



# Atlanta International School Technology Strategic Plan 2011-2016



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## **AIS Mission**

To meet the challenges and opportunities of our interdependent, fast-changing world as responsible citizens, young people require flexible intellectual competence, self-discipline, and a global outlook. To achieve these goals, they need rigorous academic preparation and a passion to become the best they can be. To thrive in and contribute to this world, they must have a solid sense of self and respect for others—as individuals, as members of a group, as citizens of their nations, and as members of the global community. Extraordinary individuals will be called upon to shape the 21st century. The mission of Atlanta International School (AIS) is to develop such individuals.

To fulfill this mission, AIS commits itself to the following goals:

- to sustain and grow the exemplary level of teaching and learning that has earned it a worldwide reputation for excellent standards in international and multilingual education within the framework of the International Baccalaureate;
- to develop each child fully by helping each one to live our core values: the joy of learning and purposeful effort as well as mutual respect and understanding in a diverse setting;
- to maintain an optimal size and composition of faculty and students to maximize the opportunities for learning and shared understanding that are necessary for a healthy community;
- to help shape and improve local and global communities through the committed participation of its multilingual students, alumni, parents, faculty, and staff.

## **AIS Technology Vision**

At AIS, the focus of technology is to support and enhance student learning throughout all grade levels and across all subjects. Our program is based on ISTE-NETS Standards and is aligned with the IB PYP, MYP and DP frameworks, and is founded on a continuum of age-appropriate skills and competencies that are taught explicitly and applied throughout all subject areas. Technology is not something that only happens in computer labs, taught by technology teachers, but is embedded throughout the learning environment and utilized by all teachers. The program includes both vertical (technology taught as a standalone subject) and horizontal (technology integrated across other subjects) components, and dedicated time is made available for both. Students learn how to become responsible digital citizens, developing positive digital identities and footprints, applying modern technology tools to solve authentic problems in different contexts, and becoming well-versed in finding, accessing, critically evaluating, and using information from a variety of sources in a variety of media. Design is an important element of the technology program, and the MYP Technology Design Cycle is a framework that is applied to problem-solving, both in the technology curriculum and throughout other MYP courses. The school offers a continuum of co-curricular activities that support technology learning.

Technology is an integral part of horizontal and vertical collaboration among teachers and is supported by dedicated planning and collaboration time. While teachers may begin at different levels along a continuum of technology competencies, they are continually supported throughout their development through a comprehensive, structured program that is incorporated into the school's existing Professional Development schedule. Ongoing professional development includes a mixture of large group, small group, and one-on-one training, and is supplemented by a wide variety of resources, including video tutorials, online documentation, and a peer-mentoring program. Teachers are encouraged to use technology to become self-directed learners and to collaborate with colleagues, both within the school and with other schools, extending professional development beyond conferences and workshops. Technology use is supported and modeled by school leadership. Technology expectations are aligned with student core competencies and are incorporated into curriculum planning, teacher hiring, appraisal, and retention.

Our technology infrastructure is a flexible, reliable learning platform that extends beyond the school campus to facilitate anytime/anywhere learning. A variety of age-appropriate technology tools are used throughout the instructional environment and are available for appropriate use at all stages of learning. Students and teachers are key stakeholders in the use of technology, and their input is a core component of the adoption of new technologies. Appropriate platforms, operating systems, software applications, and devices are chosen to best support teaching and learning at each grade level and in each subject, and the use of multiple operating systems and devices supports the idea that students need to be multi-literate in technology, just as they

need to be multi-literate in language. Students and teachers are empowered to solve their own problems and to manage their own technology environments.

Student learning is the key aim of the school's IT Strategic Plan, which focuses on long-term sustainability. The IT Strategic Plan specifies goals, metrics, timelines, and action steps for key projects that support student learning. A Technology Focus Group made up of key stakeholders (faculty, staff, administration, families, and board) guides all strategic decisions regarding technology use at the school. Sustainable funding supports our long-term technology vision, and strategic decisions ensure that we make the best use of our resources. With horizons of 1, 3, and 5 years, the IT Strategic Plan is reviewed and updated annually.

## Stakeholders

The development of this IT Strategic Plan takes into account the viewpoints of the following stakeholder groups:

- Students
- Faculty and Staff
- Administration
- Families
- Board of Trustees
- External Organizations

## Sources

Input from the following sources was incorporated into the formulation of this document:

- SWOT Analysis (AIS Community Focus Group)
- SWOT Analysis (Technology and Library Faculty)
- CIS and AdvancED Recommendations
- MYP Matters to Be Addressed
- ISTE NETS Standards
- ITEM ICT Accreditation Framework and Self-Study Results
- Horizon Reports, 2009-2011 (K-12 Edition)

Please refer to *Appendices* and the *Works Cited* section at the end of this document for additional details and information.

## Technology Plan Strands

1. Develop and implement Technology curriculum scope and sequence aligned with ISTE NETS and IB PYP/MYP/DP Frameworks
2. Develop comprehensive Faculty Technology Expectations and incorporate technology into the school's Professional Development program
3. Implement the ISTE NETS Framework and ITEM Accreditation
4. Address MYP Technology Matters to be Addressed
5. Develop Internet Safety and Cyber-bullying curriculum
6. Develop Mobile Computing Strategy (Project 3C)
7. Complete Standard Classrooms Implementation
8. Develop Cloud Computing strategy
9. Develop 4K-12 Robotics co-curricular program
10. Develop a school Learning Commons
11. Develop a Technology community communications plan
12. Address sustainability and long-term planning

## Alignment to School Strategic Plan

(For objective/project/goal column headings, please refer to Appendix E, *Objectives and Project Goals from School Strategic Plan.*)

	Com/Mkt		Facilities			Fac/Staff				Financials/Ops					Programs						Stu/Par/Com		
	O2	G4	O1	G1	C1	O3	O5	P1	P5	O2	O3	P1	P3	P4	O1	P1	P3	P4	P5	P13	O1	P1	P2
Curriculum Scope and Sequence	X					X	X								X	X	X	X	X		X	X	X
Professional Development	X					X	X	X	X						X	X	X		X			X	
ISTE NETS/ITEM	X		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
MYP Matters-to-be-Addressed	X														X		X	X			X		
Internet Safety		X																	X			X	
Project 3C	X		X											X		X					X		
Standard Classrooms	X		X	X								X				X					X		
Cloud Computing	X		X	X												X							
Robotics Continuum	X																						X
Learning Commons	X					X						X	X	X	X	X	X	X	X		X		
Communications Plan		X																	X				
Sustainability			X	X	X				X	X	X	X	X	X			X			X			

## Strand 1: ICT Curriculum Scope and Sequence

Develop and implement ICT curriculum scope and sequence aligned with ISTE NETS and IB PYP/MYP/DP Frameworks

Rationale:

A curriculum scope and sequence is essential to ensure that students are familiar with a comprehensive set of technology tools—and strategies for using them—to support and enhance student learning across all subjects at all grade levels. Both the CIS and AdvancED reports include recommendations to incorporate technology throughout student learning experiences and document its use, and the MYP Matters to be Addressed document a need to incorporate Technology into the MYP curriculum to the same level as the other 7 subjects, including curriculum documentation, unit plans, and required hours.

Link to the School Mission:

The AIS Mission demands that we prepare students for today’s interdependent, fast-changing world and for the emerging 21<sup>st</sup> century. A Technology Curriculum Scope and Sequence is necessary to ensure that technology is taught to all students in a consistent way throughout our curriculum.

Action Steps:

<b>Technology/ICT Curriculum Scope and Sequence</b>	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2015-2016</b>
Expand current MYP Technology Scope and Sequence to incorporate Materials, Information, Systems		X	X	X		
Collect and analyze ICT scope & sequence information from appropriate schools (PS)	X			X		
Develop draft S&S in coordination with curriculum stakeholders (PS)	X			X		
Complete S&S/NETS alignment (PS)		X			X	
Collect and analyze technology scope & sequence information from appropriate schools (SS)	X	X			X	
Develop draft S&S in coordination with curriculum stakeholders (SS)		X			X	
Complete S&S/NETS alignment (SS)			X			X
Atlas: Incorporate ISTE NETS / AASL		X				



**Strand 2: Technology Professional Development**

Develop comprehensive Faculty Technology Expectations and incorporate technology into the school’s Professional Development program.

Rationale:

School faculty need adequate training and support in order to be able to best prepare students for university work, career needs, and lifelong learning. The Technology SWOT analysis has pointed out the need to develop consistent technology expectations for all faculty and professional development programming to support these expectations.

Link to the School Mission:

The AIS Mission demands that we prepare students for today’s interdependent, fast-changing world and for the emerging 21<sup>st</sup> century. A consistent set of expectations and a comprehensive professional development program are needed to ensure that faculty can best support our students in this endeavor.

Action Steps:

<b>Technology Professional Development</b>	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2015-2016</b>
Develop faculty technology expectations that are incorporated into faculty recruitment and appraisal		X				
Incorporate technology into the faculty goals process			X			
Develop a peer-mentoring program		X	X	X		
Incorporate technology into timetabled faculty professional development	X	X	X	X	X	X

### Strand 3: ISTE NETS Framework / ITEM Accreditation

Implement the ISTE NETS Framework and ITEM Accreditation.

Rationale:

The ISTE NETS Standards is an aligned framework of standards for students, teachers, administrators, technology facilitators, and technology leaders that is intended to help schools better prepare students for an increasingly digital world. The International Technology in Education Mark (ITEM) is an accreditation framework that is aligned to ISTE Standards that enables schools to measure how well technology supports student learning and school operations. Implementing the ISTE Standards and measuring with the ITEM Framework will ensure the most effective use of technology at AIS. The school completed the ITEM self-study in 2010 and determined that most areas of technology use were at Level 4 (on a 1-5 scale, with 1 as the highest mark). ITEM accreditation can be used to measure adherence to ISTE Standards and is granted for schools achieving levels 1, 2, or 3 as measured by the ITEM indicators.

Link to the School Mission:

The AIS Mission demands that we prepare students for today’s interdependent, fast-changing world and for the emerging 21<sup>st</sup> century. External benchmarks and standards—such as ISTE NETS and ITEM Accreditation—are needed to measure how well we are accomplishing this goal.

Action Steps:

<b>ISTE NETS Framework / ITEM Accreditation</b>	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2015-2016</b>
Repeat ITEM Self-Study			X		X	
Identify actions needed to achieve ITEM Level 3 (Enhancing ICT)			X			
Identify actions needed to achieve ITEM Level 2 (Extending ICT)					X	
Schedule and complete ITEM Accreditation visit					X	

#### Strand 4: MYP Technology Matters to be Addressed

Address MYP Technology Matters to be Addressed: Required Hours, Information Technology, Monitoring.

Rationale:

As an MYP school, we are required to meet the basic requirements of the MYP Technology framework. These include comprehensive instruction in Materials, Information, and Systems Technology and the MYP Technology Design Cycle, with a minimum of 50 hours of instruction for every student in grades 6-10. It is important to note that the 50-hour requirement is an absolute minimum for every MYP subject, and the IB documentation notes that the minimum amount of instruction is insufficient to prepare students to successfully meet the assessment criteria. At the moment, all students in grades 6-8 receive one quarter (25 hours) of MYP Materials Technology instruction per year, and all students in grades 9 and 10 complete a semester (50 hours) of MYP Materials instruction in either 9<sup>th</sup> or 10<sup>th</sup> grade. MYP Information Technology is taught through units of instruction incorporated into other subjects. While these integrated units have been successful to some degree, the school lacks sufficient resources to deliver them to all students at all grade levels, and it has been a challenge to allocated sufficient time to address all of the MYP Technology assessment criteria.

Link to the School Mission:

The AIS Mission demands that we prepare students for today's interdependent, fast-changing world and for the emerging 21<sup>st</sup> century. One of the frameworks that supports this idea is our use of the International Baccalaureate PYP, MYP, and DP programs. In order to complete our implementation of the IB Middle Years Programme, it is necessary to address the MYP Technology Matters to be Addressed that were raised during our initial authorization.

Action Steps:

<b>MYP Matters to be Addressed</b>	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2015-2016</b>
Incorporate Technology into Secondary timetable as a full subject	X					
Submit Monitored Year-5 Tasks		X				
Develop initial MYP Technology Scope and Sequence		X				
Increase MYP Technology faculty staffing to prepare for new subject		X				
Implement MYP Technology courses in grades 6-10			X	X	X	X

**Strand 5: Internet Safety**

Develop Internet Safety and Cyber-bullying Curriculum.

Rationale:

Instruction in Internet safety is critical to protect students, teach them about appropriate ways to interact in online environments, and prepare them for life in an increasingly digital world.

Link to the School Mission:

The AIS Mission calls on students to have a solid sense of self and respect for others, and the Core Values include the nurturing of mutual respect and understanding among all members of the community. In the digital context, this requires that students act responsibly and think critically when using websites, social networks, and portable devices such as mobile phones. A comprehensive Internet Safety and Cyber-bullying curriculum will ensure that we develop this understanding among students and throughout our community.

Action Steps:

<b>Internet Safety</b>	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2015-2016</b>
Expand Primary Internet Safety Programming		X				
Expand Middle School Internet Safety Programming	X					
Expand Upper School Internet Safety Programming		X				
Review and further develop Primary School Internet Safety Programming				X		
Review and further develop Middle School Internet Safety Programming		X			X	
Review and further develop Upper School Internet Safety Programming			X			X
Revise the Acceptable Use Policy		X			X	
Make explicit links to existing Counseling department programs	X	X	X	X	X	X

## Strand 6: Project 3C

Develop a strategy (Project 3C) to integrate mobile computing devices into the curriculum.

Rationale:

The current lab-based model at AIS is insufficient to support the academic needs of the school. Recent investigation has determined that the current allocation of computer labs, even if fully used, can only support technology-based learning for approximately 5% of student instructional contact time. Further, teachers are required to plan up to two weeks ahead to reserve limited periods of access, which limits their ability to incorporate technology into instruction in a dynamic, authentic way. The Technology SWOT analysis has noted the limitations of the current model. While a number of students have started to bring their own laptop computers to school, the wide variety of equipment has made instructional activities difficult for teachers, and ensuring equity-of-access for all students has been a challenge. Better access to technology is needed to support student-centered learning, collaboration and inquiry, project-based assessment, and better teaching of information literacy and digital citizenship.

Link to the School Mission:

The AIS Mission demands that we prepare students for today's interdependent, fast-changing world and for the emerging 21<sup>st</sup> century. In order to do this, we must ensure that students have access to a wide variety of technologies and are competent in how to use them to best support and enhance their own learning. In addition to knowing how to use the technologies themselves, we also need to develop 21<sup>st</sup> century core competencies, such as creativity, collaboration, and communication.

Action Steps:

<b>Project 3C</b>	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2015-2016</b>
Define program goals	X					
Gather information from benchmark schools	X					
Investigate vendors and equipment and develop an equipment standard	X					
Develop and revise policies, procedures, expectations		X				
Secondary faculty laptop roll-out		X				
Grade 6-7 laptop roll-out			X			
Expand laptops to grades 6-10				X		
DP Bring-Your-Own Guidelines			X	X		

Primary Tablet Pilot		X				
Primary iPod Touch / iPad Pilot		X				
Develop Primary plan for integrating mobile devices into instruction			X	X	X	
Investigate additional use of mobile devices school-wide			X	X	X	X

## Strand 7: Standard Classrooms

Complete Standard Classrooms Implementation.

Rationale:

The Standard Classroom Project was initiated several years ago to ensure that consistent equipment was available in all classrooms. As of Spring 2011, approximately 80% of Secondary classrooms, as well as all Primary classrooms in grades 4K, 5K, 4, and 5, are equipped with LCD projectors, interactive whiteboards, speakers, multi-format DVD players, and document cameras. In order to ensure that teachers and students have access to a consistent set of modern tools to support instructional activities, remaining classrooms should be similarly equipped.

Link to the School Mission:

The AIS Mission demands that we prepare students for today's interdependent, fast-changing world and for the emerging 21<sup>st</sup> century. Part of this includes providing equity of access to a variety of modern tools to support student learning. Completing this project will allow all students and teachers to have access to a consistent set of modern tools to support instructional activities.

Action Steps:

<b>Standard Classroom Project</b>	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2015-2016</b>
Outfit Primary School grades 1-3 as standard classrooms (Smart boards + AV)	X					
Inventory partial standard classrooms and develop plan to complete		X	X			
Outfit remaining Secondary School standard classrooms (Smart boards + AV)			X			
Develop and implement scheduled equipment refresh cycle			X	X	X	X

## Strand 8: Cloud Computing

Develop Cloud Computing Strategy.

Rationale:

Cloud computing, the use of distributed systems throughout the Internet to deliver ubiquitous, reliable, on-demand access to software applications and information, is revolutionizing the way that information is stored, accessed, and shared. The 2011 K-12 Edition of the NMC Horizon Report (see *Works Cited*, page 27) lists Cloud Computing as one of the most influential emerging technologies in the immediate future. Potential benefits include reduced cost to maintain and deliver software and services, increased access to information across varied computer systems, significantly increased uptime and reliability, and support for robust collaboration and sharing, both within and beyond the school community. Many of our benchmark schools have moved to cloud-based solutions for email, document and file sharing, web publishing, and delivery of some software applications. AIS has already made some steps in this direction; our student information system, website, and a number of auxiliary databases and systems are hosted on external systems, and a number of teachers and students have started using web-based services, such as Google Documents and a variety of Web 2.0 applications, to create, modify, share, and publish documents and information.

Link to the School Mission:

The AIS Mission demands that we prepare students for today's interdependent, fast-changing world and for the emerging 21<sup>st</sup> century. Further, the Mission talks about sustaining and growing the exemplary level of teaching and learning that has earned the school a worldwide reputation. Cloud computing is an emerging technology that satisfies the dual goals of preparing students for the digital realities of the 21<sup>st</sup> century and of ensuring that we are providing technology infrastructure in the most effective, reliable, and cost-effective ways.

Action Steps:



<b>Cloud Computing</b>	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2015-2016</b>
Gather information from benchmark schools	X					
Investigate cloud computing options	X	X				
Develop and implement pilot program		X	X			
Develop and implement production system(s)			X	X	X	

### Strand 9: 4K-12 Robotics Co-curricular Program

Develop 4K-12 Robotics Co-curricular Program.

Rationale:

Robotics is widely recognized as a medium for engaging students in authentic, real-world problem solving activities that incorporate concepts from Mathematics and Science. AIS currently has a FIRST Robotics team, offered as a co-curricular activity to students in grades 8 – 12. Developing a Robotics co-curricular continuum in grades 4K-12 would allow all students to experience the benefits of robotics in learning.

Link to the School Mission:

The AIS Mission demands that we prepare students for today’s interdependent, fast-changing world and for the emerging 21<sup>st</sup> century. This applies not only to academic offerings, but to co-curricular and extra-curricular activities as well. Further developing our Robotics program will enable the school to provide opportunities to students that will give them exposure to authentic real-world problem-solving activities.

Action Steps:

<b>Robotics Continuum</b>	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2015-2016</b>
Re-establish the Primary Lego Robotics program			X			
Investigate and implement Middle School co-curricular programming			X			
Investigate and implement curricular tie-ins to PYP and MYP			X	X	X	
Review and revise summer camp offerings			X			X

## Strand 10: Learning Commons

Develop a school Learning Commons.

Rationale:

Traditional school libraries no longer serve the fast-evolving reality of our modern world. Many schools have moved to a Learning Commons model, where Library facilities are designed to support a more collaborative, constructivist, and project-based model of instruction that takes advantage of all of the resources—both traditional and digital—to support learning. Librarians and technology specialists collaborate to develop units of instruction and support classroom teachers. AIS has already begun the move in this direction, and we are developing a wide variety of links between Library and Technology activities. Better resources are needed to facilitate this model.

Link to the School Mission:

The AIS Mission demands that we prepare students for today's interdependent, fast-changing world and for the emerging 21<sup>st</sup> century. One of the ways in to accomplish this is through the creation of a Learning Commons, which provides a structure and mechanism for supporting the use of traditional and digital resources to support learning, as well as a framework to support and enhance faculty professional development.

Action Steps:

<b>Learning Commons</b>	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2015-2016</b>
Formalize the Learning Commons model: goals, outcomes, vision		X				
Develop a design for a Learning Commons facility		X	X			
Develop a plan to incorporate the Learning Commons into professional development		X	X	X		
Implement Learning Commons facility upgrades				X	X	

### Strand 11: Technology Community Communications Plan

Develop a Technology community communications plan.

Rationale:

A Technology community communications plan is needed to ensure that the entire school community is involved in and informed of technology decision making. The Technology SWOT analysis has pointed out the need to better communicate information to AIS community members.

Link to the School Mission:

Fulfilling the School Mission requires the participation of all members of the community: students, faculty, staff, administration, families, the Board, and external organizations. A Technology community communications plan will ensure that all members of the community are involved in and informed of this process.

Action Steps:

<b>Technology Community Communications Plan</b>	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2015-2016</b>
Establish a 21st Century Learning Group		X				
Implement and develop a Technology Portal on the school website		X	X			
Schedule and plan regular parent meetings	X	X	X	X	X	X

## Strand 12: Sustainability

Address sustainability and long-term planning.

Rationale:

Better long-term planning is needed to ensure the sustainability of the school's Technology program, as well as the general operation of the school. Review and revision of budgeting, staffing, processes, systems, documentation, and metrics is needed to ensure that the school is making the best use of its resources and that the focus of technology continues to be on student learning.

Link to the School Mission:

The AIS Mission talks about sustaining and growing the exemplary level of teaching and learning that has earned the school a worldwide reputation. In order to do this, it is critical to have proper staffing and resources, metrics for measuring effectiveness, and a long-term commitment to funding to ensure that our technology resources are utilized for maximum educational benefit.

Action Steps:

<b>Sustainability</b>	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2015-2016</b>
Document all IT processes and systems		X				
Develop procedures to ensure that IT equipment and licensing are up-to-date		X	X			
Develop 1, 5, and 10 year projected operational and capital IT budgets		X	X			
Develop maintenance and refresh cycle for all school technology equipment		X	X			
Review operational and instructional IT staffing		X	X			
Develop metrics for measuring the effectiveness of the IT operations program		X	X			
Review and revise the IT Strategic Plan					X	X

## Appendix A: SWOT Analysis (AIS Community Focus Group, January 2011)

The following SWOT Analysis was completed by a community focus group as part of the AIS Strategic Planning process in January 2011.

<b>SWOT ANALYSIS – AIS Community Focus Group, January 31, 2011</b>
<b>STRENGTHS</b>
IT instructional faculty
Level of technical support campus wide <ul style="list-style-type: none"> <li>• Curriculum</li> <li>• Infrastructure</li> </ul>
Campus wide IT infrastructure <ul style="list-style-type: none"> <li>• Wireless</li> </ul>
Use of IT in extracurricular activities for both Primary and Secondary Schools
Electronic availability of tools and resources for student, faculty and staff home use <ul style="list-style-type: none"> <li>• Rosetta Stone</li> <li>• Moodle</li> <li>• Library resources</li> </ul>
Integration of IT into academics and operations
<b>WEAKNESSES</b>
Ongoing communications to AIS community regarding technology support, updates and initiatives <ul style="list-style-type: none"> <li>• System status</li> <li>• Implementation of new systems</li> <li>• Training – use of new systems</li> </ul>
Meeting MYP requirements for technology in curriculum
Lack of short-term and long-term shared vision for IT tied to our Strategic Plan
Unreliability of some hardware and software
Reactive culture of our Tech Support
Accessibility of computer lab space <ul style="list-style-type: none"> <li>• Student access to computers</li> </ul>
Availability of age-appropriate resources <ul style="list-style-type: none"> <li>• Computer Labs</li> <li>• Computers</li> <li>• Web sites – availability and filtering</li> <li>• Language software               <ul style="list-style-type: none"> <li>○ Language acquisition</li> <li>○ Content delivery</li> </ul> </li> </ul>
Professional Development training <ul style="list-style-type: none"> <li>• Use instruction</li> <li>• Learning integration</li> </ul>
Lack of curriculum scope and sequence
Limitations of virtual environment <ul style="list-style-type: none"> <li>• Thin client issues (lack of CD capabilities)</li> <li>• Citrix insufficient to support needed software</li> <li>• Software usage limitations due to licensing</li> </ul>

**SWOT ANALYSIS – AIS Community Focus Group, January 31, 2011**

**OPPORTUNITIES**

- More technology in hands of the students
- Establish teacher/student groups to focus IT educational objectives
- Better integrate technology into Professional Development
- Increase multi-lingual technology faculty to support additional integration of IT into curriculum
- Consider alternative operating systems and devices to improve student learning and digital literacy
  - Apple
  - Linux
  - Hand held devices
  - BYOC (Bring Your Own Computer)
- Reference back to Weaknesses as sources of opportunities
- Expand Professional Development opportunities and underlying expectations
  - Set minimum technological proficiency expectations
    - Compensation implications
    - Appraisal criteria
- Learning commons
- Develop Middle School tech-oriented extracurricular activities
- Make Website content easy to locate, easy to navigate
- Organize the J-Drive content
- Do SWOT analysis on Smart Board application to our needs

**THREATS**

- Compliance with MYP hours requirements for Design Technology
- Lack of reliability of IT hardware
- Shortage of time for Professional Development opportunities due to “packed schedules” of faculty members
- Teacher competence
- Failure of faculty and students to accept and/or adapt to technological change
- Fast pace of technological change
- Competition from other schools
- Long Range Plan for funding IT program and infrastructure needs
- “Human Condition” (Meaning?)
  - Simplify
  - Prioritize
  - Develop realistic expectations for the “Big Picture”
  - Coordinate micro and macro pictures
- All knowledge rests with one individual...where is knowledge base archived?

## **Appendix B: SWOT Analysis (Technology and Library Faculty, January 2011)**

### **Strengths:**

- Strong partnership between Technology and Library faculty; beginnings of a Learning Commons
- Sound supporting infrastructure, including campus-wide wireless and broadband Internet connectivity
- Awareness and documentation of technology strengths and areas for improvement

### **Weaknesses**

- We have not completed the implementation of MYP Technology, fully addressing contact time, staffing, resources, and assessment
- Clear, consistent expectations are needed to ensure incorporation of technology throughout the curriculum: curriculum development, assessment/reporting, faculty professional development and IT competencies
- Long-term planning is needed to address infrastructure reliability and sustainability

### **Opportunities**

- Fully develop the Learning Commons collaboration between Technology and Library faculty to support teaching of 21st Century Skills and support faculty professional development
- ICT framework (ISTE+PYP/MYP/DP) that supports student learning (curriculum planning, faculty expectations, benchmarks and assessment)
- More ubiquitous computing, including portable devices used throughout all grades/subjects
- STEM collaboration with Science and Mathematics
- Develop a 4K-12 Robotics Continuum
- Outfit the new ASD facilities with more modern Design Technology equipment: CAD/CAM
- Better educate the community about the scope and value of MYP technology: Information/Materials/Systems and the Design Cycle

### **Threats**

- The perception held by many in the school community that technology is about what you do with a computer, something that only happens in computer labs with technology teachers. Technology must be about providing a 21st Century education for all students is incorporated throughout instruction by all faculty in all subjects at all grade levels
- Losing MYP authorization
- Community's misperceptions about what technology is and why it is important



## **Appendix C: CIS and AdvancED Recommendations**

### **CIS Recommendations**

#### Major Recommendations:

- The school develop and implement a plan to deliver a minimum of 50 hours annually of technology instruction in the MYP programme.
- The school take measures to support student learning with adequate and appropriate technology.
- The School review its long-term financial planning with consideration to maintaining and increasing IT resources at an appropriate level, so that it aligns with levels from the benchmark Schools it surveyed.

#### Subject-Specific Recommendations

- The School continue to ensure that staffing, resources, teaching time and space are adequate to provide a level of Technology instruction commensurate with the School's academic framework and vision.
- The School provide a greater degree of training for teachers in the delivery of cross-curricular IT.
- The School ensure that financial planning incorporates a long-term strategy for maintaining IT resources at an appropriate level.

### **AdvancED Recommendations**

- Document all curriculum K-12th grade in Atlas.
- Consistently incorporate IB requirements for instructional time in specific content areas, e.g., technology.
- Investigate ways to accelerate opportunities for the integration of technology into the classrooms, both by securing additional computer technology and by more effectively utilizing the technology already in place.

## **Appendix D: MYP Matters to be Addressed**

1. There is no concrete evidence of 50 hours of MYP technology each year of the program. The school must document Technology hours through MYP units of work that give evidence of 50 teaching hours sustained over the course of the year each year of the program. Please submit MYP Technology unit plans for each year of the program that show how the 50 hours are being met over the course of the year.
2. There is no evidence of vertical and horizontal planning around the Areas of Interaction. The school must develop this evidence and submit it to IB North America.
3. The beliefs and values of the programme are not shared by all sections of the school community (including students, teachers, administrator, members of the governing body and others, as appropriate). The school must submit a professional development plan to the regional office that details the ways in which the beliefs and values of the MYP are shared by all sections of the school community. The plan must include dated agendas that include topics around the fundamental concepts, particularly regarding holistic education.

## **Appendix E: Objectives and Project Goals from School Strategic Plan**

### **Communications and Marketing**

#### **Objective 2:**

AIS is recognized as a leader in the realm of concept-driven, 21st century skills-based curriculum development and implementation that emphasizes critical thinking in a global context.

#### **Goal 4:**

AIS will continue to enhance its website and community-wide use of digital technology and social media to improve all facets of communication internally and externally.

### **Facilities**

#### **Objective 1:**

The facilities and infrastructure of AIS are designed to optimize student learning in a safe, sustainable and attractive environment. Campus-wide facilities master planning occurs annually to ensure that AIS will continue to meet the current and future academic and co-curricular needs of all stakeholders.

#### **Goal 1:**

AIS will create and publish a facilities master plan, consistent with the outcomes of our strategic planning process, that addresses the academic and co-curricular needs of all stakeholders. This plan will include action steps, timelines and estimated costs for inclusion in the budget planning process.

#### **Continuous Improvement Goal 1:**

AIS will conduct regular facilities and major systems audits, updating the current year, next year and five-year facilities development and maintenance plans annually—inculcating revisions into five-year financial plan.

### **Faculty and Staff**

#### **Objective 3:**

AIS' objective is excellent teaching with a focus on the process of student learning and on measuring, against clear standards, what students know and are able to achieve.

#### **Objective 5:**

AIS requires its faculty and staff to be IT literate.

#### **Project Goal 1:**

AIS continues to grow and implements a comprehensive, clearly articulated strategy and process for the recruitment, support, development and retention of its faculty to include each of the following: recruitment itself, on-boarding prior to arrival at AIS, orientation prior to the start of school, and a formal mentoring and support plan for the new faculty member's first year at AIS.

#### **Project Goal 5:**

Appraisals are explicitly linked to the job description and standards/skills required of that position, the employee's annual goals, the objectives of the

school, the employee's professional development and will be used to inform employee's remuneration/placement upon salary scales and the award of performance bonuses in the case of operational staff.

## **Financials and Operations**

### **Objective 2:**

AIS has in place the funds, financial controls and management systems that ensure the perpetual fiscal health of the school.

### **Objective 3:**

All expenditures are cost-effective, balancing the importance of quality of results with the disciplined and frugal use of resources that is essential to fulfilling the school's mission and values.

### **Project Goal 1:**

Indicators and benchmarks to measure the effectiveness and efficiency of all major non-educational operations, such as the business office, the development office, food service, safety and security, transportation, preventive maintenance, HVAC, energy usage and tuition collection, will be finalized. Once benchmarks are established, these will become continuous improvement goals.

### **Project Goal 3:**

Launch and complete, within five years, a capital campaign to support the implementation of the master plan for buildings and grounds and technology and to grow AIS endowment.

### **Project Goal 4:**

Develop and maintain a five-year financial plan that will allow AIS to sustain its mission and values and to achieve its strategic objectives while ensuring funding for financial aid, maintenance and upgrades to AIS buildings and grounds as well as technology, and professional development and changes in compensation as outlined in the Littleford Reports.

## **Programs**

### **Objective 1:**

Every student accepted into the AIS community is educated in a rich, balanced, culturally diverse and challenging academic setting distinguished by its coherent philosophy, curriculum and methods of assessment based upon exemplary, research-driven international and US practices.

### **Project Goal 1:**

The educational (academic and co-curricular) program of AIS will be clearly articulated and achievement goals to demonstrate excellence in each of these areas clearly defined beginning with Science, Mathematics and Technology. Action Plans for improvement and/ or continuous improvement will be developed and implemented.

### **Project Goal 3:**

Faculty, staff and students are provided with the appropriate tools, time and educational resources to meet the curriculum goals for each grade level and for each subject area.

**Project Goal 4:**

Plans to complete the “Matters to Be Addressed” for the IB Middle Years Program will be developed, prioritized and implemented.

**Project Goal 5:**

The horizontal and vertical articulation of the AIS curriculum will be completed and published to Students, Parents, Faculty and the wider Community in a form and manner that is relevant and applicable to each audience, so that the outcomes and expectations of the curriculum are explicit and understood by all.

**Project Goal 13:**

AIS will develop the organizational structure that will maximize mission implementation and program delivery.

**Students, Parents, and the Community**

**Objective 1:**

Students are prepared to complete successfully the International Baccalaureate (IB) Diploma Programme (DP), are well-prepared for admission to selective and distinguished colleges and universities worldwide and become at least communicatively proficient in two or more languages.

**Project Goal 1:**

The AIS Community Principles will continue to be reinforced as part of a school-wide educational effort so that these principles become fully understood and integrated into the curriculum and the day-to-day experience of students, faculty, staff, parents and the Board of Trustees.

**Project Goal 2:**

A review of appropriate external co-curricular programs for students, such as Robotics, Model United Nations, science and mathematics competitions, will take place, and these programs will be strengthened and used to promote a wide range of opportunities so that students achieve to their highest personal potential.

## Acknowledgements

We thank the following members of the AIS school community for their participation in the development of this Technology Strategic Plan:

Alan Preis	IT Coordinator
Annalee Higginbottom	PYP/MYP ICT Specialist
Skip Roby	MYP ICT Specialist
John Davenport	Technology Teacher
Tom Schwartz	IT Manager
Sharon Hermann	Primary School Librarian
Grace Rembert	Middle School Librarian
Elena Barrio	Upper School Librarian
Rachel Hovington	Head of Curriculum and Professional Development, 4K-12

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