSchools@Singapore program in Singapore is a visionary and ground-breaking initiative and we are very pleased to be part of the consortia. We are excited by the opportunity to work with IDA, MOE, Jurong Secondary School and our other partners in developing and providing innovative solutions that will further enhance the learning environment for students in Singapore”.</p> <p><b>~Mr Phil Barr, Managing Director, Civica Library &amp; Learning</b></p>

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## HEWLETT PACKARD CONSORTIUM'S SOLUTIONS FOR CRESCENT GIRLS' SCHOOL: i-CONNECT@CRESCENT

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<b>Summary of Consortium Solution</b>	<p>Hewlett Packard consortium's proposal for Crescent Girls' School (CGS) is based on an integrated physical and virtual learning environment. Students can take interactive field trips, and access learning resources and tools such as games, virtual reality learning content and interactive digital textbooks. Such learning tools are designed to support the school's integrated curriculum and project-based learning approaches. The tools also enable the school's students, teachers, administrators and parents to interact and contribute to the students' progress both in and outside the classroom.</p> <p>HP consortium's i-CONNECT@Crescent solution aims to provide:</p> <ul style="list-style-type: none"> <li>▪ an environment that supports the learner-centric pedagogies, integrated curriculum, and multiple assessment approach adopted by Crescent Girls' School.</li> <li>▪ an interactive and stimulating learning experience through collaborative and personal learning settings in virtual and physical learning spaces.</li> </ul> <p>Highlights of the i-CONNECT@Crescent solution include:</p> <ul style="list-style-type: none"> <li>▪ Holistic development of students through an integrated learning and teaching platform (i-Connect Learning Space). I-Connect Learning Space (i-CLS) integrates different learning resources to support an integrated curriculum and infuse 21<sup>st</sup> century skills to students' learning. Salient features include personalised learning pathways and competencies, as well as differentiated instruction and assessment.</li> <li>▪ Personalised learning through a rich, intuitive</li> </ul>

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	<p>dashboard that provides a personalized gateway on the students' learning devices.</p> <ul style="list-style-type: none"> <li>▪ Collaborative learning through real-time classroom delivery, collaboration and management (Virtual Global Learning Faculty) which enhances communication and collaboration across boundaries and develops students' 21<sup>st</sup> century skills.</li> <li>▪ Knowledge construction through NexGen Interactive books and collaborative learning through gaming scenarios.</li> <li>▪ Independent learning through learner-centric interactive digital media content and varied assessment modes which include essay assessment and adaptive testing tools.</li> <li>▪ Experiential learning through 3D Interactive Virtual Reality in an immersive learning space for students. By representing learning objects using VR/3D modeling techniques, students can appreciate concepts typically difficult to illustrate in a real-world environment.</li> <li>▪ Authentic learning through mobile devices used at outdoor learning trails which incorporate interactive and digital media with the sights, sounds and textures of the physical landscape. This provides an authentic and engaging learning experience for the students.</li> </ul>
<p><b>Crescent Girls' School: FutureSchool Programme Highlights</b></p> <p><b>Principal</b> Mrs Eugenia Lim</p> <p><b>Key Focus</b> Empowered learners</p>	<p><b><u>Integrated Curriculum</u></b></p> <p>While the national 'O' Level curriculum forms the core content, the distinctive features in the curriculum of FS@CGS are the integration of the subject disciplines, use of learner-centric teaching approaches, deployment of multiple assessment modes, and the infusion of 21<sup>st</sup> century skills to produce 'world-ready' youths.</p> <p>A range of subjects will be integrated at appropriate junctures to promote the connection of disciplines and ideas. Subject integration will be based on themes (e.g. climate, conflict, relationships) to enable linkages to relevant and authentic developments in the real world. Students will explore the themes through subject-specific lessons and student-led projects.</p> <p>The project tasks will typically be foregrounded by problems, cases or scenarios which are stimulating and</p>

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related to real-world issues. Students will have to collaborate with others, collect data in the real world, and widen their perspectives beyond the immediate subject areas in order to examine an issue in depth. Through the projects, students will apply existing knowledge, explore new knowledge, and demonstrate the various skills sets and knowledge acquired. In short, students will collaboratively construct their own learning.

### **Varied Assessment Through Technology**

In support of the student-centric approach adopted by CGS, the school will use a spectrum of IT assessment tools for both formative and summative assessments. These include Mastery, Adaptive and Diagnostic (MAD) online assessments for students to gauge their level of mastery of key concepts and skills, as well as track their learning progression. Personal electronic portfolios and assessment which involves multiple parties (students and teachers) in providing feedback to various student-created learning products (e.g. digital art, video-clips, blogs and websites), will also be adopted.

### **Customised, Technology-enhanced Teaching and Learning**

To support its proposed integrated curriculum, CGS aims to create an innovative and technology-rich environment.

- The proposed development of the learning portal, the i-CONNECT Learning Space (iCLS), will integrate various learning resources and platforms (e.g. Interactive Teaching Courseware and NexGen Interactive Digital Textbooks) for students' seamless access using their personal learning devices.
- The Virtual Global Learning Faculty (VGLF) web-portal will provide collaborative tools and resources for students, teachers and professionals to learn and work together.
- Technology tools like SMS, instant messaging, discussion forums, blogs, digital art, music, videos and games will be integrated for enhanced learning across subjects.
- Other proposed technology-enabled learning spaces for rich learning experiences include the Interactive Immersive Virtual Reality learning scenarios and Learning Trails.

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<p><b>Quote by Lead Consortium MD</b></p>	<p>“The solution proposed by our consortium is strongly aligned to CGS’ vision to provide integrated learner-centric experiences that empowers students to be caring visionary leaders of tomorrow.</p> <p>HP believes in providing new technology experiences for our customers. Through this new learning environment, students, teachers and other stakeholders will be empowered to learn, teach and collaborate better. We are excited to work closely with CGS to make learning a truly interesting and stimulating experience for their students.”</p> <p><b>~ Ms Tan Yen Yen, Vice President &amp; Managing Director, HP Singapore.</b></p>
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## SINGTEL CONSORTIUM'S SOLUTIONS FOR CANBERRA PRIMARY SCHOOL: CANBERRA LIVE!

<b>Consortium Lead</b>	SingTel Ltd
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<b>Summary of Solution</b>	<p>SingTel consortium's proposal for Canberra Primary School leverages 3D educational games with simulations, interactive digital media and mobile learning applications. The games are designed to support experiential and inquiry-based learning. As students participate in the games, they can role play, collaborate in decision-making situations and learn problem-solving skills. In addition, students can immerse in real-world scenarios in a 4D laboratory equipped with multi-sensory tools. Thus, students will enjoy rich learning experiences which are anchored in both the real and virtual worlds.</p> <p>Based on the North Central Regional Educational Laboratory's (NCREL) enGauge 21st Century Skills framework, SingTel's proposal will implement an Integrated Learning Environment named Canberra Live! that delivers customer-centric services and contents in a safe learning environment for students, teachers and parents.</p> <p>SingTel's solution is focused on educational gaming with immersive virtual reality based technologies, multi-modal digital media and mobile learning. These are incorporated in an integrated virtual learning environment and will provide students with an engaging learning experience.</p> <p>Some key highlights of the consortium solutions are:</p> <ul style="list-style-type: none"> <li>▪ <b>3DHive</b>: a 3D online environment for game-based learning with 8 distinct subject-based themes, complete with character and object creation. Teachers can use these themes to develop multiple games with the games development kit.</li> <li>▪ <b>4D Immersive Lab</b>: an immersive physical laboratory with multi-sensory functions and tools that can mimic different kinds of environment.</li> </ul>

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	<ul style="list-style-type: none"> <li>▪ <b>Next generation school-life e-portfolio:</b> This will capture students' data and learning processes and will aid teachers in assessing their learning styles. It will also help students to learn at their own pace and will help them identify areas for improvement.</li> </ul>
<p><b>Canberra Primary School:- FutureSchool Programme Highlights</b></p> <p><b>Principal</b> Miss Ratnasingam Selvarani</p> <p><b>Key Focus</b> Empowering the future today - Creators in the 21<sup>st</sup> Century and beyond</p>	<p>Canberra Primary School's proposed six-year <b>Canberra Experience</b> comprises three key programmes - <b>Discoverer, Global Learner and Attuned Learner</b>. Each key programme will be designed to deliver the national curriculum and 21<sup>st</sup> century skills through collaborative knowledge building-based pedagogies and assessment. These pedagogies include Experiential Learning, Inquiry-Based Learning, Cognitive Apprenticeship and Human Dynamics-Based strategies. A range of assessment modes which include assessments of and for learning, performance based and portfolio based assessments, and self and peer assessment, will be employed to inform teachers' instructional practices <i>and</i> students' learning. IDM/ICT tools will be harnessed for such learning experiences and environments to engage students in collaborative knowledge building.</p> <p>Play<sup>1</sup> as a pedagogy is one of the key approaches that the school will adopt to engender engaged learning. Canberra Experience will involve imaginary play experiences to engage students in the construction of meaning from new knowledge, as they build upon their prior experience. Examples of such learning designs include role-play, drama and computer-based games. Using computer-based games in the Canberra Experience, students learn to solve realistic problems within communities of learning. Computer-based games in the Canberra Experience will be designed for students to inquire into the world through their participation in collaborative knowledge building, and problem solving situations. Experiential learning activities involving computer based games in the Canberra Experience will also be designed for students to move back and forth between their game actions and reflect on their actions with peers and mentors.</p> <p>Students will enjoy rich learning experiences involving creation and exploration in safe and secure environments</p>

<sup>1</sup> Play can be an educational experience for young children characterised by intentional and spontaneous meaning making of knowledge with one another.

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	<p>that are anchored in both the real and virtual worlds. These learning experiences will be enabled through the following technologies:</p> <ul style="list-style-type: none"> <li>(i) Immersive Gaming which will lead students to develop an interest in subjects and learn concepts/information.</li> <li>(ii) Interactive Fieldtrips where students use devices like Ultra-Mobile PCs or mobile phones to collaborate and communicate with one another.</li> <li>(iii) Multi-user Virtual Learning Environments, where students will role-play and collaborate on authentic decision-making, problem-solving and planning tasks.</li> <li>(iv) Mobile learning and simulations that integrate various platforms such as Virtual Learning Environments, Gaming and Fieldtrips.</li> <li>(v) Digital media content that can seamlessly integrate various platforms</li> <li>(vi) Electronic portfolios to facilitate holistic and in-depth assessment of students' skills and knowledge acquired.</li> </ul>
<p><b>Quote by Lead Consortium MD/CEO</b></p>	<p>"CHAMPS* is excited to play an important role in shaping the future of education in Singapore and grooming the next generation of leaders. Our innovative solutions will provide students with a superior learning experience that will equip them to make meaningful contributions to society.</p> <p>By leveraging ICT technologies, these initiatives will set a new benchmark in experiential learning and introduce ground-breaking methods for teaching and assessment. They will establish Canberra Primary School as a model for other schools to emulate."</p> <p><b>~Mr Bill Chang, SingTel's Executive Vice President for Business.</b></p> <p><i>* CHAMPS refers to the name of the consortium.</i></p>

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ST ELECTRONICS (TRAINING & SIMULATION SYSTEMS)  
CONSORTIUM'S SOLUTIONS FOR BEACON PRIMARY SCHOOL:  
BEACON WORLD

<b>Consortium Lead</b>	ST Electronics (Training & Simulation Systems) Pte Ltd
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<b>Summary of Solution</b>	<p>The proposal for Beacon Primary School is centered on an interactive 3D Virtual Learning Environment called Beacon World. Learners can immerse in 3D learning environments that challenge their understanding and deepen their learning. This environment is designed to support the school's customised curriculum and key programmes to develop pupils holistically. Beacon World positions Beacon Primary as a forerunner in the use of 3D immersive learning environments as it features the integration of the 3D environment with the school's learning management system, creating a unique and innovative learning experience for Beacon students.</p> <p>The proposal's main focus is to develop a 3D learning environment with a variety of virtual learning tools and spaces. This enables Beacon Primary School to adopt the use of virtual environments in education, integrated with learning management system to support teaching and learning activities.</p> <p>This 3D learning environment will allow teachers, students, parents, as well as the public community to have personalised avatars interacting with one another and accessing the following features:-</p> <ul style="list-style-type: none"> <li>▪ <b>Creative Studio:</b> A tool designed to support media &amp; arts programmes in the '3D world' and that include the features to allow for creation a set of pre-drawn props, characters and sounds as well as editors to generate voice, narration and to perform simple video editing.</li> <li>▪ <b>Funky Gallery:</b> A tool that allows teachers to showcase student's media creations such as digital art pieces, while allowing for peer feedback and review. Key features include easy maneuvering</li> </ul>

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	<p>around virtual 3D gallery, re-packaging of creative pieces via thumbnail creation with background music as well as channels to feedback and review on the produces to be collated.</p> <ul style="list-style-type: none"> <li>▪ <b>Live Arena:</b> This is a virtual space that comprises of a public area and additional unique virtual spaces where avatars can meet, interact and exchange opinions and experience through a set of communication tools. For example, pupils can engage in debates, public speeches, broadcasts and live audio communication, and parents can learn from teachers the methods and syllabus.</li> <li>▪ <b>Exploratory Laboratory:</b> The part of the 3D world simulates scientific scenarios and problems that are physically not possible to be re-created. Students utilise online resources and are tasked with missions to solve based on research and problem solving activities.</li> <li>▪ <b>Interactive I-MAX:</b> This set of tools help teachers to design and create role-playing exercises that aim to make students study their characters, topic background and issues for each topic/scenario they are immersed in.</li> </ul>
<p><b>Beacon Primary School: FutureSchool Programme Highlights</b></p> <p><b>Principal</b> Miss Lim Boon Cheng</p> <p><b>Key Focus</b> Envisioning the Future, Varied Perspectives</p>	<p>Beacon Primary leverages technologies to bring about engaged learning and to create a stimulating learning experience for pupils. Pupils will extend their learning beyond knowledge, skills and values to grow the ability to envision for the future and contribute to make a difference. Highlights include the diverse digital learning spaces and innovative key programmes.</p> <p><b><u>Diverse digital learning spaces</u></b></p> <p>Learning spaces that support Beacon's key programmes to extend pupils' learning experiences include technology-enabled physical space and 3D virtual learning environment.</p> <p><b>(a) Technology-enabled Physical Space</b></p> <p>The ICT-enabled classrooms and learning spaces with flexible furnishings enhance mobility, multiple interaction modes and collaboration. These physical learning spaces are expanded with wireless connection and enriched with 1 to 1 connectivity to</p>

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	<p>Beacon World and online resources to optimise pupils' learning.</p> <p>(b) <b>3D virtual learning environment</b></p> <p>An integrated web-based learning environment called <b>Beacon World</b> is being developed in collaboration with industry partners to enrich learning using the following features:</p> <ul style="list-style-type: none"> <li>▪ <b>3D virtual simulations:</b> Pupils will be able to create and showcase their digital products as well as explore ideas and abstract concepts in simulated environments to nurture their creativity and foster inquiry skills, thus, deepening their learning in new contexts.</li> <li>▪ <b>Advanced web-based collaboration:</b> Pupils will be able to collaborate online for brainstorming sessions, project work, peer review and peer editing.</li> <li>▪ <b>One-stop school portal functionalities:</b> The integrated platform will support pupil data management and monitoring, online communication with parents, online searches, assessment (such as online testing and feedback), learning resources and learning applications (e.g. server-based software applications).</li> </ul> <p><b><u>Key programmes</u></b></p> <p>The school will deliver its customised curriculum through three key programmes to develop pupils holistically:</p> <p>(a) <b>Media and Arts Channel:</b> This programme seeks to develop language abilities, aesthetic appreciation, global and cultural awareness and a sense of belonging to the community through learning languages, Art, Music and Social Studies. Through integrating different disciplines in this programme, pupils will develop competencies in creatively communicating their ideas, feelings and experiences in a variety of digital media.</p> <p>(b) <b>Investigative Channel:</b> This programme seeks to develop inquiry and reasoning skills through the three main pillars in the Investigative Channel –</p>
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	<p>investigative pedagogy, problem solving, and integration of Mathematics and Science contents. Pupils will develop their curiosity, innovative vision and problem-solving abilities through digital tools such as digital modeling and games, in authentic contexts.</p> <p><b>(c) Wellness Channel:</b> This programme seeks to develop the skills, values and attitudes for pupils to manage their own learning, emotional development, social interactions and physical well-being. It is designed to cater to our pupils' holistic well-being through Physical Education, Health Education, Civics and Moral Education, and Pastoral Care Lessons.</p>
<p><b>Quote by Lead Consortium MD/CEO</b></p>	<p>"This project reinforces ST Electronics' standing in the e-Learning industry. We see ourselves uniquely positioned to address the requirements of FutureSchools@Singapore comprehensively, given our strong capabilities in ICT, simulation, animation, and edutainment. We are honoured to be given this opportunity to participate in this project and will contribute our part towards the transformation of Singapore's education system."</p> <p><b>~SEAH Moon Ming, President, ST Electronics &amp; Deputy CEO, ST Engineering</b></p>

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## ST ELECTRONICS (TRAINING &amp; SIMULATION SYSTEMS) CONSORTIUM'S SOLUTIONS FOR HWA CHONG INSTITUTION: HWA CHONG NEXUS

<b>Consortium Lead</b>	ST Electronics (Training & Simulations Systems) Pte Ltd
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<b>Summary of Solution</b>	<p>The proposal's main focus is to develop an all encompassing e-learning solution which addresses borderless communications, linking up learning communities "live" across cultural boundaries and cater to both independent and group learning. The solution is catered to the specific needs of Hwa Chong Institution, characterised by a group of independent students who learn at various paces, with the freedom to conduct in-depth research for various topics with local or overseas partners and mentors.</p> <p>The proposal for HCI includes the Hwa Chong Nexus (HCnX), a virtual campus designed to facilitate independent learning and collaborative explorations. Leveraging the school's established partnerships both locally and internationally, the HCnX enables different groups of independent learners to conduct advanced research with local and overseas peers as well as expert-mentors in a safe and secure learning environment. Advanced communication tools and collaborative platforms bring HCI students together with mentors and peers overseas to form global communities of learners.</p> <p>With the point of entry from the HCnX portal, teachers and students can access multiple key features such as:</p> <ul style="list-style-type: none"> <li>▪ <b>Hwa Chong Tube:</b> A personalised site for teachers and students to upload and stream educational content while allowing social networking to occur.</li> <li>▪ <b>Independent Learning System:</b> This student-centric application enables teachers to set the syllabus while students determine their own learning paths. Thus this can help achieve individualised and cooperative learning.</li> <li>▪ <b>Research and Partnership Portal:</b> This community-based applications aims to allow for mentor-mentee matching search facility, online conferencing collaboration</li> </ul>

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	<p>tool and live real-time application sharing tool, bringing together alumni, industry partners, domain experts, school staff, parents and students (both local and overseas) into Hwa Chong's research environment.</p> <p>There will also be Interactive Digital Media based content featured in the solution. Besides having Chinese Games, there will also be interactive virtual field trips that allow students to experience and access locations that are not easily accessible in 'real-life'.</p>
<p><b>Hwa Chong Institution FutureSchool Programme Highlights</b></p> <p><b>Principal</b> Mr Hon Chiew Weng</p> <p><b>Key Focus</b> A passion-driven and borderless learning institution</p>	<p>The HCI programme aims to combine technology with new ways of learning to create educational value. This is achieved by creating opportunities beyond the school's physical campus at Bukit Timah, so that learning transcends boundaries between subjects, classrooms, schools, countries and cultures.</p> <p>The HCI programme further seeks to empower students to pursue their passion. To this end, an integrated system, the Hwa Chong Nexus (HCnX) has been designed to facilitate independent learning and collaborative explorations. HCnX will leverage personal communications technology devices students already own to support diverse learning styles and a broad range of assessment strategies. Specifically, HCnX caters to <i>both independent and collaborative</i> learning:</p> <ol style="list-style-type: none"> <li><b>1. Independent Learning Gateway:</b> This provides a point of entry into a suite of IDM/ICT tools that will enable individuals to acquire new knowledge through active self-study. Students will choose from a myriad of learning content, receive instructional support, and make study plans (both virtual and physical) with the ICT-enabled network learning support. This function enables different groups of independent learners to conduct advanced research with local and overseas peers as well as expert-mentors in a <i>safe and secure</i> learning environment.</li> <li><b>2. Virtual Learning Communities (VLC) Portal:</b> By providing a Web 2.0-style collaborative learning environment, this channel enables students from different countries across continents to work together to solve a research problem or create a product. Seniors and juniors can also work collaboratively in teams on self-directed projects. Together with mentors from the university and industry, students negotiate their learning and become active producers of knowledge. The bringing together of expert mentors and resources empowers students to build knowledge in authentic and virtual platforms.</li> </ol>

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<p><b>Quote by Lead Consortium CEO</b></p>	<p>"This project reinforces ST Electronics' standing in the e-Learning industry. We see ourselves uniquely positioned to address the requirements of FutureSchools@Singapore comprehensively, given our strong capabilities in ICT, simulation, animation, and edutainment. We are honoured to be given this opportunity to participate in this project and will contribute our part towards the transformation of Singapore's education system."</p> <p><b>~SEAH Moon Ming, President, ST Electronics &amp; Deputy CEO, ST Engineering</b></p>
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