



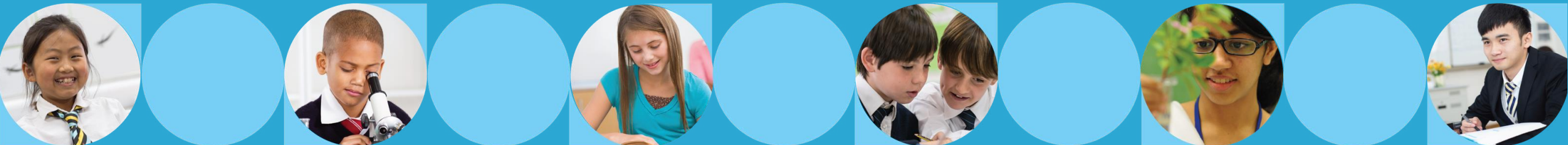
Cambridge Assessment  
International Education

Cambridge Schools Conference, Orlando  
23-24 June 2023  
**#camschoolsconf**

# Research on Cambridge's Impact in US Schools and Universities

Dr. Katherine Chi – Data & Analytics Manager, North America

Dr. Matthew Kaye – School Implementation Manager, North America



# Presenters



***Dr. Katherine Chi, Data and Analytics Manager - Cambridge - North America***

Oversees Cambridge's U.S. data sharing and research program, including collaborations with school districts, universities, and education non-profits. Focused on research on programme efficacy and student outcomes.



***Dr. Matthew Kaye School Implementation Manager - Cambridge - North America***

Current work projects include supporting the fidelity of implementation at Cambridge's K-8 centres and partnering with stakeholders to better understand federal and state accountability models.

Previously served as a Senior Leader for the School District of Lee County (FL) in the role of Director of Accountability, Assessment, and Research.

# Session overview

In this session, researchers will highlight key findings from Cambridge's US data and research activities, including post-secondary outcomes for students who participated in the Cambridge IGCSE and Advanced programmes in Florida and Arizona. The presentation will also examine case studies for Florida districts that have observed success after implementation of the Cambridge programme, and provide guidance on how schools and districts can use data and analytics to evaluate impacts of their programmes.

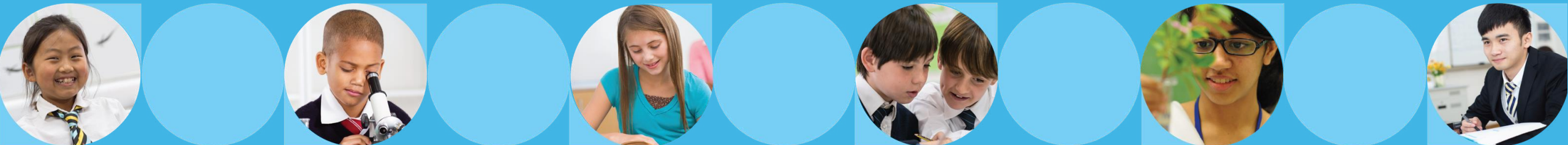
The session will close with a forecast of future research ambitions and an invitation to collaborate.

# To start: questions for you

- ▶ What types of Cambridge data would help you in your work?
- ▶ What do you know about outcomes and impacts on learners who have participated in the Cambridge program (e.g., college success, progression to other rigorous programs, etc.)?

Cambridge Schools Conference, Orlando  
23-24 June 2023  
#camschoolsconf

# Completed Projects and Outcomes



# A preview of our research



**Cambridge's role in scholarship programs opens access to college for Florida families**

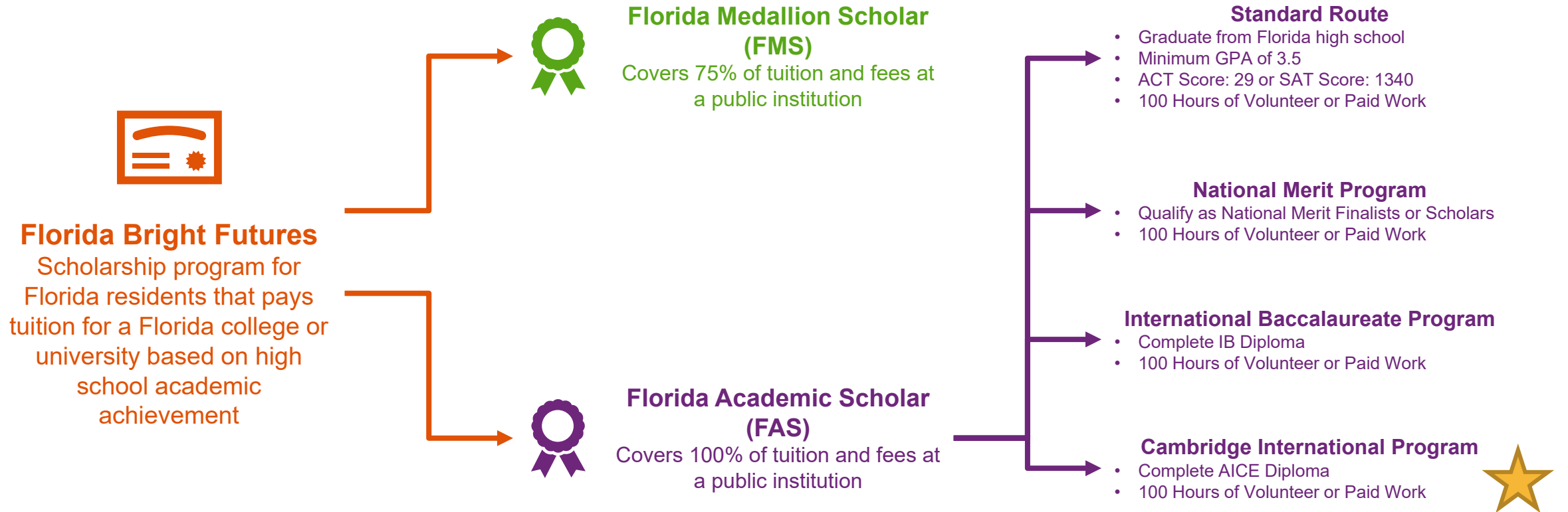


**Graduates of the Cambridge program enroll at high rates at 4-year institutions**



**Cambridge students outperform their peers in their first year of college/university**

# Florida Bright Futures Scholarship Programme





# Florida Bright Futures Scholarship Programme



## **AICE Diploma**

Est. Value: \$28,000  
(4 Years of College Tuition)



## **University Course Credits**

Est. Value: \$3,150  
(Avg 21 credits, \$150 per credit)



**AICE Diploma represents an estimated value of \$31,150 for each Florida student**

Cambridge Schools Conference, Orlando, 23-24 June 2023

Creating a positive environment for academic success

#camschoolsconf



# Florida Bright Futures Scholarship Programme

“ Florida has consistently decreased the availability of BF over the last decade alone by raising eligibility thresholds [for SAT scores] each year... **These actions cut the proportion of all high school students in the state who would be eligible for a BF award nearly in half: from 38% in 2010-11 to 20% in 2016-17.**

- Gurantz & Odle 2022

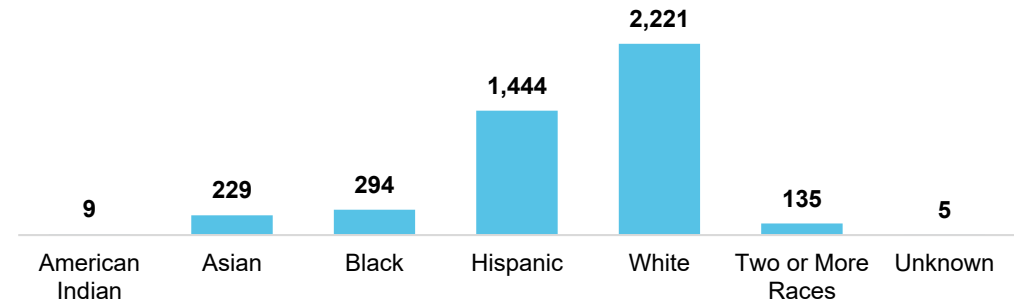


# Florida Bright Futures Scholarship Programme

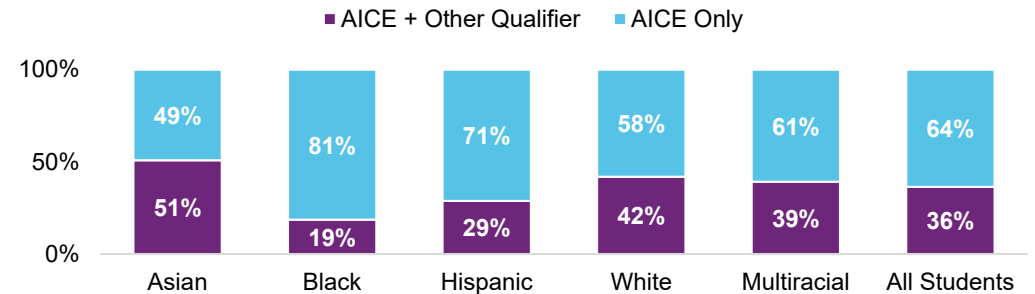
The AICE Diploma has opened access to postsecondary study for Florida students

- ▶ About 2/3 of students qualified for FAS solely based on AICE Diploma
- ▶ 80% of Black and 70% of Hispanic Cambridge students qualified for the FAS solely based on the AICE Diploma

Recipients of Bright Futures from AICE Diploma by Race (2020)

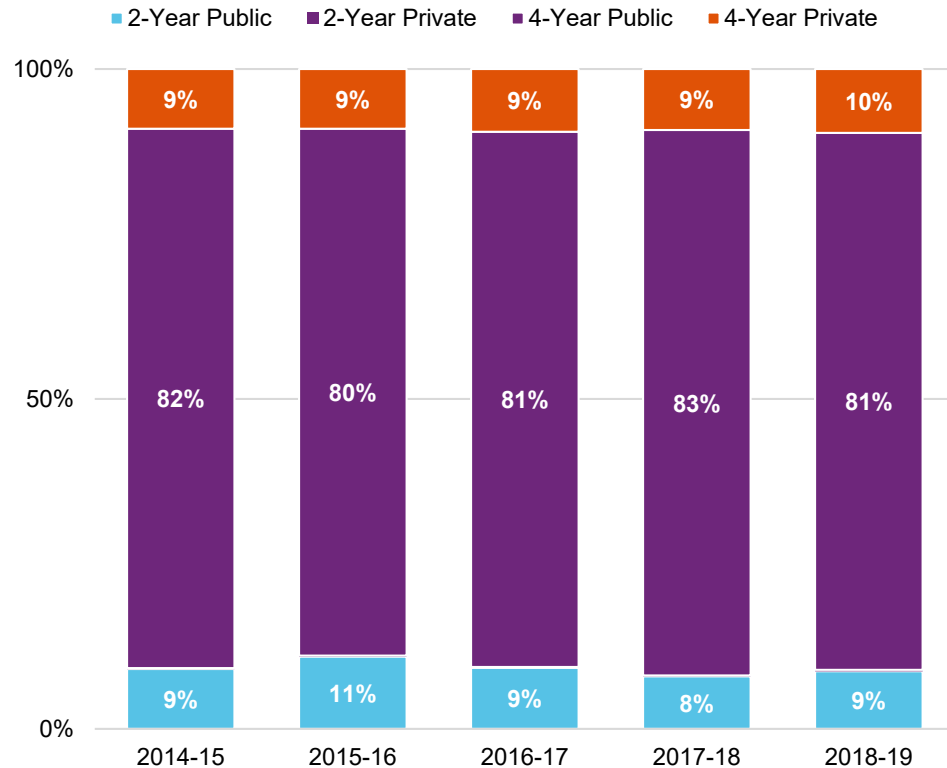


Recipients of Bright Futures from AICE vs Other Methods (2020)



# Postsecondary Enrolment (National Student Clearinghouse)

Enrollment by Institution Type and Admit Year



## Top Universities Where Cambridge Students Enroll

### 2-Year Public

- Arizona Western College (AZ)
- Tallahassee Community College (FL)
- Northeast Mississippi Community College (MS)
- North Virginia Community College (VA)

### 2-Year Private

- Florida Career College (FL)
- ASA College (NY)
- Carrington College (AZ)
- Wentworth Academy (MO)
- Ensign College (UT)
- Delaware College (DE)

### 4-Year Public

- Palm Beach State (FL)
- University of Florida (FL)
- Florida State University (FL)
- Edison State College (FL)
- Miami Dade College (FL)
- Arizona State University (AZ)
- University of Arizona (AZ)
- University of Washington (WA)
- University of Delaware (DE)
- University of Alabama (AL)
- Troy University (AL)
- George Mason (VA)

### 4-Year Private

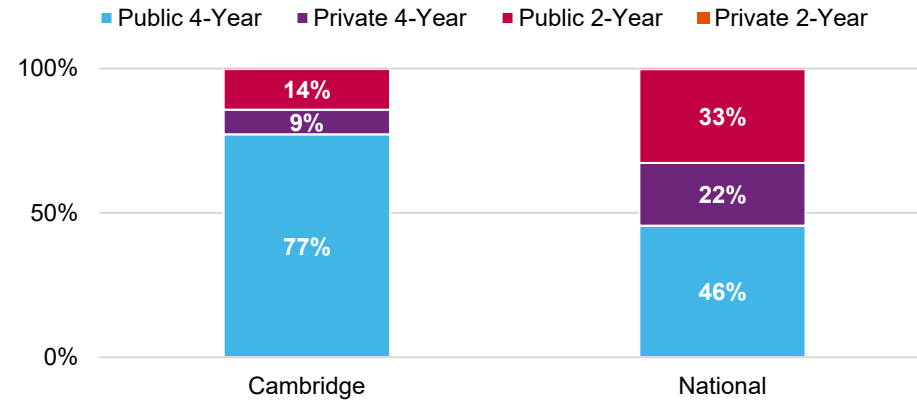
- University of Miami (FL)
- Nova Southeastern University (FL)
- Stetson University (FL)
- New York University (NY)
- Grand Canyon University (AZ)
- Boston University (MA)
- Cornell University (NY)
- Duke University (NC)
- Savannah College of Art and Design (GA)
- Lee University (TN)

# Postsecondary Enrollment (National Student Clearinghouse)

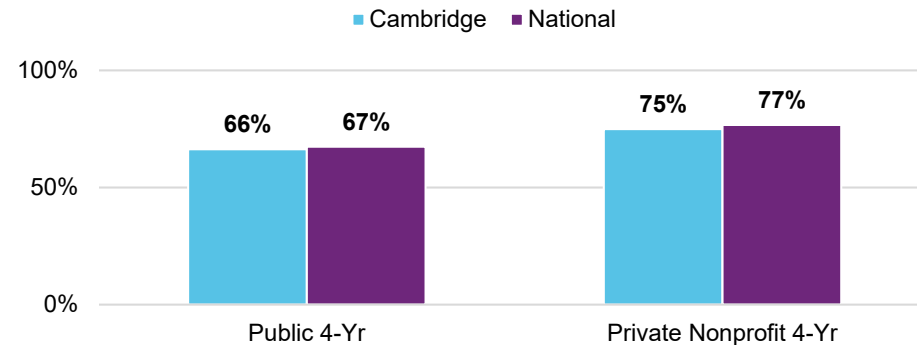
## Cambridge students typically enroll at 4-year institutions and have comparable completion rates as national rates

- ▶ Compared to national enrollment trends, a much higher percentage of Cambridge students attend a Public 4-Year as their first institution
- ▶ For 4-year institutions, Cambridge's 6 year completion rates are similar to national completion rates

Comparison: Enrollment by Institution Type



Comparison: 6-Year Completion Rates

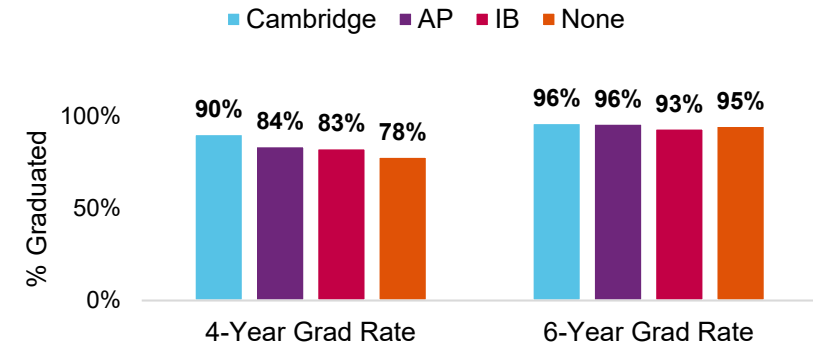


# Postsecondary outcomes at Florida State University

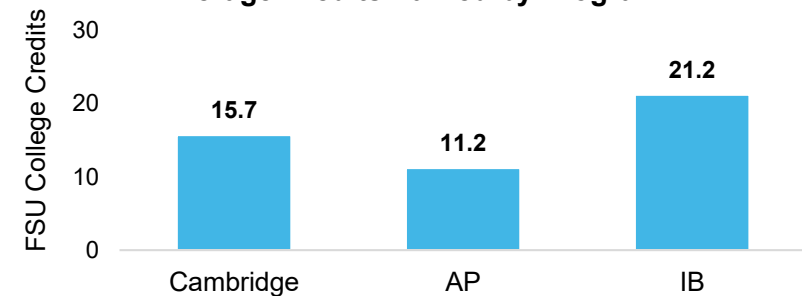
## Cambridge students have been successful at Florida State University, particularly graduates of the Cambridge Advanced programme

- ▶ Cambridge A/AS Level students earn an average of 16 credits at Florida State University and have a higher 4-year graduation rate compared to students from other programs
- ▶ At FSU, 93% of Cambridge Hispanic students graduate in 4 years (compared to 82% of Hispanic students who earned credit via other programs)

FSU Graduation Rate by Credit Program



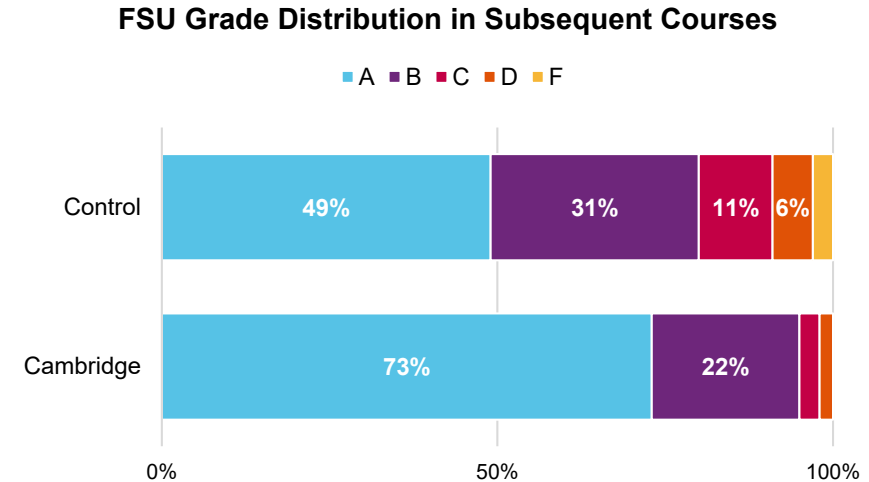
Average Credits Earned by Program



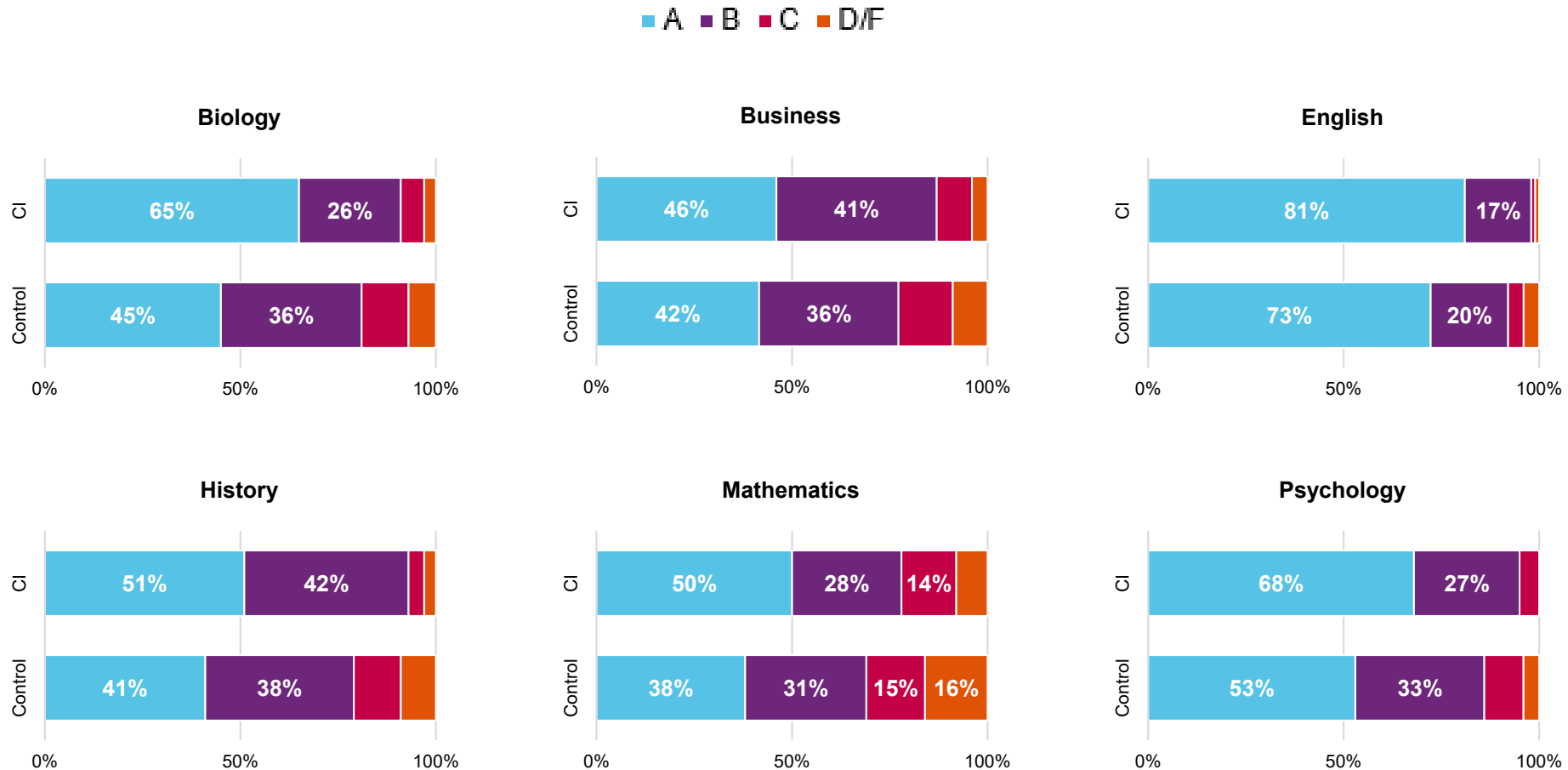
# Subsequent course performance at FSU

After receiving credit for entry-level courses, Cambridge students went on to succeed in their subsequent college courses

- Cambridge A/AS Level students have **higher pass rates in their subsequent courses** compared to the entire cohort at FSU
- Moreover, 92% of Cambridge students who achieved an E on their A/AS Level went on to earn an A or B in their subsequent course
- The trend held true across 6 subject areas (Biology, Business, English, History, Mathematics, and Psychology)



# Subsequent course performance at FSU



Cambridge Schools Conference, Orlando, 23-24 June 2023

Creating a positive environment for academic success

#camschoolsconf

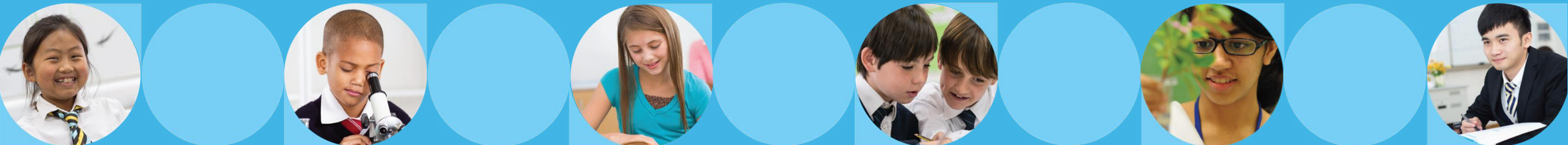


# Pause: discussion and questions

- ▶ Do you have any questions about the research?
- ▶ What additional data or studies would you like to see Cambridge pursue?

Cambridge Schools Conference, Orlando  
23-24 June 2023  
[#camschoolsconf](#)

# Ongoing and Future Projects



# Research future directions: international/domestic student study

- ▶ **Key Question: Does the Cambridge Advanced program adequately prepare international and domestic students to succeed in U.S. colleges and universities?**
  - ▶ Key metrics: first year performance (GPA, retention, course/credit completion), graduation
  - ▶ Also: performance in specific courses and course sequences related to Cambridge assessments
- ▶ Currently working with 730 international schools with Cambridge Advanced students
- ▶ Institutions interested in engaging in project:
  - ▶ Northeastern University
  - ▶ University of Georgia
  - ▶ Arizona State University
  - ▶ Washington State University

A. Requested explanatory variables.

Variable	Description	Example
Gender	Indicator of the student's identified gender.	Female, Male
Race/ethnicity	Indicator of the student's identified race and/or ethnicity; may be two fields if race and ethnicity are reported separately.	Asian, Black, Hispanic, White, Multiracial, International
Socioeconomic indicator	Indicator that can be used to infer if a student is economically disadvantaged (for example, recipient of a FSA Pell grant).	Yes, No
Nationality or country of origin	Indicator of a student's country of origin, if they are an international student.	China, India, South Africa
ELL status	Indicator if a student is a known English language learner (ELL).	Yes, No
Native language	If collected by the institution, please provide the student's reported native language.	English, Spanish
First language	If collected by the institution, please provide the student's reported first language.	Chinese, English
High school attended	The name of the high school that the student attended when applying for college (including CEEB code).	Dwight School Dubai, Sarasota High School
High school GPA	The reported high school GPA of a student when they applied to the university, reported on a 4.0 GPA scale.	3.35
High school credits earned	The total number of incoming credits that a student earned from programs while in high school (e.g., AICE, AP, IB, Dual Enrollment).	16
AICE credits earned	The total number of incoming credits that a student earned from the Cambridge AICE program (such as AS Levels and A Levels).	8
English language exam	Indicator of if a student submitted an English language exam as part of their application (e.g., TOEFL, IELTS, Pearson PTE, Duolingo DTE).	TOEFL, IELTS
English language exam score	If a student submitted an English language exam, the score achieved on the exam.	

# Recognitions and credit database

The screenshot shows the Cambridge Assessment International Education website. The header includes the logo and navigation links: About us, Why choose us, Programmes & qualifications, Exam administration, Support & training for schools, News & blog, and Help. The main heading is 'Recognition and credit policy search'. Below it, there is a search bar and a 'Search' button. The page content includes a description of the database, a note about policy changes, and a section for higher education institutions. A 'How to search' box provides instructions on using the search criteria.

**Recognition and credit policy search**

Search Cambridge International's global database of recognition policies

Our online database includes higher education institutions worldwide which have provided us with their formal acceptance policies for Cambridge qualifications.

Please note that policies are subject to change. Also, some universities or colleges may not yet be listed here, but still may recognise Cambridge qualifications or grant credit. Check with organisations directly for the most up-to-date information.

**Higher education institutions:** To be added to this search, an official employee or designated representative may register your recognition policy details.

**How to search**

To search by organisation only, enter the organisation name and select search.

To search by other criteria, select the categories (organisation name, location, organisation type, qualifications) separately or in any combination. All categories are optional but selecting a combination will increase the number of your search results.

**Organisation name**

Enter name(s) (up to 200)

**Location**

Select a location

**Organisation type**

The screenshot shows the 'Recognition details' section of the website. It includes two text boxes: one for 'Cambridge International AS & A Level and Cambridge AICE Diploma' and another for 'Cambridge IGCSE and Cambridge O Level'. Below these is a table titled 'Credit and placement by course' with columns for Subject, Syllabus Code, Qualification Level, Grade Minimum, Course Name, and Credit Hours Awarded.

**Recognition details**

**Cambridge International AS & A Level and Cambridge AICE Diploma**

Students who have completed a Cambridge course in their secondary school and who have taken a Cambridge International AS or A Level examination may receive university credit. When the scores are received by the university, credit is awarded as shown in the Cambridge International Exam table below. \*Credit awarded as a department elective will display as DEC. A DEC course is not directly equivalent to a current ASU course but could be used for graduation requirements. Students should see their advisor to determine how these courses may apply to their major. Please see credit chart located at: [https://catalog.asu.edu/credit\\_exam/cambridge](https://catalog.asu.edu/credit_exam/cambridge)

**Cambridge IGCSE and Cambridge O Level**

Arizona State University accepts IGCSE or O Levels as meeting the entry criteria for admission.

**Credit and placement by course**

Subject	Syllabus Code	Qualification Level	Grade Minimum	Course Name	Credit Hours Awarded
ACCOUNTING	9706	Cambridge International AS Level	E		3
ART AND DESIGN	9479	Cambridge International AS Level	E		3
BIOLOGY	9700	Cambridge International AS Level	E	BIO 100, BIO ELECTIVE	4
BUSINESS	9608	Cambridge International AS Level	E		3
CHEMISTRY	9701	Cambridge International AS Level	E	CHM 101	4
COMPUTER SCIENCE	9618	Cambridge International AS Level	E	IFT 100	3
DESIGN AND TEXTILES	9631	Cambridge International AS Level	E	FSH 201	3
DIGITAL MEDIA & DESIGN	9481	Cambridge International AS Level	E	ART DEPT ELECTIVE	3
EBAMA	9482	Cambridge International AS Level	C	THE 100	3
ENVIRONMENTAL	9701	Cambridge International AS Level	E	BIO 100	4

Cambridge Schools Conference, Orlando, 23-24 June 2023

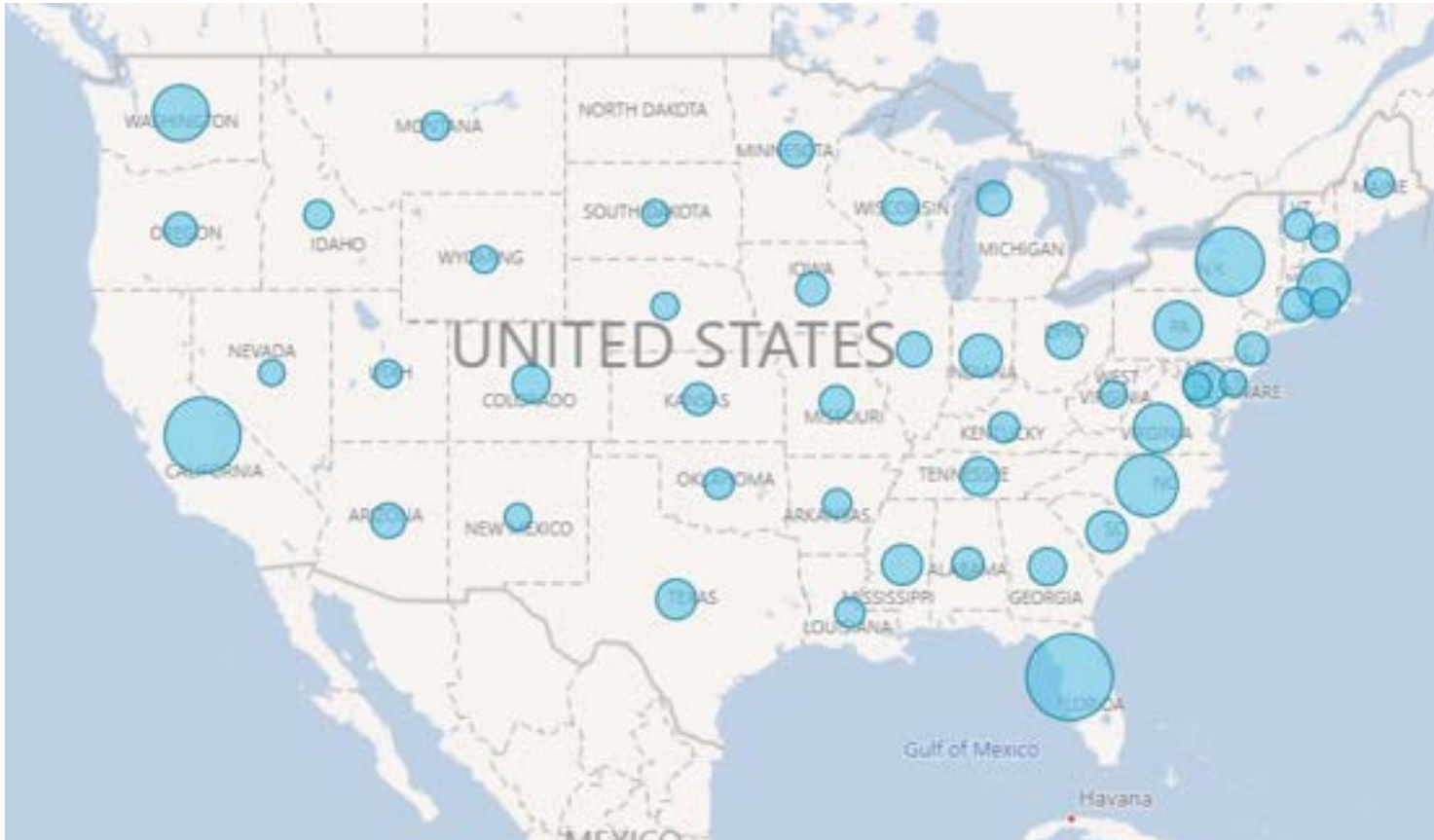
Creating a positive environment for academic success

#camschoolsconf

Website: <https://www.cambridgeinternational.org/recognition-search/>

Or search: "Cambridge International Credit and Recognition"

# Recognitions and credit database



**916**

Total Institutions  
with Policies

**1,429**

Total Cambridge  
Policy Statements

Cambridge added or updated nearly **100**  
higher education policies in 2022

**States with  
the Highest  
Numbers  
of Policies:**

Florida	156
California	128
New York	111
North Carolina	98
Washington	76

Cambridge Schools Conference, Orlando, 23-24 June 2023

Creating a positive environment for academic success

#camschoolsconf

# Recognitions and credit database

## A/AS Level Syllabi with Highest Policy Counts

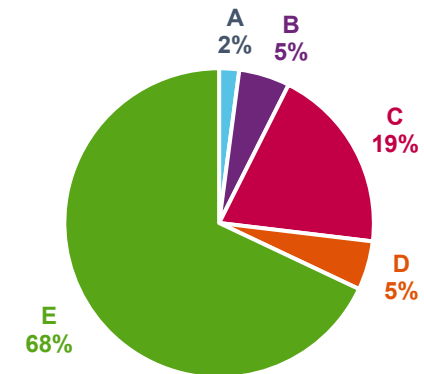
Syllabus	Policies
9701 - CHEMISTRY	174
9700 - BIOLOGY	163
9618 - COMPUTER SCIENCE	149
9709 - MATHEMATICS	149
9990 - PSYCHOLOGY	145
9696 - GEOGRAPHY	144
9708 - ECONOMICS	144
9706 - ACCOUNTING	142
9609 - BUSINESS	137
9702 - PHYSICS	135
9093 - ENGLISH LANGUAGE	133
9479 - ART AND DESIGN	131
9695 - LITERATURE IN ENGLISH	127
9699 - SOCIOLOGY	127
9693 - MARINE SCIENCE	122
9626 - INFORMATION TECHNOLOGY	112
9483 - MUSIC	110

Institutions award Cambridge credit across a variety of subject areas, including humanities, arts, and STEM.

Note: Policy counts represent a sample of U.S. institutions and do not include “general” statements.

Nearly 2/3 of institutional policies are for grades earned at the E.

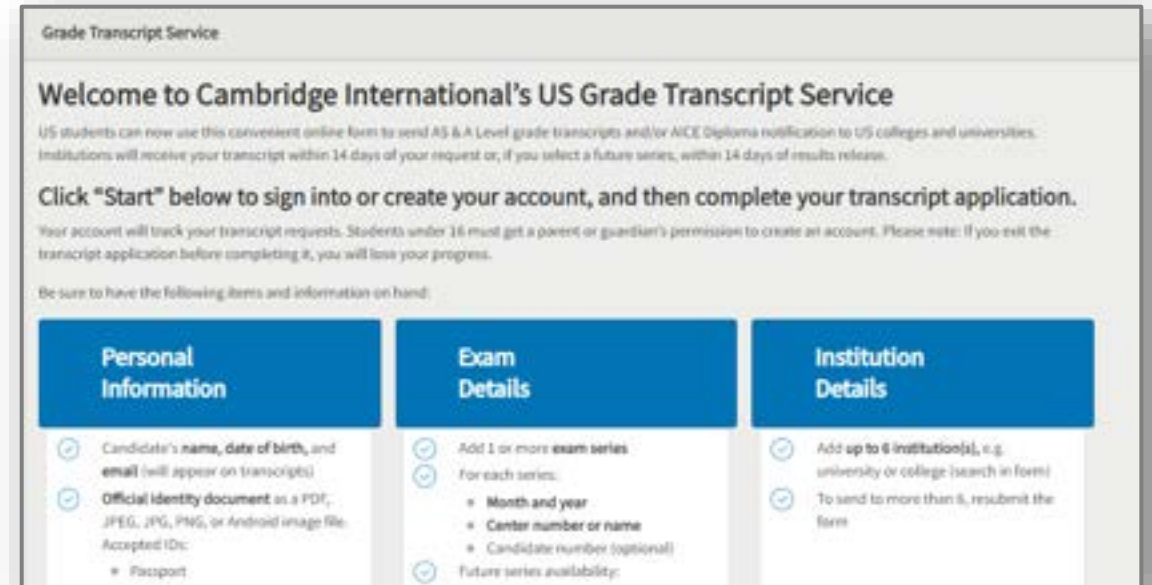
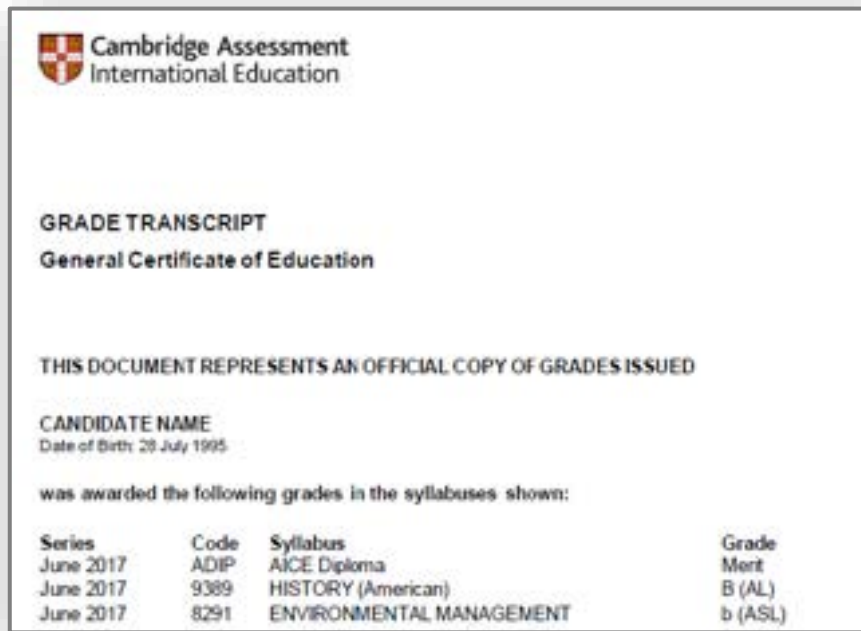
Minimum AS/A Level Grade in Policies for College Credit





# Student Grade Transcript Service

- In 2021, Cambridge launched the **U.S. Grade Transcript Service** as part of the U.S. Data & Systems Project
- Enables students to request and deliver a complete record of their A Level and AS Level grades to U.S. universities
- Universities can opt to receive paper transcripts or electronic bulk grade files (in CSV format)



- Service also introduced **new student portal**, where students can create a Cambridge account with identity verification
- Currently **limited to U.S.** students/universities (planned expansion to international students in Phase 4 of project)

View Transcript Service: <https://gradetranscripts.cambridgeinternational.org/>

Cambridge Schools Conference, Orlando, 23-24 June 2023

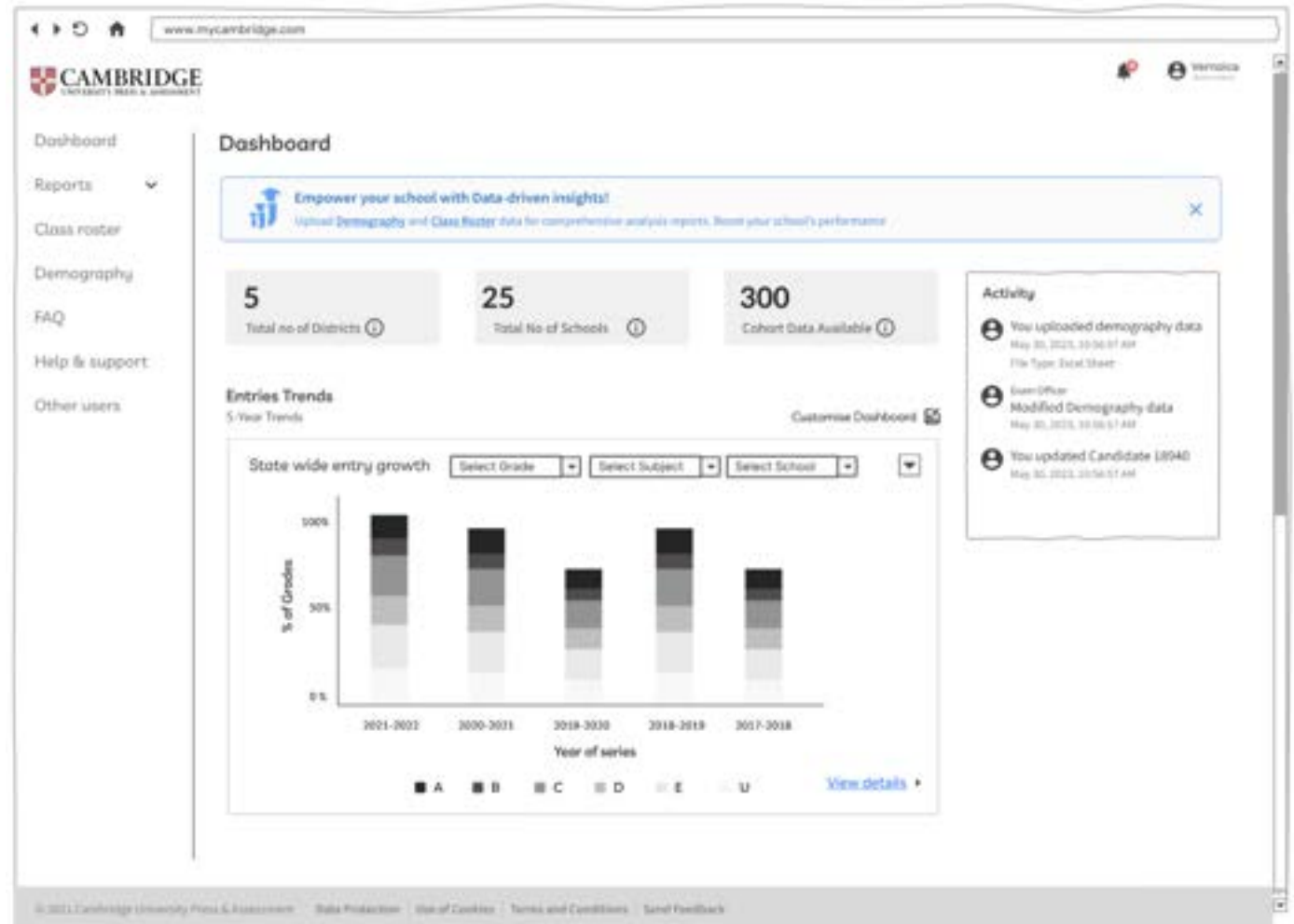
Creating a positive environment for academic success

#camschoolsconf



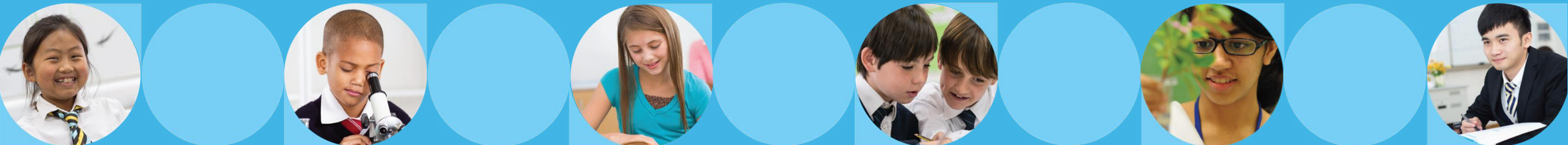
# Student data and reporting platform

- In 2024, Cambridge plans to launch a **new data and reporting platform**
- First offered to U.S. schools and districts
- First access for: Exam Officers, teachers, school and district administrators
- Includes data upload features to generate reports for teachers/classrooms and student subgroups (gender, race/ethnicity, etc.)
- Will feature analysis and report generation, including data/file exporting
- Future phases of the platform will include an **AICE Diploma** tracker (2025 and beyond)



Cambridge Schools Conference, Orlando  
23-24 June 2023  
[#camschoolsconf](#)

# Forecasting Ahead: Research Interests

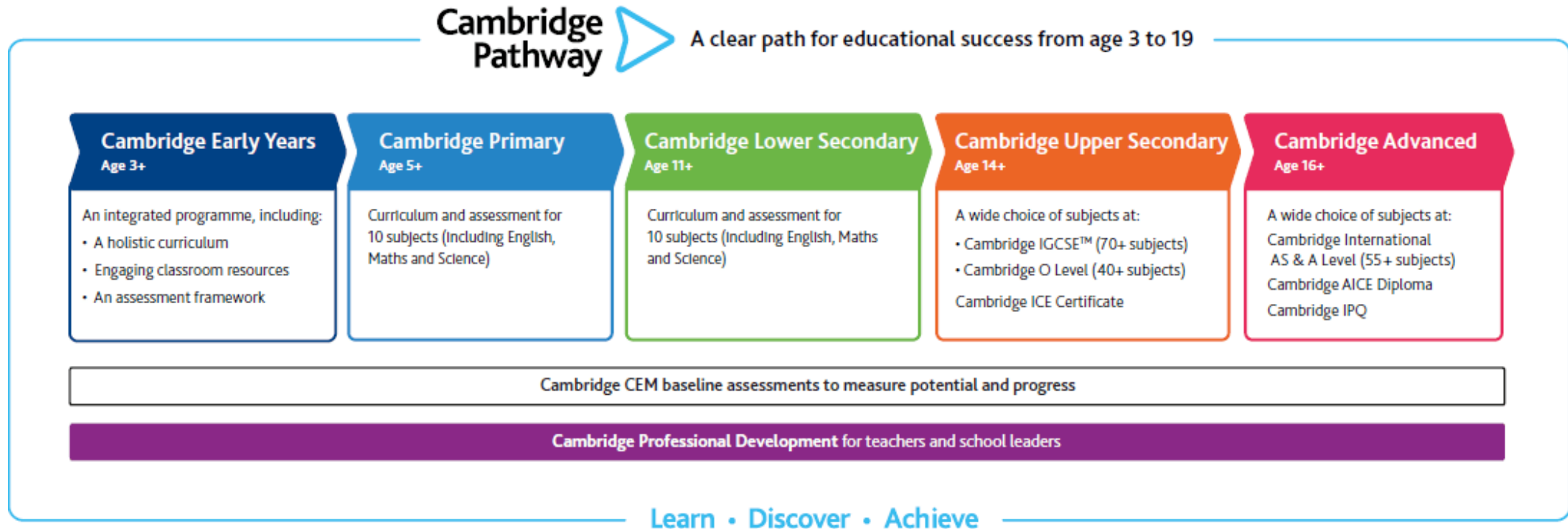


# Seeking partnership in research

- ▶ There are still several areas of interest we would like to better understand
- ▶ For each of these, we are open to collaborating with schools/districts who may want to explore efficacy and impact of Cambridge at their centres:
  - ▶ The Cambridge Pathway
  - ▶ The Cambridge Learner Attributes
  - ▶ English as a Second Language

# The Pathway

- ▶ Goal: To better understand the longitudinal associations of the Cambridge Pathway for learners via common measurable learning outcomes



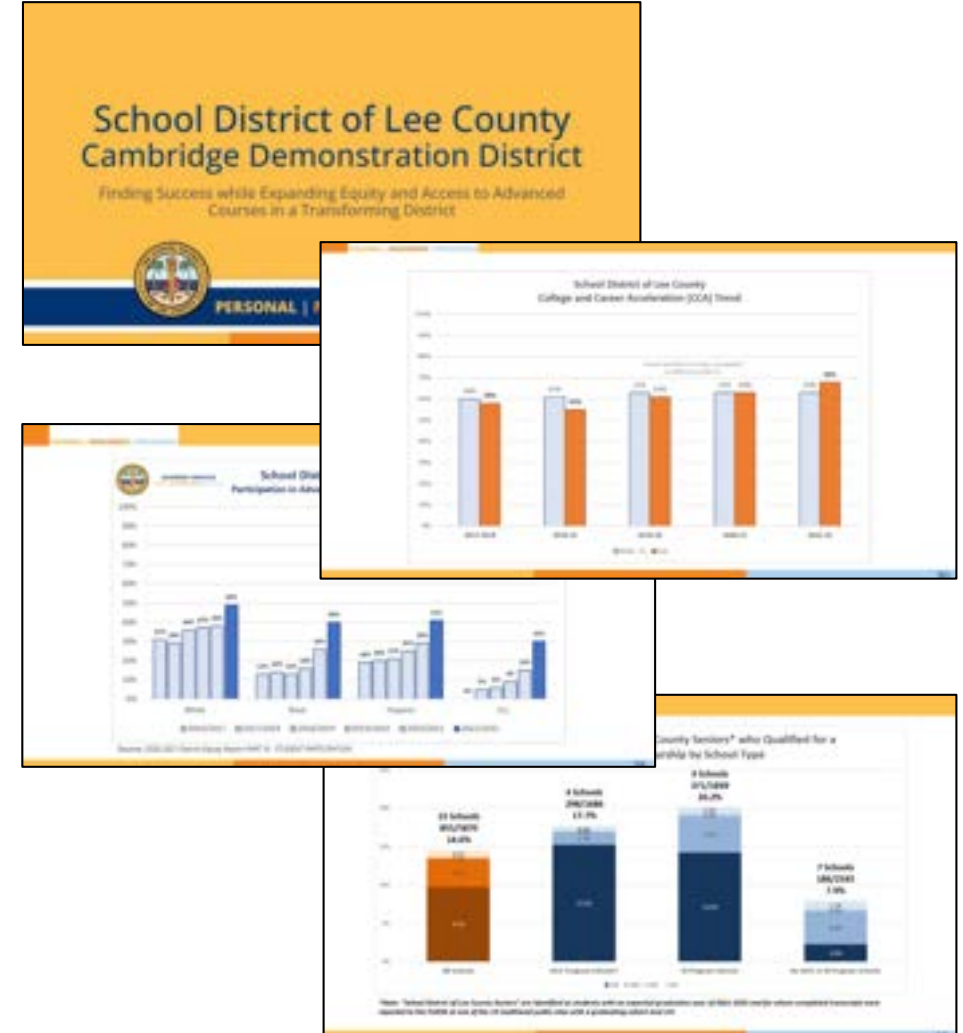
Cambridge Schools Conference, Orlando, 23-24 June 2023

Creating a positive environment for academic success

#camschoolsconf

# School district of Lee County (FL)

- ▶ School District of Lee County (FL): A large, diverse (100,000+ students) district in SW Florida
- ▶ Our first Demonstration District
- ▶ Implemented Cambridge pathways across all 15 high schools and all 20 middle schools between 2019-2020 and 2020-2021
- ▶ Has demonstrated increased participation, acceleration, and positive student learning outcomes associated with participation in Cambridge courses



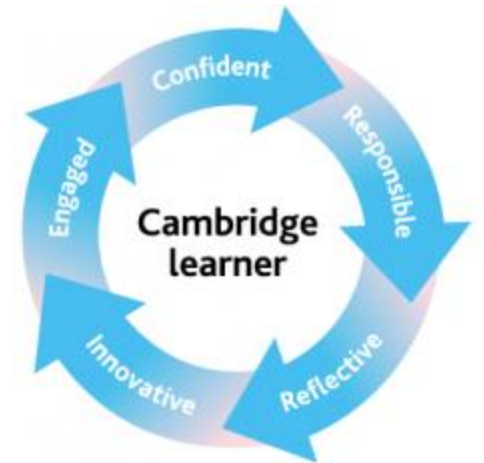
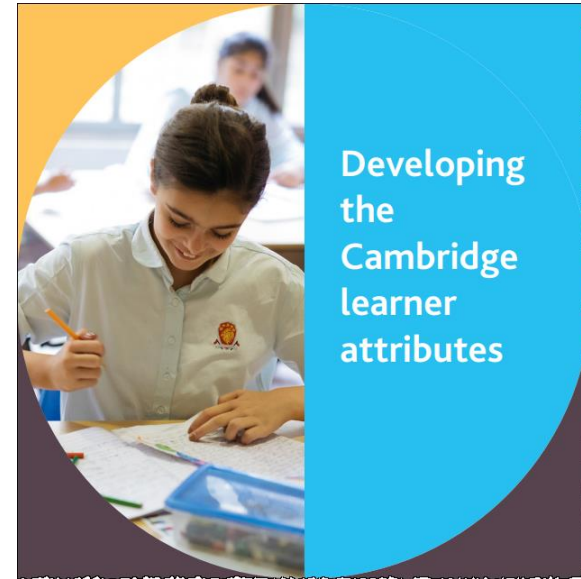
Cambridge Schools Conference, Orlando, 23-24 June 2023

Creating a positive environment for academic success

#camschoolsconf

# Fostering the Cambridge Learner Attributes

- ▶ The [Cambridge Learner Attributes](#) – the learning habits students need to be successful in school, higher education, the workplace and life in general: **Confident, Responsible, Reflective, Innovative, Engaged**
- ▶ *From a school leader's perspective, how does our curriculum foster these attributes in learners?*
- ▶ Question for Participants: *How might the Learner Attributes align with schoolwide initiatives you currently support?*





# The Cambridge Learner Attributes

	Cambridge learners	Cambridge teachers
<b>Confident</b>	<p><b>Confident</b> in working with information and ideas – their own and those of others.</p> <p>Cambridge learners are confident, secure in their knowledge, unwilling to take things for granted and ready to take intellectual risks. They are keen to explore and evaluate ideas and arguments in a structured, critical and analytical way. They are able to communicate and defend views and opinions as well as respect those of others.</p>	<p><b>Confident</b> in teaching their subject and engaging each student in learning.</p> <p>Cambridge teachers know their subject well and know how to teach it. They seek to understand their students and their educational needs. They strive to communicate a love of learning and to encourage students to engage actively in their own learning.</p>
<b>Responsible</b>	<p><b>Responsible</b> for themselves, responsive to and respectful of others.</p> <p>Cambridge learners take ownership of their learning, set targets and insist on intellectual integrity. They are collaborative and supportive. They understand that their actions have impacts on others and on the environment. They appreciate the importance of culture, context and community.</p>	<p><b>Responsible</b> for themselves, responsive to and respectful of others.</p> <p>Cambridge teachers are highly professional in their approach to teaching and they are collaborative and supportive. They understand their actions will help shape future generations and they are concerned about the holistic development of every individual they teach.</p>
<b>Reflective</b>	<p><b>Reflective</b> as learners, developing their ability to learn.</p> <p>Cambridge learners understand themselves as learners. They are concerned with the processes as well as the products of their learning and develop the awareness and strategies to be life-long learners.</p>	<p><b>Reflective</b> as learners themselves, developing their practice.</p> <p>Cambridge teachers are themselves learners, seeking to build on and develop their knowledge and skills through a virtuous circle of reflection on practice – involving research, evaluation and adaptation. They support students to become independent and reflective learners.</p>
<b>Innovative</b>	<p><b>Innovative</b> and equipped for new and future challenges.</p> <p>Cambridge learners welcome new challenges and meet them resourcefully, creatively and imaginatively. They are capable of applying their knowledge and understanding to solve new and unfamiliar problems. They can adapt flexibly to new situations requiring new ways of thinking.</p>	<p><b>Innovative</b> and equipped for new and future challenges.</p> <p>Cambridge teachers are creative, experimenting with new ideas and pursuing an enquiring approach in their teaching. They are open to new challenges, being resourceful, imaginative and flexible. They are always ready to learn and apply new skills and techniques.</p>
<b>Engaged</b>	<p><b>Engaged</b> intellectually and socially, ready to make a difference.</p> <p>Cambridge learners are alive with curiosity, embody a spirit of enquiry and want to dig more deeply. They are keen to learn new skills and are receptive to new ideas. They work well independently but also with others. They are equipped to participate constructively in society and the economy – locally, nationally and globally.</p>	<p><b>Engaged</b> intellectually, professionally and socially, ready to make a difference.</p> <p>Cambridge teachers are passionate about learning within and beyond the classroom, sharing their knowledge and skills with teachers in the wider educational community.</p>

Cambridge Schools Conference, Orlando, 23-24 June 2023

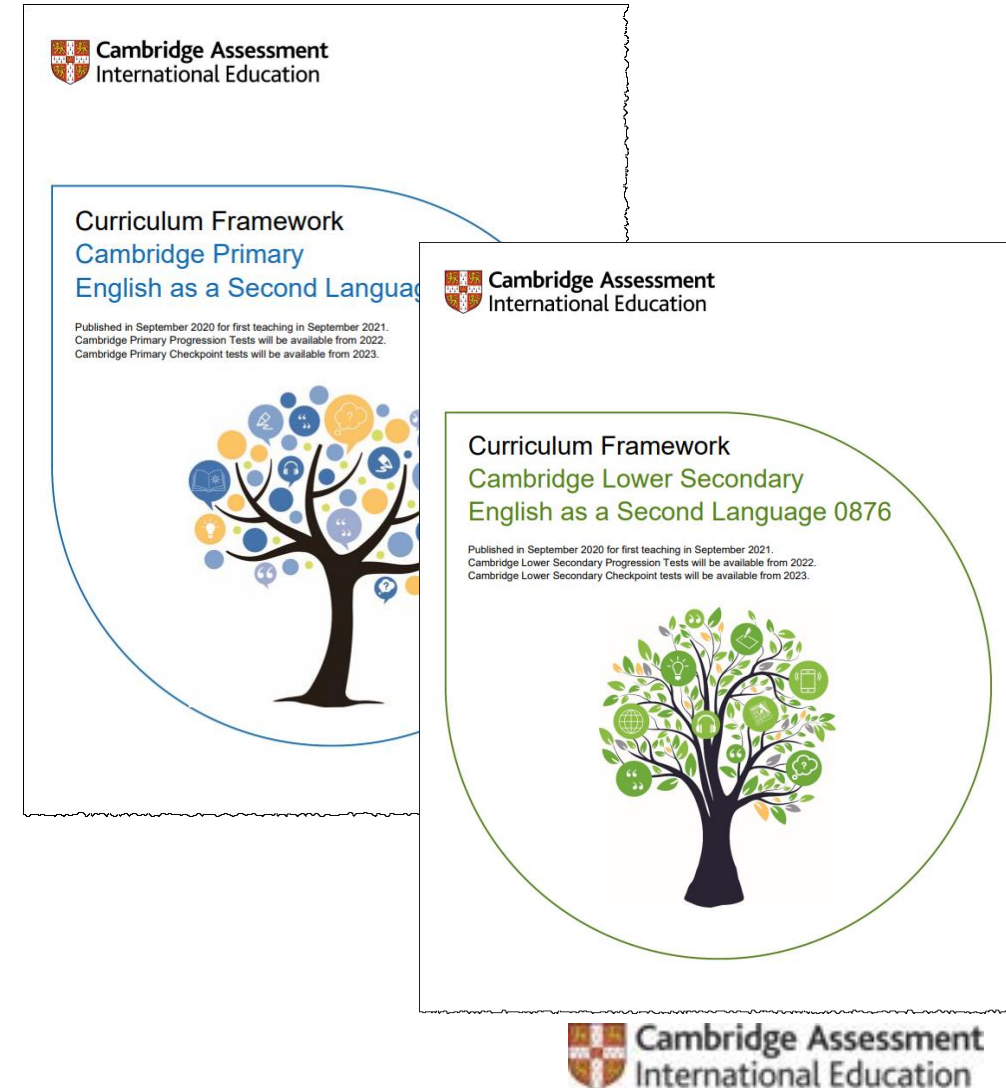
Creating a positive environment for academic success

#camschoolsconf



# Impacts of English as a second language

- ▶ Impact of P/LS English-Second Language toward the development of Multilanguage Learners (ML/ELL)
  - ▶ Many of our partners are seeking supportive approaches for their ML/ELL students
  - ▶ Using grounded controls, can we measure successes on student learning outcomes associated with these curricula?
- ▶ Question for Participants: *What would you like to know about these courses in terms of their “fit” within your curriculum approach?*



# Participant input

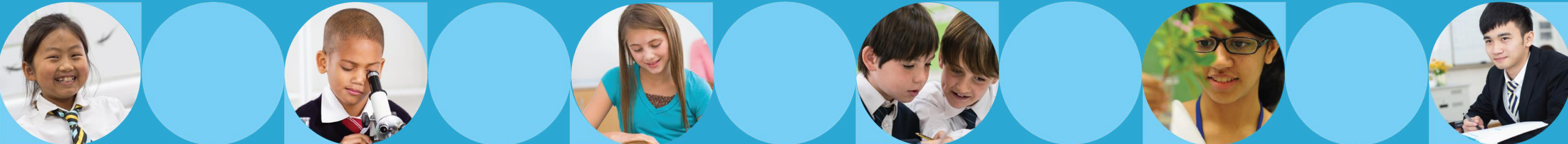
- ▶ For our participants, what research initiatives would you like to explore?
  
- ▶ Possibilities:
  - ▶ *Curriculum*
  - ▶ *Student Learning Outcomes*
  - ▶ *Associations with other State/Federal Indicators*
  - ▶ *Student Attributes/Characteristics*
  - ▶ *Teacher Development*



Cambridge Assessment  
International Education

Cambridge Schools Conference, Orlando  
23-24 June 2023  
**#camschoolsconf**

**Thank you**  
**Any questions?**



# Your feedback

- ▶ Please let us know your views on this session
- ▶ Scan the QR code and share your feedback with us



**Learn more!**  
Getting in touch with Cambridge is easy

Email [info@cambridgeinternational.org](mailto:info@cambridgeinternational.org)  
or telephone +44 1223 553554

