Soft Skills Summary and Findings

Slide Deck (1/3)



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Process Overview

- Web research was conducted to compile hundreds of domestic programs that teach "soft skills" to any population through various mediums
- In collaboration with the Gates Foundation, heuristics were developed to determine potential programs of interest
 - Programs were selected that met some or most of the criteria: target population of Black / Latino or low-income youth, high school to employment or college transitional period focus, programs that collected and published data about their assessment and evaluation
- Of those programs (~55), insights were derived about taxonomies, program patterns, trends, and opportunities.

We have a representative sample set of programs analyzed to highlight similarities and differences across program design, implementation, outcomes and measurement.

- The programs that are most effective* generally possess these qualities:
 - Clearly defined outcomes and logic models linking activities to desired outcomes
 - Developmentally-appropriate intensity / duration
 - Example: Botvin Life Skills provides three different versions of their curriculum (elementary, middle and high school) that teach the same skills supported by age-appropriate language and activities.
 - Multiple supports or comprehensive services outside of training / learning model
 - Example: Generation provides living allowances, childcare allotments, medical care and clothing for career training to their program participants.
 - Continuous monitoring and improvement measures built-in
 - Youth participation and advocacy; engaging youth throughout the program as equal contributors and partners with an emphasis on strong relationships with committed and caring adults
 - Example: Youthbuild facilitates community advocacy by providing them with the support to build homes and participate in youth councils

- As programs were analyzed, natural clustering emerged. Programs can be categorized by four major outcomes: Education, Employment, Well-Being and Civics. This is in general alignment with recent research on meta-learning interventions as a facilitator of key life outcomes (Educational Attainment, Health, Happiness, Income).*
 - Focusing exclusively on programs in the education sector will be limiting because programs are unevenly distributed across the quadrants
 - Education and employment-focused programs make up the majority of the profiles analyzed; however, well-being / prevention-focused programs offer critical opportunities to redirect youth that may otherwise need intervention later in life
 - Additionally, Civics / Advocacy-focused programs promote positive youth development by offering the critical opportunity for youth to engage, support and make an impact in their communities
- Programs can be further segmented by stage of life/timing (early childhood vs. pre-adolescence) or program type (e.g. mentoring vs. toolkit).
- Establishing a single taxonomy based on skills is challenging but there are three models that accommodate all the different varieties of programs profiled.
 - A set of future skills are starting to be emphasized including creativity, digital literacy and social skills.

- Geographical spread of profiled programs suggest opportunities for expanded programming in the Midwestern and Western Regions (excluding California) of the US.
 - Highly populous urban areas (e.g. New York, Chicago, Los Angeles) tend to have an abundance of outreach and programming, both in unique programs that are region-specific and affiliate sites of broader national programs; there are opportunities to expand programming in rural areas countrywide, and the Midwest & Western regions of the US. Programs are generally well-represented in California.
- The majority of programs profiled do not run the span of need.
 - Although there are programs that support participants through multiple milestones, this is not the case widely. Program models that remain with the participants for multiple years throughout multiple transitions are particularly impactful.

There were a number of key program attributes analyzed to derive insights about which are related to impact.

Although cost is often related to program duration, it varies widely and within this sample, is not directly related to impact. Program duration / intensity and early intervention are more closely correlated to impact. There are a subset of organizations that receive outsized results relative to cost (e.g. iMentor, Communities in Schools, Botvin Life Skills)

The way that programs measure impact varies significantly across programs, even when comparing programs that focus on similar outcomes or work with similar target populations. For example, education-focused programs may measure impact by:

- Academic Improvement / Achievement
 - Example: Improved classroom attendance and self-confidence in academic areas
 - Example: Increase on standardized test scores in core areas
- High School Graduation
- College Access and Enrollment (may range from number of applications submitted to persistence and successful completion)

- Assessment and Evaluation Methods: We have a deep-dive on a variety of assessment methods and it tells us that there are a variety of out-of-the-box solutions, existing survey measures, and other types of evaluation instruments being used in the space, but there is no one-size-fits-all solution for an entire program. Even the most defined programs compiled a variety of strategies to measure individual components (e.g. a self-concept survey completed by youth, grade data, and observation feedback from adults).
- Rather than applying one program's evaluation method to another, each unique evaluation should be carefully considered by factoring in program participant attributes, skills, activities and outcomes. There are also evaluation methods that emphasize Positive Youth Development and Youth Participatory Research methods that can further engage them in the process and create stronger outcomes.

Recommendation: Improve and broaden evaluation and measurement.

Approximately 1/5 of programs profiled met the gold-standard for evaluation rigor. Although many of the organizations are making demonstrable progress towards similar outcomes, there is a significant spread in both:

- 1.) the quality of assessment / evaluation
- 2.) the methods used for performing evaluation

There is an opportunity to standardize assessment and evaluation methods across similarly-grouped organizations in a collaborative way to reduce the strain on any particular organization. An alternative approach is to highlight the organizations that are measuring their impact in the most effective way, pair them with similar (e.g. similar desired outcomes) but less-established organizations to facilitate their ability to share best practices and methods.

- Assess Existing Models and "Out of the Box" Products (samples begin at slide 22)
- Develop or define best practices and evaluation methods by segmentation (e.g. skill cluster or programmatic outcome) to be potentially shared as a field guide
- Expand measurement methods to include fidelity and comparative evaluations

Recommendation: Create a cradle-to-career program pipeline.

Improve Program Pipelines to Span Multiple Developmental Periods & Integrate Positive Youth Development Principles

- Rather than creating new programs that meet holistic K-12 needs independently, programs that share desired outcomes but work with different developmental levels can create a pipeline for "hand-off" to improve skill retention beyond program cessation and provide additional "graduation" support; research would be conducted to better understand which programs share similar metrics, outcomes, and approaches.
- o Program recommendations would follow to integrate best practices in Positive Youth Development to increase the impact by improving implementation.

Recommendation: Assess student skill-level at program entry and differentiate their training.

An opportunity exists to shape and enhance learning by collecting baseline data and scaffolding the training or adjusting pedagogy based on student needs. For example:

- o Novices entering the program will receive direct instruction and modeling
- Intermediate skill-holders will engage in role play
- Advanced students will practice in simulations
- Emerging experts in field work and apprenticeships

Similarly, the learning methodology model defined by researchers at LUMSA University in could be applied:

Expository (Beginner)	Guided (Intermediate)	Active (Advanced)		
Lecture	Discussion / Debate	Brainstorming		
Seminar	Workshop	Role Play		
Conference	Case Study	Business Game		
Demonstration	Project Work	Visits, Journeys		
	Simulation	Outdoor Training		
	Mentoring	Coaching 11		

Approaches to Evaluation

Despite similarities in outcomes and populations, each organization takes a different approach to evaluation. This refers to the tool type (surveys, observations, rating forms) in addition to frequency (once per year vs. once per quarter), data sources (e.g. participants only; parents and teachers, internship supervisors), and type of evaluation (e.g. fidelity evaluations to ensure program model is being implemented as stated).

This section highlights several different approaches that organizations are taking to evaluate and assess their programs, features several case-studies from programs that maintain rigorous third-party evaluations, and a sample of out-of-the-box solutions and instrument databases that can be applied to a variety of soft skill programs.

Youth Participatory Research

Youth participatory evaluation (YPE) is an approach that engages young people in evaluating the programs, organizations, and systems designed to serve them. Through YPE, young people conduct research on issues and experiences that affect their lives, developing knowledge about their community that can be shared and put to use. There are different models of YPE: some are completely driven by youth, while others are conducted in partnership with adults.

A wide variety of YPE projects are taking place in urban, suburban, and rural areas spanning the globe. They take place in schools, community programs, and research organizations. Youth can be involved in all aspects of evaluation and research, including:

- Developing research questions
- Identifying the sample and recruiting participants
- Creating data collection instruments (such as surveys)
- Collecting information, gathering data
- Interpreting and analyzing findings
- Presenting findings
- Making recommendations for change; advocating for use of findings

Exercises & Interviews

World Bank Case Study

- **Group Exercise:** The group discussion was centered on the design of an amusement park. Five to eight participants were tasked to redesign a failing amusement park in Jordan. Each participant was given a pre-defined role in marketing, HR, finance, customer service, and management with specific responsibilities and often conflicting goals. By creating an opportunity for job candidates to interact in a group in a structured manner, evaluators could evaluate how job candidates work in groups. Two trained evaluators evaluate each candidate on 10 soft skill categories during the group discussion, tabulated below:
 - o Listening, Responsiveness (Posing Questions), Presentation, Self-Confidence, Influence, Leadership, Supportiveness, Initiative, Organization, Teamwork
- Role-playing Exercise: a one on one exercise with the evaluator and the job candidate that is intended to test the candidate under pressure. The job candidate plays the role of a customer service associate and the evaluator plays the role of an angry customer who just bought a computer that broke down the past night. The job candidate has to calm down the customer and come up with a solution within the framework of the companies' rules. This component is assessed by one evaluator on soft skill components 1 through 5 above.
- **Skills-based Interview:** where the evaluator asks questions to elicit examples of leadership, teamwork, and overcoming obstacles. This last component was assessed by one evaluator on the soft skill components 6 through 10 in the table above. The group exercise lasted 40 minutes, and the individual exercises lasted 5 to 10 minutes each. We then average the scores in each of the 10 soft skill categories and form a principal component of the average scores in the 10 soft skill categories to create a soft skills index.

Collaborative Measurement Efforts

The Chicago Benchmarking Collaborative, launched in 2009, is an alliance of six education and human service agencies that collectively work with more than 12,000 low-income individuals throughout some of Chicago's most underserved neighborhoods. Their mission is to:

- Build a cross-agency and cross-sector infrastructure through which agencies collect carefully vetted data, share best practices, and track the efficacy of data-driven strategies for program improvement.
- Utilize this infrastructure to exponentially increase member agencies' abilities to positively impact clients.
- Assess methods and results to create a replicable model of collaboration.

The Collaborative is dedicated to increasing the quality of services offered to low-income families. To this end, the Collaborative:

- Sets standardized desired outcomes
- Employs uniform, research-based assessments
- Tracks data in a shared database
- Discusses findings together
- Implements data-based program improvements

4-H conducted a study to test the idea that when the strengths of youth are aligned with family, school, and community resources across adolescence, positive youth development will occur. These resources include those provided by community-based, out-of-school time youth development programs, including 4-H. For this research, Positive Youth Development is defined by the Five Cs of positive youth development (PYD): competence, confidence, character, connection, and caring. Further, they hypothesized that the development of these Five Cs leads to youth contributions, the "Sixth C" of PYD.

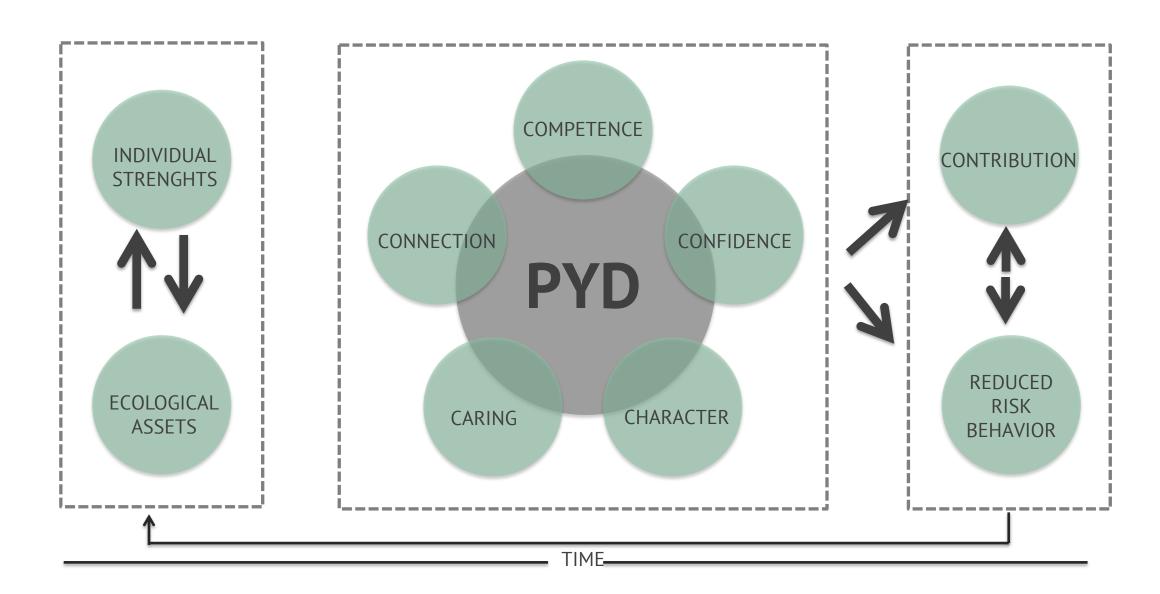
The below areas were evaluated using the following mechanisms:

- Five C's of Positive Youth Development
 - o items from the Profiles of Student Life Attitudes and Behaviors Survey, the Teen Assessment Project, the Self-Perception Profile for Children, the Self-Perception Profile for Adolescents, and the Eisenberg Sympathy Scale
 - o 6th C: Contribution: Profiles of Student Life-Attitudes and Behaviors Survey and the Teen Assessment Project Survey Question Bank
- Career Goals related to Science, Engineering, and Computer Technology (SECT)
 - o Questions developed on participation in SECT programs, performance in related classes, and future planning
- Adult Mentors
 - Search Institute's PSL-AB
- School Engagement and Academic Competence
 - Self-Perception Profile for Children in Waves 1 to 3; Self-Perception Profile for Adolescents in Waves 4 to 8; additional items were drawn from a pool of
 questions collected from the school engagement literature and other related literatures, such as school connectedness, school bonding, and organizational or
 institutional membership
- Youth Civic Identity and Civic Engagement (AEC active and engaged citizenship)
 - Social Responsibility Scale of the Teen Assessment Project (TAP) Survey Question Bank; Political Efficacy and Participatory Citizen constructs of the Student Voices measure; Search Institute's Profiles of Student Life-Attitudes and Beliefs; Political Voice and Competence for Civic Action constructs of the Student Voices measure; Search Institute's PSL-AB questionnaire

- Sexual Behavior
- Internal Self-Regulation
 - o Selection, Optimization, and Compensation (SOC) questionnaire
- Engagement in Exercise and Healthy Eating
 - o TAP Survey Question Bank
- Engagement in Risk / Problem Behaviors (e.g. smoking, drinking, bullying)
 - o Search Institute's Profiles of Student Life-Attitudes and Behaviors Scale and the Monitoring the Future questionnaire.
- Presence of Characteristics related to Depression
 - o Center for Epidemiological Studies Depression Scale
- Data was collected from:
 - Student questionnaires
 - Parent questionnaires
 - o School and government sources (e.g. U.S. Census)

THE "5 CS" OF POSITIVE YOUTH DEVELOPMENT						
"C"	DEFINITION					
COMPETENCE	Positive view of one's actions in specific areas, including social and academic skills.					
CONFIDENCE	An internal sense of overall positive self-worth and self-efficacy.					
CONNECTION	Positive bonds with people and institutions that are reflected in exchanges between the individual and his or her peers, family, school and community and in which both parties contribute to the relationship.					
CHARACTER	Respect for societal and cultural norms, possession of standards for correct behaviors, a sense of right and wrong (morality), and integrity.					
CARING	A sense of sympathy and empathy for others.					

THE "5 CS" LEAD TO A SIXTH C – CONTRIBUTION				
CONTRIBUTION	Contributions to self, family, community, and to the institutions of a civil society.			



Case Study: Botvin Life Skills Training

Botvin Life Skills is a prevention program teaches social resistance skills and general personal and social competence skills. Evaluation is ongoing and includes third-party researchers that measure long-term outcomes related substance-abuse and usage to determine effectiveness. Throughout program duration, the skill development is measured through the completion of in-class activities and post-program surveys. An example of the high school curriculum and evaluation measures follows:

The Value of Good Health

• Cooperative learning; using assessment rubrics; self-analysis

Decision-Making for Health

· Self-reflection and assessment; analysis of health risks; decision analysis

Risk-Taking and Substance Abuse

· Researching, analyzing, and applying data

The Media and the Health

• Content analysis of media techniques; comparing media messages to previous knowledge; oral presentations and projects

Managing Stress, Anger and Other Emotions

• Self-reflection and assessment of stress and anger triggers and responses; resulting risky behaviors; analysis and practice of five techniques for managing stress and anger

Family Communications

• Identifying developmental changes in oneself; interviewing family member; communication skills

Healthy Communications

• Reflecting on actions taken in personal relationships; verbal and non-verbal assertiveness; making social contacts; practicing conflict resolution

CASE STUDY: BOYS AND GIRLS CLUB OF AMERICA

HOW COMPONENTS OF THE CLUB EXPERIENCE PREDICT POSITIVE YOUTH OUTCOMES

YOUTH OUTCOMES	OPTIMAL CLUB MEMBER EXPERIENCE					ENGAGEMENT			
	Adult Support	Emotional Safety	Physical Safety	Recognition	Sense of Belonging	Fun	Staff Expectations	2+ Club visits/week	Member for 2+ years
On track to graduate high school			290		9		29	•	Ω
Mostly passing course grades		2					2	9	
Expect to attend college							2		
Days physically active	220		2	2					
Did not skip school									
Volunteered offsite*					9				
Did not physically fight*			9					9	
Did not consume alcohol*			9			2		2	
Did not use marijuana*								9	

Youth (Ages 9-12)

Younger Teens (Ages 13-15)

Older Teens
(Ages 16 and Older)

*These outcomes were only measured for teens

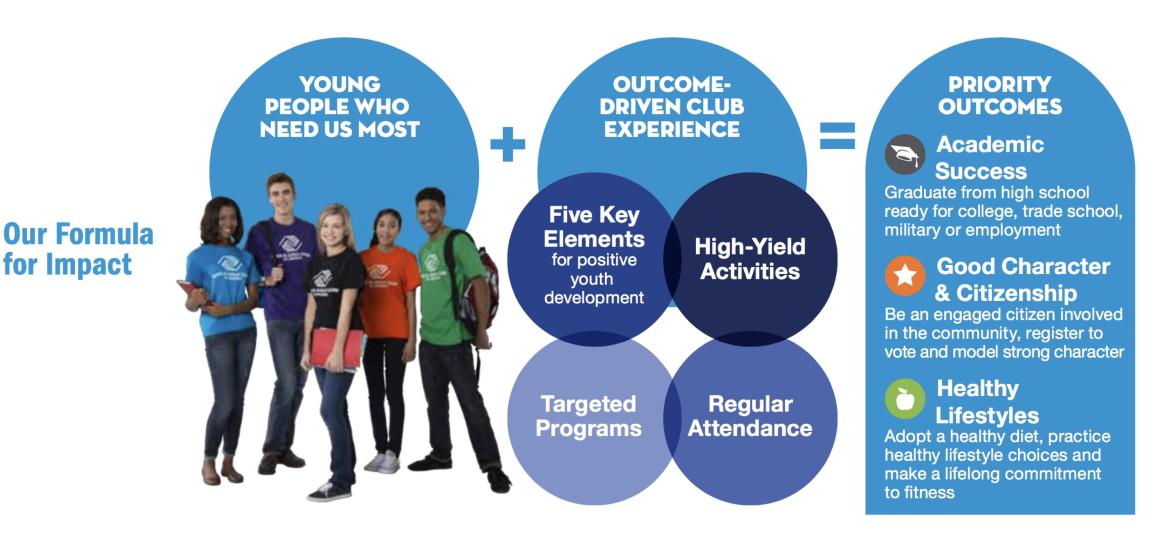
The organization largely focuses on identifying the indicators that create an optimal club experience which lead to desired outcomes, and measuring program quality on an ongoing basis. Optimal Club Member experience and program quality are measured through organization-created survey questions (e.g. I feel respected by staff at the Boys & Girls Club.) Self-reported and school data is also collected to track academic performance, in and out of school behavior and discipline, school attendance and grades. Other outcomes are tracked through participation of the activity during the program. Some survey questions mirror the Centers for Disease Control and Prevention's Youth Risk Behavior Surveillance Survey in order to compare outcomes to similar populations outside of the organization..

CASE STUDY: BOYS AND GIRLS CLUB OF AMERICA

Indicator of quality



CASE STUDY: BOYS AND GIRLS CLUB OF AMERICA



Case Study: BARR

The BARR model results in decreased failure rates, higher math and reading scores, narrowed opportunity gapes, improved student experiences, and increased teacher satisfaction. The outcomes are measured by

- NWEA MAP Reading scores
- NWEA MAP Mathematics scores
- Core credits earned
- Passing all core courses
- Student survey measures
 - Expectations and rigor
 - Engagement
 - Supportive relationships
 - Social and emotional learning
 - Sense of belonging
 - o Grit

Data is collected from the following sources:

- Administrative student demographic records
- Administrative student academic, attendance, and discipline records
- NWEA MAP reading and mathematics scores
- Survey administered to students in Grade 9
- Survey administered to core academic teachers of Grade 9 students
- Interview data from core academic teachers
- Interview data from BARR coordinators
- Observation data from site visits to each school

Case Study: City Year

HOW CITY YEAR WORKS IN SCHOOLS

City Year works closely with the school principal and teachers to deliver a suite of interconnected services that cost-effectively¹ and efficiently improve student, classroom and whole-school outcomes.



Additional capacity in the classroom, supporting classroom management and providing and enabling differentiated instruction



Use of data to monitor student progress and better meet student needs



One-on-one and small group instruction in ELA and math with embedded social-emotional supports



Extended-day activities: after-school programming, homework assistance, enrichment curricula and civic projects that build and serve community



Small group social-emotional skill building sessions



Whole school activities that improve conditions for learning, engage families and inspire civic engagement



Case Study: City Year

City Year leverages third-party researchers to answer questions such as:

- How do the whole school or grade wide outcomes across performance in English Language Arts and math of City Year schools compare to outcomes of other similar schools that do not partner with City Year?
- What is the predicted impact on academic performance by having City Year in a school?

The organization uses statewide standardized assessments and general academic performance (e.g. grades, attendance). To measure SEL, the organization uses the Devereux Student Strengths Assessment (DESSA). Skills measured include:

- Self-awareness
- Self-management
- Relationship development

Data sources include:

- Partner teachers
- City Year Americorps Members
- Student surveys
- Student school data

Out-of-the-Box Evaluation Solutions

Although there is no "one-size-fits-all" model for evaluation, there are a number of tools that can be used to begin to an assessment process or to improve an existing process. Programs should analyze the skills they intend to teach against the skills assessments provided to determine what combination of assessments is the most appropriate. This section features both holistic solutions (1 assessment that measures a number of skills) in addition to survey / instrument databases that provide individual measures by skill (e.g. resilience, self-concept).

PAIRIN

PAIRIN provides a baseline measurement of an individual's soft skills, but also provides a roadmap and targeted development tools to help on the journey to success. The attributes and mindsets PAIRIN measures include essential skills like initiative, problem solving, critical thinking, creativity, productivity, grit and interpersonal skills. The graphically friendly way the results are delivered encourages individuals to identify areas for growth and take actionable steps to move them toward their personal and professional objectives. The PAIRIN system maps each individual's goals for career or educational programs to performance "targets."

CORE SCORE

Core Score is an innovative soft skills assessment for entry- and mid-skill workers that measures core competencies and can be used to articulate the potential gaps in a worker's experiences and knowledge, assuring proper alignment to training opportunities. The Core competencies measured are: Critical Thinking, Communication, Customer Service, Adaptability, Drive For Results and Leads People.

CYFER Evaluation Instrument Database

The Common Measures Adoption Project is an effort that was spearheaded by the CYFERnet Evaluation Team at the University of Arizona and Virginia Tech in order to support CYFAR SCP grantees with their program evaluation efforts. This process included the systematic identification, review, and vetting of approximately 300 evaluation instruments in order to arrive at approved common measures for adoption by CYFAR grantees in seven short-term outcome areas: Leadership, Nutrition, Parenting, Physical Activity, Science, Technology, and Workforce Preparation.

Instruments can be browsed by construct areas such as:

- Civic Responsibility
- Civic Engagement
- Leadership Development
- Life Skills
- Nutrition
- Parenting
- Physical Activity
- Positive Youth Development
- Risk Behaviors
- Science
- School Climate
- Technology
- Workforce Preparation
- Program Quality

READY Tool

The Rochester Evaluation of Asset Development for Youth (READY) tool is an instrument designed to help youth serving programs evaluate the impact of their programs on youth development outcomes of participants. The instrument consists of 40 items which measure four core youth development outcomes along with program participation, connectedness to program, and socio-demographics. It is a self-report, pencil and paper survey designed to be completed by program participants ages 10 and older. The survey is written at a fourth grade reading level and takes, on average, about 10-15 minutes to complete. Two of the four core outcomes listed above include additional subcategories. Basic Social Skills includes measures related to communication, self control, and empathy, and Caring Adult Relationships includes staff relationships and program effect on other caring adult relationships.

Constructs include:

- Self Control
- Staff Relationships
- Communication
- Decision Making
- Empathy
- Program Effect (Caring-Adult Relationships)

National Institute on Out-of-School Time (NIOST) APAS System

The APAS System includes three flexible, research-based measurement tools that can be used individually or together:

- SAYO-Y uses three surveys completed by youth to measure their experience, future planning, and sense of competence.
- SAYO-S&T uses staff and teacher surveys to collect data about specific youth outcomes that are aligned with your program goals.
- APT measures important aspects of program quality like learning and skill building, program organization and structure, and social environment.

Assessment Tools in Informal Science (ATIS)

ATIS is a searchable website of assessment tools for informal science learning. The goal is to provide practitioners, evaluators, researchers and policy makers with the information to choose appropriate tools for assessing program quality and outcomes for children and youth. Supported by the Noyce Foundation, PEAR (Program in Education, Afterschool and Resiliency) located at Mclean Hospital and Harvard Medical School, reviewed existing tools and published the findings in a report titled Toward a Systematic Evidence-Base for Science in Out-of-School Time: The Role of Assessment. This website is based on the findings of that report and will be continuously updated in collaboration with the Youth Development Researchers at 4-H. Assessments can be sorted and filtered by age, domain, assessment types or a custom sort.

Assessment types include:

- Drawing
- Interview
- Point Scale
- Multiple Choice
- Short Response

Domain types include:

- Attitude
- Engagement
- Competence
- Career

Employment Readiness Scale

The Employment Readiness Scale™ (ERS) is an online assessment tool that helps clients identify their strengths and challenges in becoming employment ready, measures their changes over time, and provides organizations with roll-up reports across clients for use in program planning and evaluation. The ERS is designed to provide a quick, comprehensive initial employment readiness assessment in 20 minutes, with a detailed feedback report and an action planning tool. As well, individuals can retake the ERS five more times in order to measure the progress they are making (an upgrade to eleven more times is available). Roll-up reports across clients help organizations identify the programs clients need, demonstrate client improvement, and assess the effectiveness of specific interventions. This roll-up capability can provide excellent objective input for program planning and accountability reporting.

NOTE: This scale is for use in adult populations.

University of Pennsylvania: Authentic Happiness

Developed by the University's Positive Psychology Center, the Authentic Happiness repository houses dozens of questionnaires measuring the areas of:

- Emotion
 - Happiness
 - o Positive and Negative Affect
 - o Depression Symptoms
- Engagement
 - o Optimism
 - Transgression Motivations
 - o VIA Survey of Character Strengths
 - Gratitude
 - o Grit
 - o Brief Strengths
 - o Work-Life
- Flourishing
 - o Workplace PERMA Profiler
 - o PERMA Meter
- Life Satisfaction
 - o Stress and Empathy Questionnaire
 - Well-Being Survey
 - o Approaches to Happiness
 - Satisfaction with Life
- Meaning
 - o Meaning in Life
 - o Compassionate Love
 - Close Relationships

Taxonomies and Frameworks

- The value of applying a taxonomy is that the clustering allows us to identify gaps in skill areas being served.
- Additionally, in the programmatic landscape, program partners are using a variety of different terminology to refer to various soft skills; taxonomies allow us to standardize the language internally.
- Given the lack of cohesiveness in evaluation when comparing programs, there is also an opportunity to evaluate and assess programmatic outcomes and impact by defined clusters, which is more manageable and appropriate from the program perspective, and would allow them to better customize their evaluation strategy.

Taxonomy Selection Process

A literature review was conducted to determine the spread and applicability of various soft skills taxonomies; given the vast research conducted in the space, the most comprehensive taxonomies were selected for potential application. The two that emerged (in upcoming slides) were created by researchers through a combination of literature and inputs from multiple academic disciplines, and the input of various stakeholders (employers, instructors, students, career counselors, etc.) inclusive of terms and frameworks such as (but not limited to):

- Soft skills
- Non-technical skills
- Employability skills
- Competencies
- Leadership
- Emotional intelligence
- · Discipline-specific skills
- 21st century skills
- Future work skills
- Life skills
- Interpersonal skills
- Essential skills
- SFI

Beyond stakeholder input, skills were sourced from a body of knowledge as extensive as:

- · Accreditation standards within soft-skill focused disciplines
- Government reports
- Standard frameworks
- International reports and standards
- Discipline-specific literature (multi-discipline)

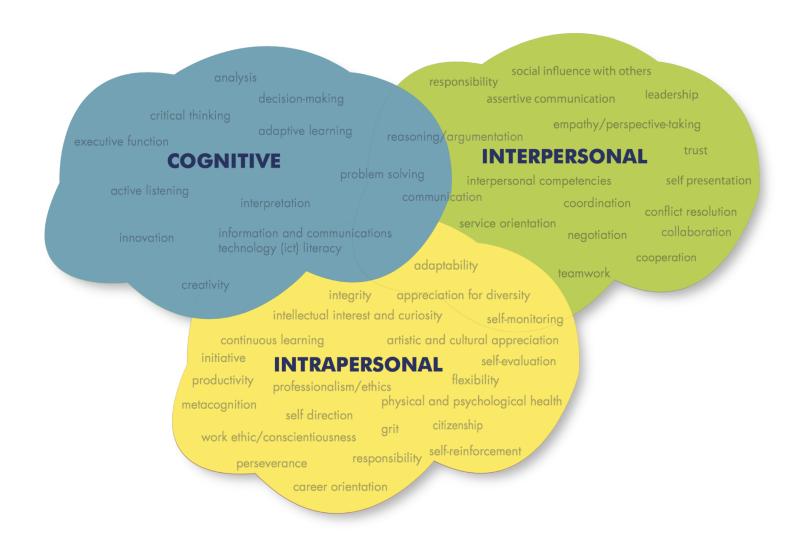
Of those frameworks, preference was given to those that:

- 1.) demonstrated the most precise overlap / applicability with programmatic skills across desired outcomes against the current program profile list
- 2.) presented a concise cluster of skills for simplicity of integration and application (e.g. some frameworks have as many as 12-20 skill clusters)
- 3.) the research suggested was broadly generalizable across disciplines and developmental levels
- 4.) was recommended by an existing program partner as widely-used and recognizable

Cognitive: Internal skills used for learning and processing

Interpersonal: Skills used to engage with others

Intrapersonal: Skills used to manage and regulate oneself



Social Skills: peopleengagement skills

teamwork, communication (online but also face-to-face "traditional" communication; all levels: speaking, listening, formal and informal writing), exibility, openness for constructive feedback and humility

Personal Skills: emotionalintelligence skills

empathy, honesty, commitment and motivation, openness for new things to learn, curiosity, patience, perseverance

Self-Skills: personal development and personal management skills

self-evaluation, self-regulation of the learning process and, as a consequence, capacity to make a conscious career choice

Learning Skills: cognitive skills

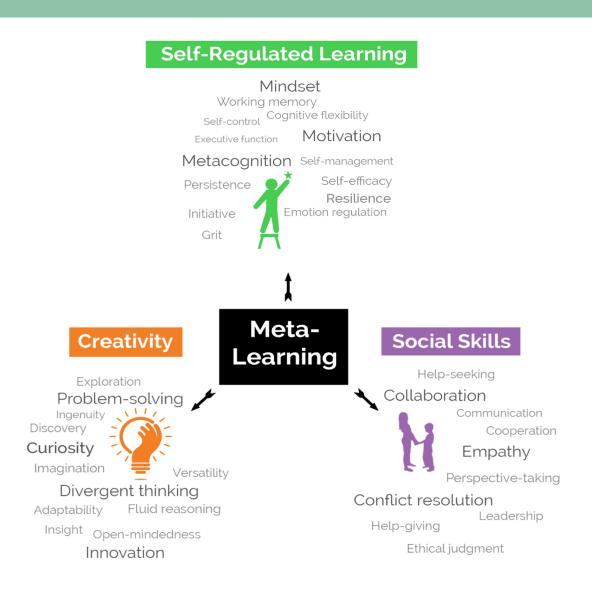
synthesis, skills of numeracy, ability to absorb in and deeply familiarize the topic

Proposed Taxonomy C – Skills

Self-Regulated Learning: Internal self-management skills that are needed to manage the process of understanding and synthesizing new and challenging material

Social Skills: Skills that are needed to effectively engage with others

Creativity: Cognitive skills that are needed to process, make connections, use logic and ideate



Proposed Taxonomy - Programmatic Outcomes

Employment

- Career Exploration
- Career Exposure
- Career Readiness
- Apprenticeships
- Job Attainment

Well-Being

- Prevention of Negative Life Outcomes (e.g. drug use, education drop-out, juvenile delinquency etc.)
- Positive Youth Development
- Mentorship

Civics

- Activism
- Community Involvement
- Volunteering

Education

- College Readiness
- Degree Completion
- College Persistence

Further Segmentation for Program Profiles

Outside of skill and outcomes, programs can be organized and analyzed in other ways:

Development / Education Level

- Early Childhood
- Elementary School
- Middle School
- High School
- Post-High School (not matriculating into higher education)
- College

Program Setting

- In-School
- After School / Summer / OST
- Community-Based
- Online Programs

Program Type

- Social Networking (Social Capital)
- Mentoring
- Work & Project Based Learning
- Curriculum / Toolkit
- Tutoring / Individualized Support
- Activity-Based Learning (e.g. sports, cooking)

Additional Taxonomies Considered

There were a number of taxonomies that were reviewed and considered for inclusion. Several were excluded because they weren't applicable outside of the "employment" domain; others were comprised of too many clusters; some didn't apply to lower developmental levels (e.g. early childhood or elementary-aged students). A sample of the taxonomies that were excluded follows.

Cluster A: Navigating the World of Work

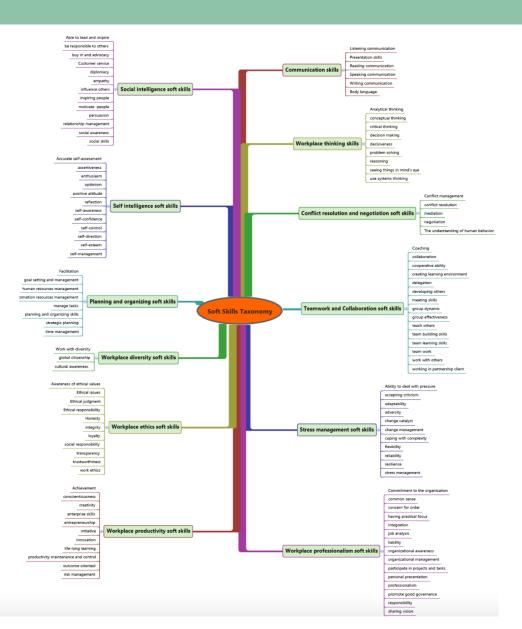
- Identifying work goals
- Learning to learn
- Adaptability and flexibility
- Motivation
- Recognizing and applying work protocols and values
- Respecting hierarchal levels and rules
- Managing responsibilities
- o Time management
- o Managing the digital process

Cluster B: Social Skills

- Communication skills
- Managing the communication circle
- Personal effectiveness skills (stress management)
- Team working
- Service skills
- o Leadership
- Conflict management
- Cultural awareness (recognizing and using diverse perspectives)

Cluster C: Achieving Results

- o Decision making
- Problem solving
- o Creativity and innovation
- Critical and structures thinking





Cognitive

Creative Thinking Analytical Thinking Foreign Language



Social

Communication and Interpersonal Skills Cross-Cultural and Diversity Competence Ability to Cope with Changes Conflict Management Stress Management



Methodological

Problem-Solving Results-Oriented Performance Self-Management



Subject / Domain-Specific

Cluster 1: Communication Skills

· Written and verbal communication

Cluster 2: Critical Thinking

· Pattern recognition

Cluster 3: Problem Solving

· Creativity and creative thinking

Cluster 4: Interpersonal and Intercultural Sensitivity

- Interpersonal skills
- · Emotional intelligence

Cluster 5: Team Work / Working Effectively with Others

- · Task collaboration
- Social intelligence
- Conflict resolution

Cluster 6: Organizational Skills

- · Goal and task management
- Time management

Cluster 7: Professional Responsibility

- Social responsibility
- Accountability

Cluster 8: Leadership

- Performance Management
- Developing Others

Cluster 9: Project Management

- Time Management
- Goals / Goal Setting

Personal Mindset

- » Needs minimal supervision to complete tasks.
- » Attempts to complete tasks independently before asking for help.
- » Follows rules/directions as required by the task/situation.
- » Maintains focus on tasks despite internal (e.g., emotional) and/or external distractions.
- » Avoids actions that have produced undesirable consequences or results in the past.
- » Strives to overcome barriers/set-backs, seeking assistance when needed.
- » Adapts approach in response to new conditions or others' actions.

Social Awareness

- » Recognizes the consequences of one's actions.
- » Balances own needs with the needs of others.
- » Takes into consideration others' situations/feelings.
- » Develops and implements strategies for navigating in different contexts (i.e., manages different patterns of behavior, rules, and norms).

* Planning for Success

- » Sets and prioritizes goals that reflect a self-awareness of one's capabilities, interests, emotions, and/or needs.
- » Breaks goals into actionable steps.
- » Accurately estimates level of effort and establishes realistic timelines.
- » Manages time to complete tasks on schedule.
- » Applies existing/newly acquired knowledge, skills, and/or strategies that one determines to be useful for achieving goals.
- » Monitors progress and own performance, adjusting approach as necessary.
- » Demonstrates a belief that one's own actions are associated with goal attainment.

Verbal Communication

- » Organizes information that serves the purpose of the message, context, and audience.
- » Uses and adjusts communication strategies as needed based on the purpose of the message, context, and audience.
- » Signals listening according to the rules/norms of the context and audience.
- » Seeks input to gauge others' understanding of the message.
- » Asks questions to deepen and/or clarify one's understanding when listening to others.

Collaboration

- » Completes tasks as they have been assigned or agreed upon by the group.
- » Helps team members complete tasks, as needed.
- » Encourages the ideas, opinions, and contributions of others leveraging individual strengths.
- » Provides feedback in a manner that is sensitive to others' situation/feelings.
- » Clarifies areas of disagreement/conflict that need to be addressed to achieve a common goal.

Problem Solving

- » Defines problems by considering all potential parts and related causes.
- » Gathers and organizes relevant information about a problem from multiple sources.
- » Generates potential solutions to a problem, seeking and leveraging diverse perspectives.
- » Identifies alternative ideas/processes that are more effective than the ones previously used/suggested.
- » Evaluates the advantages and disadvantages associated with each