Introduction to the Taxonomy Project:
Tools for Selecting & Aligning SEL Frameworks

Given the large and growing number of SEL frameworks designed to meet different purposes and to work in different contexts, it is increasingly important to look both at specific frameworks in depth and to compare across frameworks. This is particularly so when choosing a framework to guide the selection of SEL strategies for implementation and/or assessment tools. In addition, once a framework is selected it should be aligned with other frameworks likely to be in use in a classroom, school, district, or broader context.

This series of three briefs examines three different efforts to compare frameworks. The first brief, about the Harvard Taxonomy Project, describes tools for comparing the words in different frameworks using a master thesaurus and interactive visualization tools. The second brief, by the American Institutes for Research (AIR), is based on AIR’s study of 136 different frameworks from a variety of fields. The final brief, by CASEL, compares the existing state SEL standards as frameworks designed to help guide practice in each state.

A broad and deep body of research shows that social, emotional, and related “nonacademic” skills are important to success in school, work, and life. However, the field is beset by dilemmas about how best to measure and promote skills in this area, in large part because the field is structured around a large number of organizing systems – or frameworks – that often use different and at times conflicting terminology to define and describe skills. For example, frameworks from different disciplines might refer to the same skill or competency by different names, or alternatively, use the same name to refer to two conceptually distinct skills. Consequently, there is a lack of consensus among researchers, practitioners, and policymakers about which skills are important, what they should be called, and whether and how they are related to each other. Without a way to make sense of this terminological messiness, we risk mistranslating research into practice in ways that waste time, money, and effort and imperil the value and status of the field as a whole (see Figure 1).

This brief describes our team’s response to this challenge and shares what we have learned about frameworks for social and emotional learning (SEL) and related “nonacademic” domains – what they are, why they matter, and how they work. It also includes a summary table that documents the key features of 16 widely used frameworks, enabling readers to learn more about and compare
features across different ways of thinking about SEL. The brief concludes with a preview of a set of online tools designed to connect and compare frameworks and next steps for the Taxonomy Project and the field.

**The Taxonomy Project: A Rosetta Stone for the Field**

For the past four years, our research team at the Harvard Graduate School of Education has been working on the Taxonomy Project, which is designed to serve as a translator, or navigator, for the field. There are many frameworks in the field, and each framework has its own purpose, style, and approach to SEL and often uses terms and language specific to its own perspective and goals. In addition to having a general understanding of what is inside each framework, researchers, practitioners, and policymakers need tools and resources that allow them to see where the terms and related definitions used to describe important skills across frameworks are the same or different in order to make informed decisions about related standards and strategies for schools. Thus, much as the Rosetta Stone enabled historians to see connections among ancient alphabets, the Taxonomy Project is designed to produce a set of interactive online tools to help stakeholders in the field of SEL make sense of and navigate between different frameworks, regardless of their differences in terminology.

To build the Taxonomy tools, we used a detailed and comprehensive coding system and trained coders to map frameworks and terms in order to see whether and how “nonacademic” constructs and terms are related across frameworks based on how they are defined rather than how they are labeled or categorized. The coding system used for the Taxonomy Project was derived from a comprehensive review of the literature on social, emotional, and related skills that are linked to an array of positive outcomes. It has been refined over the course of multiple projects. It consists of 178 codes organized into 23 subdomains across 6 domains, which have been refined over the course of multiple projects. The resulting database of frameworks and terms – or taxonomy – allows those working in the field to easily see where the terms and definitions used to describe important skills across different frameworks are the same or different, regardless of how they are labeled or named.

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Taxonomy Project Resources:
Online Tools for Comparing Frameworks and Terms

The data collected for the Taxonomy Project will result in a set of interactive, online tools designed to make it easier for those working in the field to make sense of the language and terms used to define and describe important social, emotional, and related “nonacademic” skills – not only to select an approach that aligns with their vision and goals for SEL, but also to understand where that approach is situated in the field and how it ties into the efforts of others doing similar work, despite differences in language and terminology. Available on a public-facing website, the full suite of tools will include detailed framework profiles, visual tools, and a thesaurus of “nonacademic” terms, each described in more detail later in this brief.

**SUITE OF ONLINE TOOLS**

- **Framework Profiles**
  - “Look inside Frameworks”
  - Learn more about widely-used “nonacademic” frameworks and compare skills and features across them.

- **Three Visual Tools**
  - “Compare Frameworks”
  - Use a set of interactive visual tools to identify similarities and differences across widely-used frameworks.

- **Thesaurus**
  - “Search for Skills”
  - Search a thesaurus of 200+ SEL and “nonacademic” terms to identify related skills across frameworks.

The Taxonomy Project tools and website will be available to the public in its first phase in 2019. Please complete a [short form](#) to be alerted when the site is open.

**Project Goals: Connecting, Comparing, and Communicating**

It is important to note that the Taxonomy Project is agnostic with regard to brand and viewpoint. It is designed to maintain the integrity of each framework while providing a system for connecting, comparing, and communicating across them. Diversity in the field is not in and of itself a problem. Frameworks are often designed for and tailored to specific purposes and objectives, and they define and organize skills differently for important reasons. The Taxonomy Project simply provides a method for being precise and transparent about where and how different viewpoints overlap or diverge.
The Project’s profiles, visual tools, and thesaurus thus serve to align and advance the field of SEL by improving effectiveness, accessibility, coordination, and communication.

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<thead>
<tr>
<th>EFFECTIVENESS</th>
<th>ACCESSIBILITY</th>
<th>COORDINATION</th>
<th>COMMUNICATION</th>
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<tr>
<td>Encourages and enables those working in the field to be clear and precise about the skills they are researching, developing, and measuring, leading to more effective and impactful research and practice throughout the field as a whole.</td>
<td>Brings together the work of many disciplines so that everyone can access, understand, and use available information about the field and infuse it into their own work.</td>
<td>Enables researchers, practitioners, and policymakers to coordinate and align SEL work across frameworks, ages, and settings – ultimately maximizing field-wide impact.</td>
<td>Facilitates communication and alignment across different research areas and/or stakeholder groups in ways that enable stakeholders to effectively learn from and collaborate with those doing similar work.</td>
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Before we begin discussing SEL and related “nonacademic” frameworks, it is important to define the concept of a framework itself. What is a framework supposed to do, anyway? Our team thinks about a framework as an organizing system, a blueprint, or even a roadmap that tells the user what he/she should be looking for. In the case of SEL, this means the kind of knowledge, skills, and attitudes you should expect to see in children and youth and when you should expect to see them across development. Another way of saying this is that a framework tells us what we are aiming for. It tells us what outcomes we should or can expect from any program, strategy, or practice. In our view, a good framework is (a) concrete – it describes what one should expect to see in children’s (and adult’s) behavior, and it provides a clear set of reasonable short- and long-term outcomes; (b) clear – it employs terminology that is both transparent and linked in clear ways to measurement/assessment on the one hand and to strategies and practices on the other; and (c) developmental and contextual – meaning it highlights what is salient (i.e., growing or emerging) at different developmental periods and links its concepts and constructs to age-specific and context-relevant demands and opportunities.

SEL frameworks carry a great deal of weight and influence in the field because they distill ways of thinking and prioritizing that guide policy and practice. As one of the most common ways of communicating about and organizing “nonacademic” skills, they are often used to guide an organization, program, or funder’s approach to the domain. Therefore, frameworks have a great deal of influence over which skills and outcomes are prioritized, addressed, and measured. However, there are a great number of SEL frameworks to choose from, and though they are similar and overlapping in some ways, they are not all the same. Frameworks vary considerably in their purpose, scope, structure, level of detail, and the extent to which they address issues of development, context, and diversity. Furthermore, they differ in which skills they emphasize and the terms they use based on their distinct purpose, goals, and research traditions.
This diversity is ultimately helpful. Different frameworks have different purposes for different settings. Each framework adds to the conversation. However, no single framework can be used to solve every problem or meet every need. The question, then, is how can one better understand different SEL frameworks, including how they are related and different, in order to identify one that meets the specific focus and needs of any particular setting or stakeholder?

What is in Each Framework?

As part of our work on the Taxonomy Project, we looked closely at the essential elements of 16 widely used frameworks and created a set of framework profiles to show what is inside each framework, as well as a summary table (see page 8) that supports making general comparisons across them. The framework profiles summarize the purpose, design, and key features of each framework. They include information about the extent to which each framework provides content and resources that address important considerations such as development, context, culture, associated outcomes, measurement, programming, and more, relative to other frameworks in the sample. Each profile included in the Taxonomy Project to date contains the following information, which can guide decisions about if and when a framework is well-aligned with specific needs, goals, or settings.

Framework Overview

In each profile the Framework Overview includes basic information summarizing the framework’s focus, scope, and audience, including:

- **Developer Name and Type.** The name and type of individual(s) or organization(s) that developed the framework. This may include researchers, nonprofit organizations, governments, intergovernmental organizations, and others.

- **Key Parameters.** Information about the framework’s target population and context, including:
  - **Age:** The age and/or grade range to which the framework applies.
  - **Setting:** Any specific contexts or settings for which the framework may have been designed.

- **Level of Detail.** Some frameworks are highly specific and explained in great detail while others are meant to be generalizable across multiple settings and are therefore described at a higher level. Profiles indicate the extent and depth of information a framework provides about the following areas:
  - **Framework:** The extent to which the framework provides information about (a) the framework itself (what it includes, how it works, and who it is for), and/or (b) social, emotional, and other nonacademic skills in general.
  - **Skills:** The level of detail with which the skills in the framework are described and defined.
  - **Observable Behaviors:** Whether the framework describes how major skills and behaviors it
includes can be observed and measured in real world contexts.

- **Learning Progression:** Whether the framework provides a sequence in which skills/constructs are learned and deployed across the lifespan or another discrete developmental span (i.e., which skills are most salient and what they look like at various ages) and/or in relation to each other (i.e., how new skills build on previous skills).

Each profile also includes additional information about the framework’s **origin and history; purpose** (e.g., intended audience and objectives); **common uses** (e.g., any groups/settings among which the framework is widely known or used); **scope and structure** (e.g., the range/breadth of skills covered by the framework, including the number and type of skills included and how they are organized into groups or hierarchies); and **key publications** (publicly available and easily accessible documents that describe the framework).

### Competencies: Knowledge, Skills, and Attitudes

Some frameworks provide a single list of competencies while others organize or group knowledge, skills, and attitudes into ontological categories or hierarchies. Although not included in the summary table in this brief, the online version of each profile contains a list of the major skills in each framework and how they are grouped or categorized. Each skill will link to a page in our online thesaurus, where users can access its definition and see related terms in other frameworks.

### Key Considerations

The next part of each profile includes any resources or information the framework provides about important factors that (a) impact how and why skills are developed, and (b) guide how the framework should be applied across ages and settings, including:

- **Culture and Diversity.** Any information or resources that address how identity and culture impact the way individuals understand, prioritize, develop, and deploy skills. This includes whether and how the framework takes race, gender, sexuality, religion, nationality, special/exceptional education, ESL/ELL, and similar factors into consideration.

- **Developmental Perspective.** Information or resources that address (a) the developmental sequence in which skills are learned (i.e., how skills build on each other), and (b) when and how skills are learned and deployed across various ages and developmental stages.

- **Context and Environment.** Any information or resources that address the impact of environmental and contextual factors on the development and deployment of social, emotional, and related nonacademic skills, including: (a) individual biology and life experiences; (b) everyday influences like family, friends, school, and work; and (c) more macro influences like government policies, the sociopolitical climate, and access to resources.

- **Associated Outcomes.** Any information about the influence of the relevant skills on important outcomes related to school, work, and life. The evidence may apply directly to specific skills in the framework or to skills in the domain generally.
Available Resources

The final part of each profile includes any resources or information the framework provides to help audiences understand, develop, and assess skills in the framework, including:

- **Support Materials.** Additional materials that support the understanding or implementation/use of the framework. This may include handouts, videos, webinars, online tools, research reports, reading lists, implementation guides, and similar materials.

- **Programs and Strategies.** Any information or resources related to finding programs, strategies, and interventions that align with the framework. This may include programs/strategies specifically created to support or align with the framework or more general guidance and recommendations on how to select effective programs/strategies.

- **Measurement Tools.** Any information, resources, or tools related to measuring or assessing skills, either those specific to the framework or more general.

The descriptive profiles of individual frameworks can be easily compared using the following Summary Table (see next page). This table reveals broad trends in the field and also identifies frameworks that more fully address a topic of interest. For example, you can see from the summary table that, despite what we know about the impact of culture and context on how children develop and deploy SEL skills, only four frameworks (25%) provide comprehensive information or resources for addressing culture and diversity, and similarly only four (25%) provide comprehensive information or resources on environment and context. Trends like this may indicate that these are areas in which the field has room to grow and improve. In addition, approximately half of the frameworks (n=7; 44%) describe the sequence in which skills are learned over time (e.g., provide a learning progression) and about half (n=7; 44%) also include sample behaviors for each skill (e.g., observable behaviors), but not always both. Five frameworks contain neither (31%). For those working in applied settings where these skills are being taught and assessed, it may be helpful to select a framework that includes information about when and how to observe them.
<table>
<thead>
<tr>
<th>Framework</th>
<th>Framework Profile Summary Table</th>
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<tbody>
<tr>
<td>ACT Education and Workforce Readiness</td>
<td>ACT, Inc.</td>
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<tr>
<td>Anchorage Standards</td>
<td>ASD SEL Steering Committee</td>
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<td>Big 5 Personality Traits</td>
<td>Multiple researchers</td>
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<td>Building Blocks for Learning</td>
<td>Turnaround for Children</td>
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<td>CASEL Framework for Systemic SEL</td>
<td>CASEL</td>
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<td>Character Strengths (Character Lab)</td>
<td>Character Lab</td>
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<td>Character Strengths (KIPP)</td>
<td>KIPP NYC &amp; Researchers</td>
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<tr>
<td>Clusters of 21st Century Competencies</td>
<td>National Research Council</td>
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<tr>
<td>Connecticut State Standards</td>
<td>Connecticut Dept. of Ed.</td>
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<td>Employability Skills</td>
<td>Office of Career, Tech. and Adult Ed.</td>
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<tr>
<td>Foundations for Young Adult Success</td>
<td>UChicago Consortium</td>
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<tr>
<td>Four Branch Model of Emotional Intelligence</td>
<td>Mayer &amp; Salovey</td>
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<tr>
<td>Framework for 21st Century Learning</td>
<td>P21</td>
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<td>Head Start Early Learning Outcomes</td>
<td>Office of Head Start</td>
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<tr>
<td>Mindsets, Essential Skills and Habits (MESH)</td>
<td>Transforming Educator &amp; Core Districts</td>
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<tr>
<td>OECD Social and Emotional Skills</td>
<td>OECD</td>
</tr>
</tbody>
</table>

Key: ○ minimal, □ some, ■ comprehensive, × no, ✓ yes, ☣ government, ☣ school, ☣ researcher(s), ☣ non-profit, ☣ intergovernmental
A Closer Look at the Online Tools: The Visual Tools and Thesaurus

Although the framework profiles allow exploration and comparison of features of the major frameworks, we have also developed a set of interactive visual tools linked to a robust thesaurus. The following section explores these tools in more depth and illustrates how they can be used to connect and compare frameworks and terminology.

Visual Tools

The Taxonomy Project includes three interactive visual tools that enable those working in the field to look across frameworks and identify similarities and differences between and among them, regardless of differences in language or terminology. More specifically, the tools allow their users to (a) see what general types of SEL competencies different frameworks tend to emphasize; (b) compare and link terminology across different frameworks; and (c) identify where related skills can be found in different frameworks. These tools can also make the user’s work more efficient and effective. For instance, they can be used to identify frameworks that align best with specific needs and goals or to identify through-lines across ages, contexts, and disciplines (e.g., from early childhood through high school, or between SEL and character development) in order to better coordinate efforts across settings and stakeholders. Below we take a closer look at one visual tool, the Compare Frameworks Tool, to illustrate how Taxonomy Project data can be used to make sense of where and when frameworks overlap, despite differences in terminology that might otherwise obscure the connections.

In the figure above, we use our Compare Frameworks tool to compare the Mindsets, Essential Skills, and Habits (MESH) framework used by many large urban school districts in California to a set of core character strengths outlined by Character Lab, a leading organization in the field of character development.
development. Although the two frameworks use different terminology, our data enable users to see where those terms are related, with the thickness of the line indicating the amount of overlap between two terms as determined by our coding system. For example, you can see in this illustration that, unsurprisingly, the definition of “self-management” put forth by MESH is closely related to the definition of “self-control” in the Character Lab framework. Similarly, the definition of “growth mindset” in the MESH framework is closely related to that used by Character Lab. However, “growth mindset” in MESH is also related to “grit” and “optimism” in Character Lab, and “mindset” as defined by Character Lab is also related to “self-efficacy” in MESH. Without a tool like the Tree Comparison, it would be difficult to understand if and where these two frameworks overlap.

Thesaurus

In addition, the visual tools mentioned above are linked to a thesaurus of over 200 terms drawn from the 16 frameworks included in our analysis. The thesaurus allows users to explore commonly used terms and compare them to related or overlapping terms. For example, clicking on a term in the tree diagram above would take you to a thesaurus page that provides a definition for that term and lists related terms in other frameworks. The level of relatedness between two terms is based on the similarity of their definitions, as determined by our coding system.

Once again, without a tool like the thesaurus, it is difficult to see where terms with different names might have similar definitions, or terms with similar names might have different definitions. For instance, as shown in the figure below, “self-management” is a term that appears in both the MESH and CASEL frameworks, and as might be expected, the terms have similar definitions. However, “self-management” in MESH is actually more closely related to “self-control” in the Character Lab framework, despite having a slightly different name. And in some cases, two terms that may seem similar based on their names – such as “self-regulation” in Building Blocks for Learning and “self-regulation of impulses and emotional reaction” in the Connecticut state standards actually have very little overlap. It is important to be able to pinpoint these key similarities and differences, especially when attempting to select and align related strategies and measures to teach and assess these skills.
What’s Next? Linking Frameworks to Programs, Strategies, and Measures

We envision that the future of the Taxonomy Project will not only include additional frameworks and state standards, but also expand our scope to include programs, strategies, and measures to create alignment across all facets of the work of SEL and related “nonacademic” domains. Thus, the taxonomy will be useful in making clear and precise connections across the entire research-to-practice cycle.

<table>
<thead>
<tr>
<th><strong>Adding Frameworks</strong></th>
<th><strong>Linking to Programs</strong></th>
<th><strong>Linking to Strategies</strong></th>
<th><strong>Linking to Measures</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Create a more robust and comprehensive database of frameworks from which to draw information for the Explore SEL website</td>
<td>Identify and explore evidence-based SEL programs that align with specific frameworks and skills</td>
<td>Identify and explore stand-alone SEL strategies that align with specific frameworks and skills</td>
<td>Identify measurement tools that align with specific frameworks, skills, and strategies/programs</td>
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*This will enable practitioners to translate research into practice in ways that ensure alignment among skills, strategies, and measures.*

The Easel Lab @ HSGE

Ecological Approaches to Social and Emotional Learning (EASEL) Lab, led by Dr. Stephanie Jones of the Harvard Graduate School of Education, explores the effects of high-quality social and emotional learning (SEL) interventions on the development and achievement of children, youth, teachers, parents, and communities.

Our projects aim to advance the field of SEL through research, practice, and policy. The EASEL Lab also effects change through translational projects, which work to strengthen the links between the growing body of evidence supporting high-quality SEL and the creation and application of education policy and practice more generally. The Taxonomy Project is a product of the EASEL Lab.
Acknowledgements

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The Measuring SEL Series of Frameworks Briefs

The Establishing Practical Social-Emotional Competence Assessments of Preschool to High School Students project as guided by the Assessment Work Group (AWG) is dedicated to helping advance the effective use of data to inspire practice in SEL. In deciding how the AWG could best contribute to advancing the field and complement rather than compete with other efforts underway to address the challenges of multiple frameworks and inconsistent use of language, the AWG Frameworks Subgroup, led by Stephanie Jones and Roger Weissberg, developed four series of briefs designed for practitioners. Each series and each brief in the series is designed to help advance how people think about the issues and make reasonable choices that work best for them and their context. We hope they provide a set of “building blocks” that systems and practitioners can use to advance and improve their SEL efforts. Learn more at https://measuringsel.casel.org

Introductory Series
These briefs are about what frameworks are, how they are useful, the challenges and opportunities they present in practice, and defining criteria that are helpful when considering what frameworks to use.

Comparative Series
These briefs explore efforts underway to categorize and align ways of thinking about comparing unique frameworks. The briefs also describe tools available to aid systems and practitioners in their selection and use of a framework.

Special Issues Series
These briefs identify critical issues that frameworks must address or that influence how they are used that are important to consider when selecting and using frameworks, such as equity and SEL, and developmental considerations.

Descriptive Series
These briefs each describe an individual framework currently in use. They are intended to illustrate how frameworks can be analyzed and help practitioners learn to evaluate frameworks on the types of criteria that matter most in their settings. (The briefs are not an endorsement of these frameworks.)

The Assessment Work Group is committed to advancing dialogue on key issues in the field and stating a perspective when appropriate. The views and opinions expressed in these briefs reflect the general position of the Assessment Work Group. They do not necessarily reflect the official policy or position of CASEL or any of the individual organizations involved with the work group.