



Introduction

LEGO® Education is pleased to introduce the *BuildToExpress Extension Activity Pack* to complement and expand on both the self-paced *BuildToExpress Guide and Activity Pack* DVD and the professional development training.

Who is it for?

The material in this activity pack is designed to support elementary teachers who have completed training in the LEGO Education BuildToExpress process through in-class professional development or are using the *BuildToExpress Guide and Activity Pack* DVD. Activities in this pack have been developed for Grades 2-5, although activities and ideas can be adapted for higher grades as well. Teachers of any academic background can use these materials to work with students ages seven years and up.

What is it for?

LEGO Education BuildToExpress can be used for a wide range of topics and themes to inspire reflection, promote discussion, and support students in expressing their thoughts and ideas. The materials in this activity pack can be used to enhance learning and create engaging, informative assessment experiences when teaching core curriculum concepts. They can be adapted to meet the specific needs and goals of your class and program.

There are no right or wrong answers with BuildToExpress. The goal of the process is to help students express their ideas about what they have already learned and form their thoughts more clearly by using a hands-on, visual approach. The BuildToExpress process will help students enhance their speaking and listening skills.

BuildToExpress can be integrated into classroom activities as:

- An icebreaker activity to help class members get to know one another
- An introductory activity for a new unit
- A diagnostic or formative assessment tool
- A brainstorming activity to generate ideas

- A comprehension activity to confirm student understanding
- A cool-down activity after a test or presentation

The BuildToExpress process helps students develop a wide array of skills such as:

- Abstract thinking
- Reasoning
- Verbal communication
- Time management
- Inquiry
- Interpretation
- Active listening

What is in the BuildToExpress Core Set?

The activities outlined in this activity pack have been created for use with the BuildToExpress Core Set of elements. Each BuildToExpress Set includes LEGO® bricks and a building plate. These are used by students to make their thoughts and ideas visible and tangible in 3-D models. The LEGO bricks in each BuildToExpress Set have been carefully selected to provide a broad spectrum of ready-made metaphors. The range of bricks, colors, and minifigures inspires students and stimulates their creative thinking and imagination, giving them a tool with which to clearly and confidently express themselves.

Each student should be provided with their own BuildToExpress Set in order to allow all students to have the same starting point when given a Building Challenge. They respond to Building Challenges individually and use the building plate to showcase their models when sharing their ideas about their models with others throughout the activities.

What is in the Extension Activity Pack?

The *BuildToExpress Extension Activity Pack* has been created to complement and expand on the *BuildToExpress Guide and Activity Pack DVD* and the *LEGO Education Professional Development Training Course Manual for BuildToExpress*. The materials provided in this pack are intended to support teachers after completing BuildToExpress training using the *BuildToExpress Guide and Activity Pack DVD* or through in-class professional development. Some key features and concepts from the training materials have been included in this activity pack. It is strongly recommended that teachers become familiar with the BuildToExpress methodology and process before beginning the activities outlined in these materials.

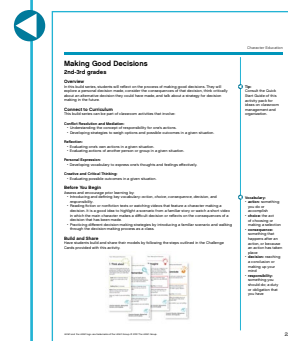
This activity pack provides teachers with activity plans, customizable templates for planning and documentation, and an extensive list of drop-in ideas to be incorporated into existing elementary curriculum at the second- through fifth-grade levels. Approximately 40 hours of detailed in-class materials have been provided, including 20 hours for 2nd-3rd grades and 20 hours for 4th-5th grades. Curriculum connections have been made in four key subject areas including language arts, social studies, science, and mathematics. Activities have also been developed to help students develop general communication skills and focus on Character Education goals.

Additional resources have been provided as reproducible templates and extension ideas to practically and effectively build upon this experience and integrate BuildToExpress into daily teaching practice.

The activity pack includes the following.

Quick Start Guide

This section provides teachers with essential information about the BuildToExpress process and how to further integrate it as an enriching part of the classroom routine. Information on organizing and managing the classroom has also been provided, and important terminology used throughout the material has been highlighted.



Curriculum Grids

Two Curriculum Grids have been provided to help teachers identify connections to the curriculum with which BuildToExpress activities can be integrated.

Each BuildToExpress activity has been designed with specific curriculum concepts in mind for two distinct levels: 2nd-3rd grades and 4th-5th grades, but teachers should feel free to select and adapt any of the activities to suit the needs of their own classes and programs.

Curriculum standards have been drawn from US Common Core State Standards as well as other sources as noted in the Curriculum Grid.

Classroom Activities

Teachers are provided with 20 classroom Activity Plans connected to expectations in language arts, social studies, science, mathematics, and character education. Ten activities have been provided for each age range (2nd-3rd and 4th-5th grades). Each activity is structured around a series of Building Challenges on Challenge Cards. The Challenge Cards take approximately 1.5-2 hours to complete as a series. Completion time might vary depending on the experience of students and the amount of instruction or discussion that takes place throughout the process.

Each Activity Plan includes:

- A detailed lesson Overview with a summary of the concepts that will be explored using the Challenge Cards.
- Connections to core curriculum standards.
- Suggestions to integrate the BuildToExpress process with ongoing learning in the classroom and to prepare students before the building process takes place.
- BuildToExpress Challenge Cards for students to follow.
- Cross-curricular Extensions to continue and extend learning after the building process has been completed.

Activities can be completed in one long instructional block or divided among two or more lessons throughout a week or unit.

Example Builds have been provided in the Quick Start Guide section of this activity pack. The Example Builds show one complete set of Building Challenges for each age range.

Self-Guided BuildToExpress Activity

A self-guided walk through of a BuildToExpress activity has been provided to help teachers review the BuildToExpress process and experience the procedure that students follow in the activities in this pack. This activity can also be used to introduce parents, adult community members, colleagues, or administrative staff to BuildToExpress.

Examples

Example models, stories, and sample facilitating questions have been provided for each age range to illustrate possible types of models and stories students may create.

Note: It is important for teachers to tailor the facilitating questions they ask to each student's model and story as it is explained.

Examples of completed Recap and Reflect templates have also been included to demonstrate how these reproducible templates can be used to help students document their ideas for future reference and reflection.

Warm-Up Activities

Fourteen stand-alone Building Challenges have been provided as inspiration for two distinct age ranges (2nd-3rd and 4th-5th grades). Teachers can use these ideas to help students get into the BuildToExpress frame of mind and develop a level of comfort with sharing in a risk-free situation as they are being introduced to this activity pack.

These activities are not directly connected to curriculum objectives and can be completed or adapted for situations where class time is limited, when a change of pace or focus is needed in instructional time, or to periodically remind students about the rules of BuildToExpress.



Building Challenge List

An extensive list of additional curriculum-focused Building Challenges have been provided in the Support Material section of this activity pack. They have been categorized by subject and subject strand, with notations to indicate appropriate age range for easy search and reference by teachers who would like to incorporate BuildToExpress across the curriculum.

Recap and Reflect Worksheets

Five different Recap and Reflect Worksheets have been provided to help students document their models and ideas throughout the building process. Teachers can reproduce and use these general worksheets directly, project and use them as inspiration for class discussion, or have students use them as a starting point for writing projects or presentations. A Modify the Build Recap and Reflect Worksheet has also been included for students to document idea development when one model has been built, shared, modified to add or revise ideas, and then shared again.

Teachers are encouraged to select and adapt the materials to best fit the needs of their students and classrooms.

Activity Planning Templates

Reproducible templates have been provided to help teachers organize and plan the incorporation of BuildToExpress into their everyday classroom practice.

- A blank Activity Plan has been created to guide teachers through the creation of original activities tailored to the specific needs of a class. This includes establishing curriculum connections, preparing students, planning Building Challenges, outlining possible facilitating questions, and creating extension activities. Completed Activity Plans can be shared with other teachers in the school and community.
- A blank BuildToExpress Weekly Planning Calendar has been provided to schedule lessons that incorporate BuildToExpress into larger units of study within the classroom and to help teachers in the same school or grade grouping coordinate and track the use of BuildToExpress materials. The Weekly Planning Calendar can also be used to communicate to parents and administrators how the resources are being used in the classroom.

Self-Evaluation Rubrics

Two rubrics have been provided to help students reflect on personal communication skills and progress. Each rubric targets a specific age range for independent use and completion. It is recommended that teachers have students complete these rubrics periodically throughout the school year to encourage students to track their own confidence, vocabulary, sharing, listening, and expressive progress.

Letter to Parents

A customizable letter has been provided to help teachers explain the BuildToExpress process and benefits to parents and community members. This letter can be filled in with the school's and teacher's information and reproduced for distribution.

BuildToExpress Rules for Participants

A short list of rules and reminders about the BuildToExpress process has been provided that can be reproduced and distributed to students or posted in the classroom for reference during BuildToExpress activities.

Tip:
Examples of completed Recap and Reflect Worksheets have been provided in the Examples section of this activity pack.

