

IPASCO

The global leader in 21st century
science solutions and education



IPASCO[®]
scientific

Presentation Outline

- **Millennium Participant and Sustainable Classroom Model**
- **PASCO Complete Solution for a Sustainable Classroom**
- **Energy and STEM as Driver of Sustainable Development**

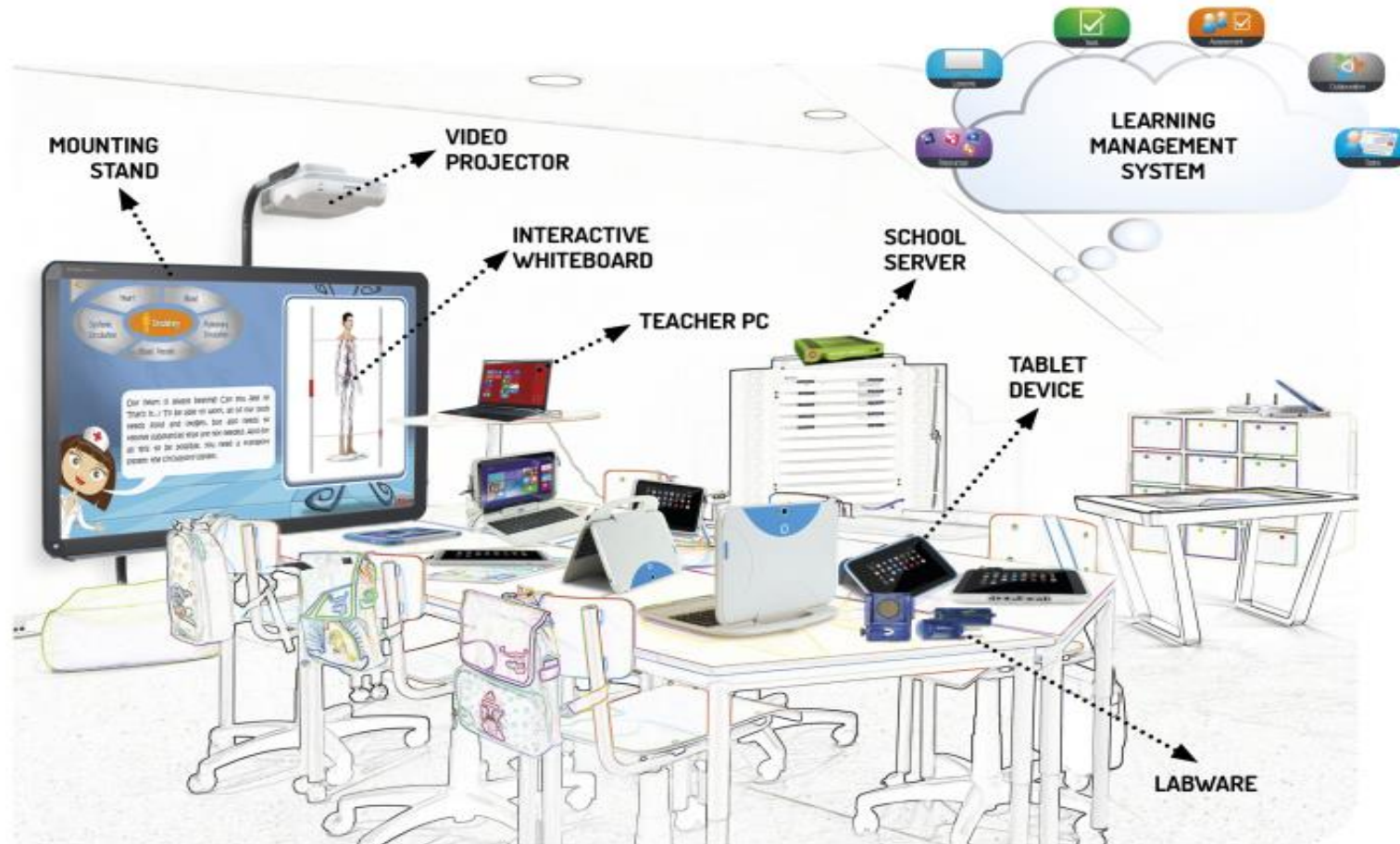
PASCO Participant and Founding Member




"In today's world, science and technology are increasingly interwoven into our daily lives. National economies depend on it. Our planet and the world's population depend on it," said Paul Stokstad, founder of PASCO Scientific. For nearly 50 years, PASCO has dedicated itself to helping educators provide an effective, modern science education. As a founding member of the Millennium@EDU Foundation, we will work to ignite and support truly transformational projects in education, bringing this opportunity to students around the globe. PASCO and our employees are completely dedicated to this cause."


**Mike Bridge – Corporate Vice-President
USA**

Sustainable Classroom Model





PASCO Complete Solution for a Sustainable Classroom



The Complete Package



Technology



Customized Content



Professional Development and Curriculum Support



PASCO Technology

PASCO Smart Cart



Motion encoder
no tape required
0.1 mm resolution

3-Axis Accelerometer (+/- 16g)
3-Axis Gyro
Force sensor (+/- 100N)

Simultaneously measure
Position
Velocity
Acceleration
Force
Incline angle

No track required.



Patent Pending

All sensors. No limits.



PASCO AirLink.

Every PASCO sensor can be made wireless.

No exceptions.



Your choice – supports both USB and Bluetooth connection.

One simple user experience across all technologies



Providing a future-proof investment



New wireless sensors

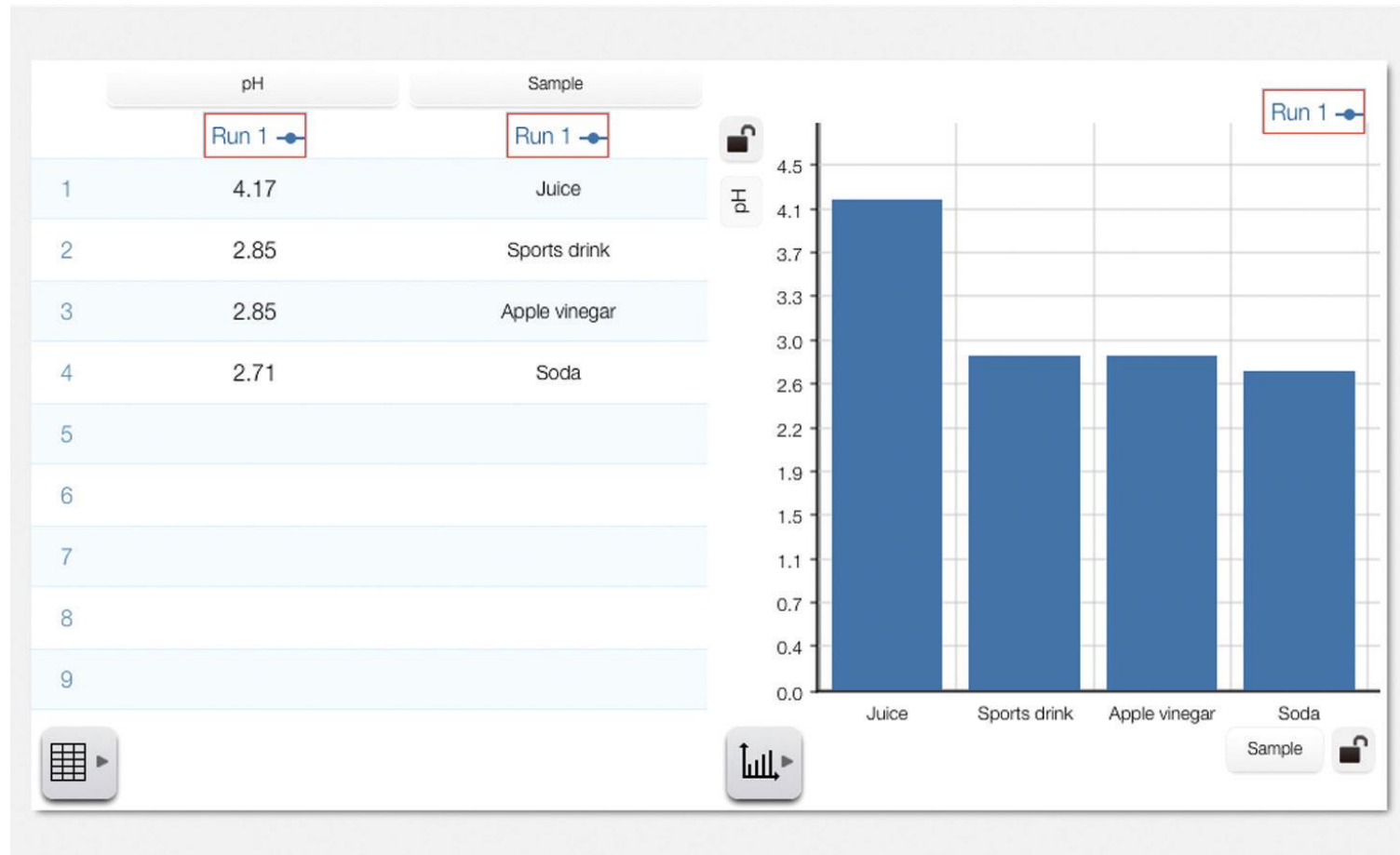
- Eliminate interface—reducing total cost and complexity
- Minimize clutter and clean up
- Simplified experience for better time management
- World-leading prices for improved access for all





PASCO CONTENT

SPARKvue – a full featured software



Choice of
display types

Customizable
layout

Data Sharing with SPARKvue

- Easiest solution available
- Any device to any other devices
- No extra equipment required

A PASCO cloud service



PASCO Sparkvue Content

التسارع

ينبغي إدراج كل صفحات هذه التجربة
المعملية التي تحتوي على الرمز في
السجل الخاص بك.


اللقطة

وبعد الانتهاء من أية صفحة في هذه
التجربة المعملية تحتوي على رمز
اللقطة، اضغط على  في الركن
العلوي الأيمن (إدراج الصفحة في
السجل الخاص بك).


ملحوظة: قد تريد أخذ لقطة للصفحة
الأولى من هذه التجربة المعملية
كصفحة غلاف للسجل.

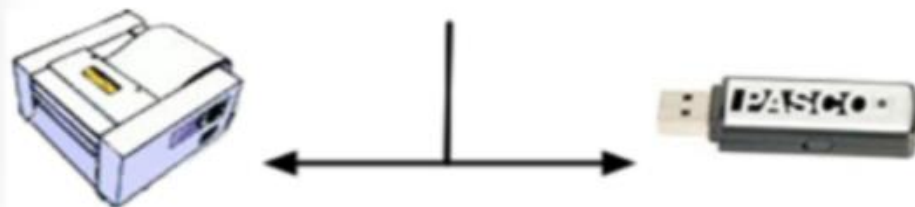
مقدمة

السجلات واللقطات

يستخدم زر اللقطة لالتقاط صورة لما هو معروض على
الشاشة. 

يعد السجل المكان الذي يتم فيه تخزين اللقطات وعرضها. 

يستخدم زر المشاركة لتصدير السجل أو طباعته
ليتم تسليم العمل. 



Datalogging sensors



Collect data beyond Bluetooth range

Collect data without draining tablet/computer battery



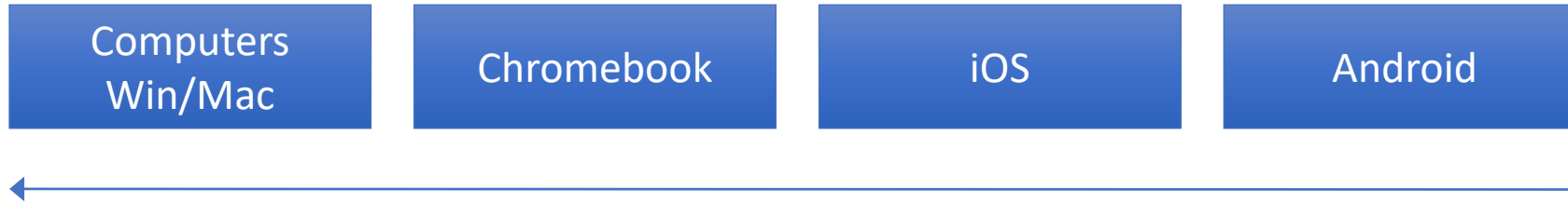
Study microclimates at multiple locations overnight

A real classroom solution



No limits.

School Ecosystem



One software
All sensors
No exceptions




PASCO CURRICULUM DEVELOPMENT AND SUPPORT



STEM Curriculum

PASCO:
Your Partner in **STEM** Education



A photograph of a student in a blue shirt working on a PASCO force table experiment. The student is looking at a tablet computer that displays the value -6.0 N . The force table is a complex structure of metal rods and pulleys. In the background, other students are visible at their desks, also working on similar experiments.

PASCO
scientific

Serving the science education community since 1954

Motivate and Inspire students to excel in
Science ,Technology ,Engineering and Math
(STEM) Curriculum



“Energy and STEM as driver of Sustainable Development”.

Engineering



Material Testing Machine



Digital/Analog Breadboard

Renewable Energy Bundle Kit-STEM Lesson



Renewable Energy Bundle Kit Content

The Renewable Energy Bundle Kit contains all of the equipment needed for a single lab station:

- Long turbine blades (6)
- Short turbine blades (6)
- STEM adapters for student designed blades (6)
- Towers (2)
- Weighted base
- Nacelle with generator
- 1 W Solar Cell
- LED
- Patch Cords (2)
- Wireless Voltage Sensor
- Wireless Current Sensor
- Shrouded Alligator Test Leads
- Sparklabs

Renewable Energy Sparklabs

- **Design an Efficient Turbine STEM challenge:** Design the most efficient wind turbine for a given wind speed
- **Energy Transformations:** Learn how one type of energy can be converted into another. Observe energy transformations that produce electricity.
- **What is Electricity?** Determine the relationship between voltage and current while studying electricity in a solar-powered circuit.
- **Solar Panel Performance** Investigate how panel angle, cloud cover, and dust affect solar panel output.
- **Wind Power I: Distance and Speed** Understand the relationship between wind speed and turbine output.

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STEM CURRICULUM AND CASE STUDIES

- STEM TECHNOLOGY AND CURRICULUM DEPLOYMENTS
 - UAE MOE
 - EGYPT MOE
 - USA Public Schools
 - QATAR MOE
- STEM CASE STUDIES
 - Windham Public Schools Connecticut, USA
 - Public School in Hillsborough County, Florida, USA



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