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The Intel® Skills for Innovation (Intel® SFI) Framework envisions a world in which students possess the skills necessary to meet the shifting landscape of the Fourth Industrial Revolution. Students are empowered to be innovators as they prepare for, imagine and create the jobs of the future.

The framework provides a direction for decision makers and educators to integrate technology activities into the existing curriculum to build essential mindsets and skillsets.

Path to Adopting Intel Skills for Innovation

1. **Plan**
   - Understand new skill requirements in the post-pandemic environment. Rethink technology’s role to foster skill building. Align stakeholders and facilitate creation of action plan.

2. **Experience**
   - Experience technology used for skill building in the actual learning environment and verify viability. Identify best practices for wider adoption.

3. **Train**
   - Develop educators’ competencies to facilitate higher-order skills development in their students.

4. **Deploy**
   - Adopt technology-supported, skills-based learning models across the entire education system.

**Intel SFI Planning Toolkit**

**Intel SFI Starter Pack**

**Intel SFI Professional Development**

**Engage with Intel Partner Ecosystem**
Introduction to Intel® SFI Starter Pack

The Intel® Skills For Innovation (Intel® SFI) Starter Pack allows educators to experience the Intel SFI vision and establish an innovation environment by providing ready-to-use, technology-infused learning experiences that develop skills of the future for their learners. With a growing library of 70 activities spanning 140 hours of content across various subjects for K-12 schools, educators are able to effectively integrate innovation skills supported by digital technologies into their existing curriculum. Starter Pack activities can be conducted virtually or in a school environment. They also provide excellent project material for flipped classrooms.

The Intel SFI Starter Pack is hosted on the Intel SFI Platform, which offers educators access to an interactive, engaging and collaborative learning community.

Why is it a “Starter Pack”?

The Intel SFI Starter Pack is meant to get educators started on the path to integrating technology-infused skill-building activities in their lesson planning. To build educators’ capacity to create such activities on their own, the Intel SFI framework provides another program - Intel SFI Professional Development.

Design of the Intel SFI Starter Pack

The Intel SFI Starter Pack maps innovation skills under the Intel SFI Framework to existing curriculum to create technology-infused learning experiences and deliver innovation outcomes that build skills of the future.

<table>
<thead>
<tr>
<th>Mindsets**</th>
<th>Education Level + Subject</th>
<th>Technology Usage</th>
<th>Creation of New Learning Experiences</th>
<th>Innovation Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Thinking</td>
<td>Segmented into elementary, middle and high school levels. Activities cover the following subject areas: STEM, humanities and language arts.</td>
<td>Use of cloud-based software for 3D modeling, simulation and data analysis. Use of programming software installed on laptops or PCs. Use of digital fabrication tools such as 3D printing and laser-cutting (for selected lessons).</td>
<td>Ready-to-use activities for educators and learners. Each activity comes with: • Educator guide • Class presentation • Working files</td>
<td>Ability to create, evaluate and analyze (higher-order cognitive skills). Developing innovation mindsets of learners. Improved readiness for the demands of the Fourth Industrial Revolution.</td>
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<table>
<thead>
<tr>
<th>Skillsets**</th>
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</thead>
<tbody>
<tr>
<td>Simulation &amp; Modeling</td>
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<tr>
<td>Programming &amp; Coding</td>
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<td>Data Science</td>
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<tr>
<td>AI &amp; Machine Learning</td>
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</table>
Exploring an Intel® SFI Starter Pack Activity

Each Intel® SFI Starter Pack activity is a complete resource for educators and is designed to support educators with specialization in different curriculum subjects. With an estimated duration of 2 hours, each activity comprises a comprehensive educator’s guide, a teaching deck and a folder containing various resources that are required to carry out the activity.

The Intel SFI Starter Pack activity can be conducted on a Windows or Chromebook* platform.

Detailed Contents

Educator’s Guide
- Learning objectives
- Lesson overview
- Activity guide
- Troubleshooting tips
- Assessment & rubrics

Teaching Deck
- Introduction to topic
- Hands-on activities
- Guided learning
- Discussion topics
- Reflection

Working Files
- Worksheets
- Installation guides
- Applications
- Source files or codes
- Data sets

*Refer to the Intel SFI Starter Pack glossary for the list of activities that can be conducted on a Chromebook.
New to the Technology?

Beginner’s guides have also been created for educators who are interested in finding out more about how to use and apply the software or technology introduced in the Intel® SFI Starter Pack activities. As a supplementary resource, the guides provide additional support to educators in using technology with greater confidence.
Categorization of Intel SFI Starter Pack Activities

<table>
<thead>
<tr>
<th>Elementary (15 Activities)</th>
<th>Languages</th>
<th>STEM</th>
<th>Humanities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• English</td>
<td>• Mathematics</td>
<td>• Geography</td>
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<tr>
<td></td>
<td>• Literature</td>
<td>• Biology</td>
<td>• History</td>
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<tr>
<td></td>
<td></td>
<td>• Chemistry</td>
<td>• Social Studies</td>
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<tr>
<td></td>
<td></td>
<td>• Physics</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Middle (25 Activities)</th>
<th>Languages</th>
<th>STEM</th>
<th>Humanities</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>• English</td>
<td>• Mathematics</td>
<td>• Geography</td>
</tr>
<tr>
<td></td>
<td>• Literature</td>
<td>• Biology</td>
<td>• History</td>
</tr>
<tr>
<td></td>
<td>• Language Arts</td>
<td>• Chemistry</td>
<td>• Social Studies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Physics</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>High (30 Activities)</th>
<th>Languages</th>
<th>STEM</th>
<th>Humanities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• English</td>
<td>• Mathematics</td>
<td>• Geography</td>
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<td></td>
<td>• Literature</td>
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<td></td>
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<td>• Physics</td>
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</tbody>
</table>

Curriculum Integration

Each Intel SFI Starter Pack activity has been designed for seamless integration into the local curriculum. Curriculum mapping to the United States Common Core Standards and Singapore National Curriculum are currently available. Refer to the Starter Pack Catalogue for a comprehensive list of these curriculum maps.

List of Intel SFI Starter Pack Activities

For detailed information including learning objectives, platform compatibility, technology used and innovation skills covered in each Intel SFI Starter Pack activity, refer to the Starter Pack Catalogue.
Intel® SFI Learning Platform

The Intel® SFI Learning Platform provides educators and administrators with access to a rich, interactive social learning environment to learn, share, collaborate and connect with a global population of educators. With system-wide reporting and analytics, administrators can access powerful insights to track and support the progress of their staff on behalf of their entire organization.

### Learning
Interactive learning & completion certificates

### Resource Library
Lesson plans, PDFs, videos, beginner’s guides, presentations, and much more

### Live Chat
Live ‘study group’ engagement, group discussions, moderated chat

### Community-Generated Content
Shared lesson plans, best practices, and an opportunity to connect with other professionals through the community

### Live Discussions
Grouped by cohort, topic, subject, and thread

### Live Classroom
Live training experience with streamed presenter, desktop sharing, polling, and live chat

### Insight Surveys
Capture trends of the innovative approaches to learning and student development

### Intelligent Search
Search categories and filters aligned to educators’ interests

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### Starter Pack Navigation Page

**Download Starter Pack Catalogue**
A complete list of all activities as well as available curriculum mappings.

**Navigate Starter Pack Activities**
Quick overview of activity title, brief description, and target level/subject.

**Search Starter Pack Activities Using Pre-defined Filters**
Filter activities based on target grade level/subject, target mindset/skillset, software used, and supported platform.

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### Starter Pack Activity Page

**Activity Information**
Detailed information and description, hardware/software requirements, and curriculum mapping examples

**Additional Resources**
Getting-started guides for teachers to facilitate adoption of software titles used in the activity

**Activity Preview**
A closer look at the Educator Guide first two pages with overview of instructional objectives, learning outcomes, and real-world application of the activity
The Intel® SFI Starter Pack is designed to meet the evolving pedagogical needs of educators and prepare learners to excel as part of tomorrow’s workforce. This program is available under license from Intel.

For more information about how to deploy Intel® SFI Starter Pack in your education environment, please contact your Intel Technology Provider.

For more information, visit skillsforinnovation.intel.com