# The right devices for Education from Lenovo with Microsoft & Intel

June 2024

**Lenovo** · Microsoft · intel

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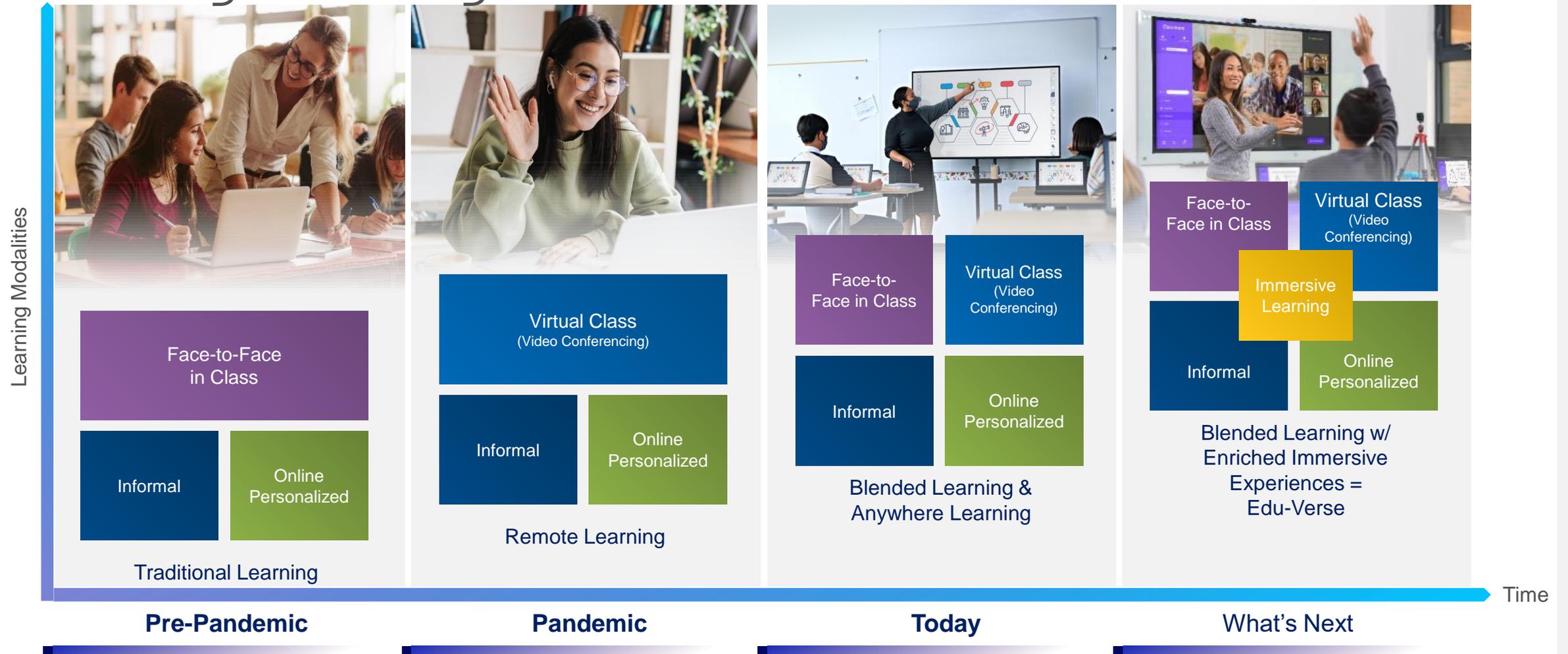
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Your costs and results may vary.

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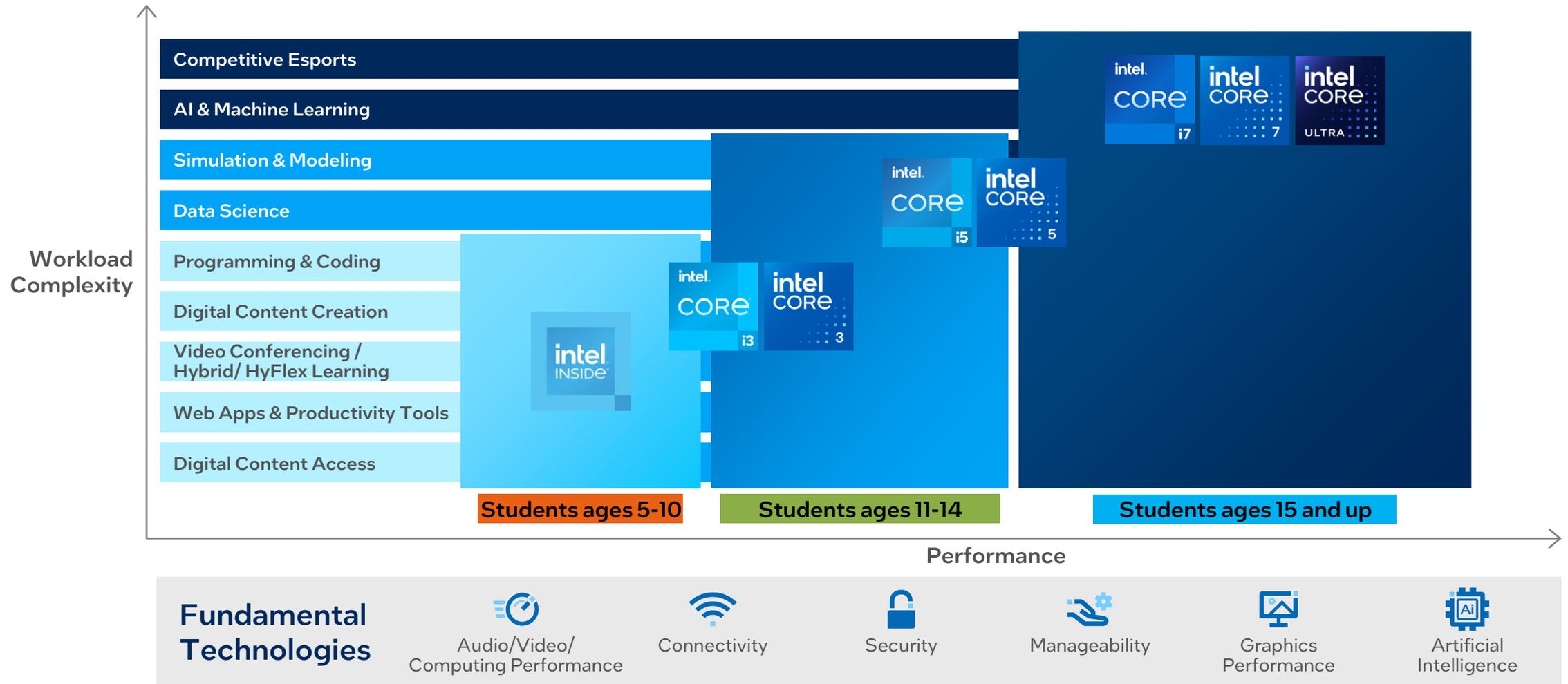
2024-June-18th

# Evolving Learning Modalities



Learning Modalities

**Face-to-Face in Class**

Informal

Online Personalized

Traditional Learning

**Virtual Class** (Video Conferencing)

Informal

Online Personalized

Remote Learning

Face-to-Face in Class

Virtual Class (Video Conferencing)

Informal

Online Personalized

Blended Learning & Anywhere Learning

Face-to-Face in Class

Virtual Class (Video Conferencing)

Immersive Learning

Informal

Online Personalized

Blended Learning w/ Enriched Immersive Experiences = Edu-Verse

Time

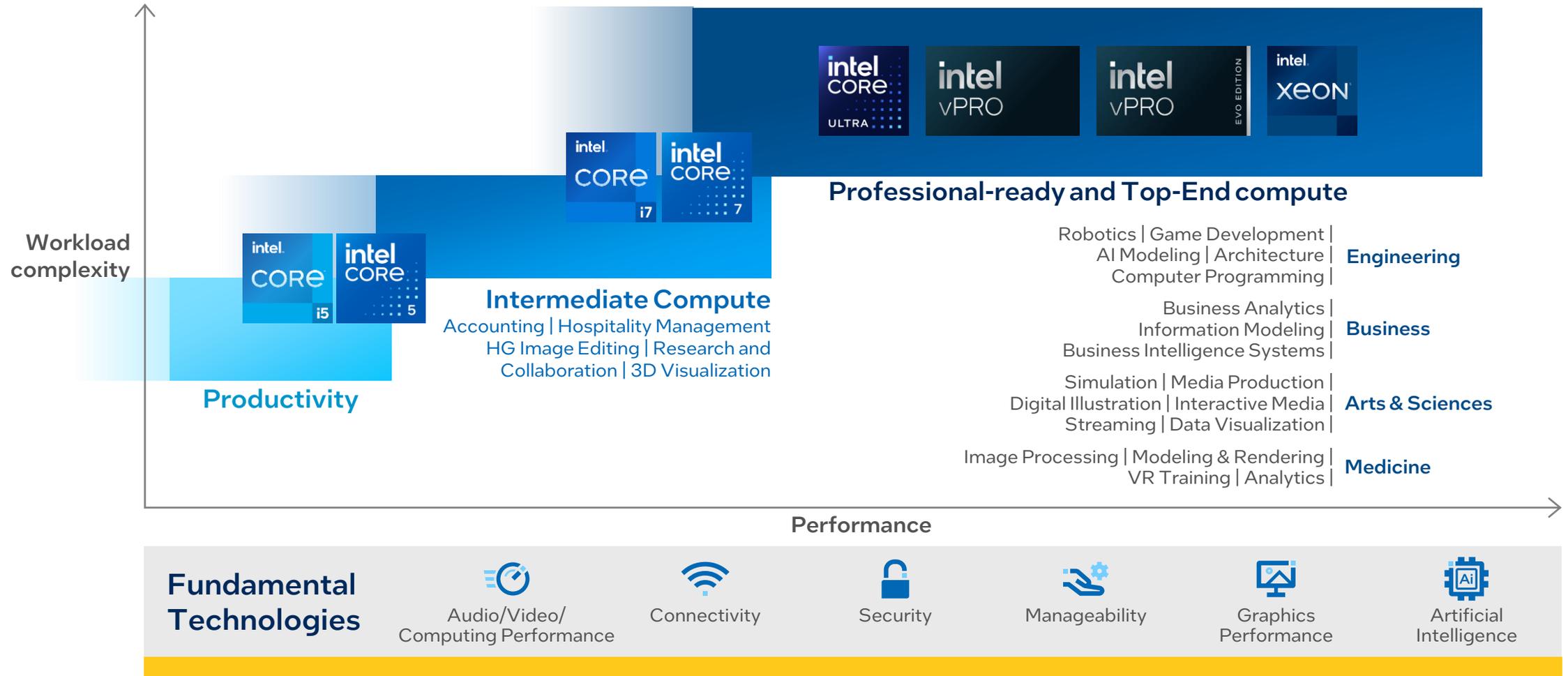**Pre-Pandemic**     **Pandemic**     **Today**     What's Next

**Immersive learning experience future… Increased demand in computing and graphic performance, faster and more reliable connectivity, and longer battery life, resulting in a richer computing experience.**

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# Intel Delivers a Variety of Choices for All Learners

**Workload Complexity**

| Competitive Esports |
| AI & Machine Learning |
| Simulation & Modeling |
| Data Science |
| Programming & Coding |
| Digital Content Creation |
| Video Conferencing / Hybrid/ HyFlex Learning |
| Web Apps & Productivity Tools |
| Digital Content Access |

**Students ages 5-10**

**Students ages 11-14**

**Students ages 15 and up**

**Performance**

**Fundamental Technologies**

| Audio/Video/ Computing Performance | Connectivity | Security | Manageability | Graphics Performance | Artificial Intelligence |

For Intel vPro® for Windows systems only; OEM enabling varies; not available on ChromeOS. Intel® Core™ Ultra processors specifically recommended for Labs and CET environments
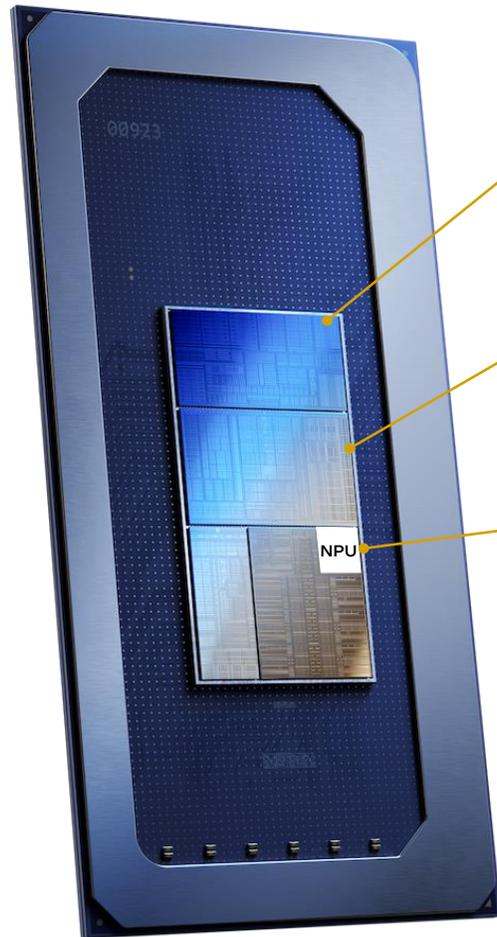
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# Intel Delivers a Variety of Choices for Educators

**Workload complexity**

**Professional-ready and Top-End compute**

Robotics | Game Development | AI Modeling | Architecture | Computer Programming | **Engineering**

Business Analytics | Information Modeling | Business Intelligence Systems | **Business**

Simulation | Media Production | Digital Illustration | Interactive Media | Streaming | Data Visualization | **Arts & Sciences**

Image Processing | Modeling & Rendering | VR Training | Analytics | **Medicine**

**Intermediate Compute**

Accounting | Hospitality Management HG Image Editing | Research and Collaboration | 3D Visualization

**Productivity**

**Performance**

| **Fundamental Technologies** | Audio/Video/ Computing Performance | Connectivity | Security | Manageability | Graphics Performance | Artificial Intelligence |
| --- | --- | --- | --- | --- | --- | --- |

For Intel vPro® for Windows systems only; OEM enabling varies; not available on ChromeOS.

# Intel® Core™ Ultra Processors

First PC platform from Intel with built-in neural processing unit (NPU)
for AI optimization of education workloads for today and tomorrow

**CPU** — **Fast Response**
Ideal for lightweight, single-inference, low-latency AI tasks

**GPU** — **Performance Parallelism & Throughput**
Ideal for AI infused in Media/3D/Render pipeline

**NPU** — **Dedicated Low Power AI Engine**
Ideal for sustained AI and AI offload

The right balance of platform power and performance for AI and the right software tools to scale.

ONNX    OpenVINO    DirectML    W3C Web Neural Network API

# AI PC: Optimized Experiences for Educators and Students
## Save Time, Improve Quality, Experience New Ways of Working

## Educators

### AI Eye Tracking
tobii

### AI Avatars
Faceunity Technology

### Personalized Learning
Khan Academy

## Educators + Students

### Developer Tools
web neural network
MATLAB
WebNN

### Video Collaboration
zoom
Microsoft Teams
webex by CISCO

### Video Editing
Adobe
MAGIX
ByteDance
wondershare

### Text to Image
Stable Diffusion
gimp

### AI Image Indexing
mylio

### Music Separation & Voice to Text
Audacity

### Optimized LLMs
stability ai
LLAMA 2

### Gesture Controls
iQIYI

### 3D Rendering
AUTODESK
D5 RENDER

### Graphic Design
GRAPHIC DESIGNING
KRITA
Distinct AI
Adobe

### Video Streaming
XSplit

### Game Upscaling
XeSS

### Photo Editing
TOPAZ LABS
SKYLUM software
Adobe

### Personal Assistant
Microsoft

### AI Accessibly
OMNIBRIDGE
Windows

### Workstation
Adobe
AUTODESK

### AI Audio Enhancement
krisp
intelliGo Technology Inc.
WAVES

### Data Visualization

## Base – Solutions available for: Students (ages 6-10)

| Device | | CPU | OS | Design | Memory | Display | Wi-Fi | Graphics | SSD | Battery | vPro | Sysmark 25 | CrossMark | UL Procyon | Launch/Available in |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lenovo 300w Yoga Gen 4 | | Intel Processor N100 (Q1'23) | Windows 11 OS | 2-in-1 mit Stift | 8 GB | 11,6" touch 1366x768 | Intel® Wi-Fi® 6 | Intel® UHD Graphics | 128 GB | 47Wh | Nein | | | | Erhältlich ab: Q1/23 82VM000HGE Deutschland |
| Lenovo 500w Yoga Gen 4 | | Intel Processor N200 (Q1'23) | Windows 11 OS | 2-in-1 mit Stift | 8 GB | 12,2" touch 1920x1200 | Intel® Wi-Fi® 6 | Intel® UHD Graphics | 128 GB | 47Wh | Nein | | | | Erhältlich ab: Q2/23 82VQ0001GE Deutschland |

## Good – Solutions available for: Students (ages 10-14)

| Device | | CPU | OS | Design | Memory | Display | Wi-Fi | Graphics | SSD | Batery | vPro | Sysmark 25 | CrossMark | UL Procyon | Launch/Available in |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ThinkPad E14 Gen 4 | | Intel® Core™ i3 1215U (Q1'22) | Windows 11 OS | Clamshell | 8GB | 14" 1920x1080 Non-Touch | Intel® Wi-Fi® 6 | Intel® UHD Graphics | 256GB | 57Wh | Nein | | | | Erhältlich ab: Q2/22 821E3004XGB Deutschland |
| ThinkPad E14 Gen 5 | | Intel® Core™ i3 1315U (Q1'23) | Windows 11 OS | Clamshell | 8GB | 14" WUXGA 1920x1200 Non-Touch | Intel® Wi-Fi 6 BT 5.1 | Intel® UHD Graphics | 256GB | 57Wh | Nein | | | | Erhältlich ab: Q2/23 21JK0062GB Deutschland |

## Better - Solutions available for: Students and Teachers (age 15+ years / digital competence building)

| Device | | CPU | OS | Design | Memory | Display | Wi-Fi | Graphics | SSD | Battery | vPro | Sysmark 25 | CrossMark | UL Procyon | Launch/Available in |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ThinkBook 14 G4 IAP | | Intel® Core™ i5 1235U (Q1'22) | Windows 11 OS | Notebook | 8 GB | 14" Non touch 1920x1080 | Intel® Wi-Fi® 6 | Intel® Iris® Xe Graphics | 256GB | 45Wh | Nein | | | | Erhältlich ab: Q2/22 21DH000KGE Deutschland |
| IdeaPad Duet 5 12IRU8 | | Intel® Core™ i5 1335U (Q1'23) | Windows 11 OS | 2-in-1 mit Stift | 16 GB | 12.4" touch 2560x1600 | Intel® Wi-Fi® 6 | Intel® Iris® Xe Graphics | 512 GB | 50Wh | Nein | | | | Erhältlich ab: Q2/23 83B30047GE Deutschland |

## Best – Solutions available for: Teachers and Students (advanced use)

| Device | | CPU | OS | Design | Memory | Display | Wi-Fi | Graphics | SSD | Batery | vPro | Sysmark 25 | CrossMark | UL Procyon | Launch/Available in |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ThinkPad E14 Gen 5 | | Intel® Core™ i7 1355U (Q1'23) | Windows 11 OS | Notebook | 16 GB | 14" (1920x1200) Non-touch | Intel® Wi-Fi® 6 | Intel® Iris® Xe Graphics | 512GB | 57Wh | Nein | | | | Erhältlich ab: Q2/23 21JK000GGE Deutschland |
| ThinkPad E14 Gen 6 | | Intel® Core™ Ultra 5 125U (Q4'23) NPU | Windows 11 OS | Notebook | 16GB | 14" WUXGA (1920x1200) Non-touch | Intel® Wi-Fi 6E BT 5.3 | Integrated Intel® Graphics | 512 GB | 57Wh | No | | | | Erhältlich ab: Q1/24 21M7002GGB Deutschland |
| ThinkPad X1 2-in-1 Gen 9 | | Intel® Core™ Ultra 7 165U (Q4'23) NPU | Windows 11 OS | 2-in-1 | 16GB | 14" WUXGA (1920x1200) Touch. Pen | Intel® Wi-Fi 6E BT 5.3 | Integrated Intel® Graphics | 512 GB | 57Wh | vPro Enterprise | | | | Erhältlich ab: Q1/24 21KE004CGB Deutschland |