Say Yes to Assess
An Exploration in El Sistema-Inspired Assessment Practice

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SISTEMA FELLOWS PROGRAM at NEW ENGLAND CONSERVATORY
Executive Summary

The El Sistema-inspired field is filled with questions. How could it not be, given its recent and rapid emergence? Our challenge, then, is to find the right questions – the provocative, testing, and ultimately, formative ones. One of the focal investigations of the Sistema Fellows this year was how to document and measure the effectiveness and impact of El Sistema-inspired programs in the U.S.; that is, carrying out evaluation and assessment. The terms “assessment” and “evaluation,” while highly related, refer to substantively different things. Assessment measures the student learning that takes place, whereas evaluation measures the quality of the learning experience (or programming). Our exploration of these topics proved much richer and more robust than we originally expected once we realized how many facets there were to these topics, from both social and musical standpoints. However, three key overarching questions emerged from our process:

For whom do we assess?
What do we assess?
How do we assess?

As a field, we often feel the need to prove our program's value to those on the outside through our evaluation and assessment results; assessment, however, can and should be just as introspective as outward looking. We advocate using assessment tools and practices for the purpose of determining effective programming and teaching, improving students’ learning and experiences, and ultimately leading to longer-term outcomes and impact. Thorough and intentional assessment has the potential to inform program growth and provide a clear direction for the field.

In deciding what to assess we must look to our core: our values, mission, and vision. These three components of a program’s foundation then determine the program’s desired outcomes, executed by programming and pedagogy. We found the guiding question of the Boston Youth Arts Evaluation Project to be helpful: What do we really value and how does this help tell our story? From here, we then propose a series of sequential steps for carrying out documentation as the first step to evaluation and assessment.

1. Identify mission
2. Define relevant and meaningful outcomes
3. Build logic model
4. Research and clearly define outcomes
5. Define indicators of desired outcomes
6. Develop tools for documenting and measuring these indicators
7. Define process (including who will collect data, when data will be collected, where data will be stored) for carrying out documentation/measurement
8. Collect data

In beginning our project, we did a survey of various mission statements of U.S. Sistema inspired programs. It was difficult to extract common themes; thus, adhering to the ideal

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that El Sistema-inspired programs seek to transform individuals and enhance communities through music, we chose the following three desired outcomes:

**Musical Literacy:** The ability to identify and create musical ingredients, contextualize them within an ensemble, and form social emotional connections.

**Sense of Community:** Has the student become more aware of his/her community? Has their sense of belonging or contribution within that community increased?

**Personal Agency:** Has the student increasingly acknowledged his/her personal sense of control in evoking change in his/her own life?

In order to address how we assess, we must identify **indicators** by which to measure and understand whether outcomes are being attained. Our indicators for our three desired outcomes are as follows:

1. **Musical Literacy**
   a. Ensemble Skills
   b. Musical and Social Awareness

2. **Sense of Community**
   a. Sense of Belonging
   b. Sense of Contribution
   c. Awareness

3. **Personal Agency**
   a. Locus of Control
   b. Self-Efficacy
   c. Power To, Power Over, Power With, Power from Within

There are typically three different kinds of documentation tools, which can be used: **quantitative, qualitative, and art-based.** While numbers and quantitative data are important, the anecdotes and artistic perspective that come with them are equally as telling and should be no less valued. In the following sections, each outcome has a part that is devoted to ways to think about and develop tools for assessment.

This document provides a starting point for núcleos to begin developing assessment tools and documenting results. We hope that it will be informative, useful, and most importantly, that it will provoke inquiry that both sustains and propels the field in exciting new directions.
You may find it helpful to peruse this document by navigating by headings. If there is no navigation pane (usually on the left-hand side) showing as you read this PDF, click “view” on the toolbar, select “show/hide,” select “navigation panes,” then click on “bookmarks” (indicated by the image of a folded ribbon). You should also be able to press “F4” to bring up the navigation pane. A navigation pane with bookmarks corresponding to the headings on this document should then show up; you can click on the headings to jump to that section within the document.

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Preface

The El Sistema-inspired field in the United States is nascent, with the oldest programs now entering only their fourth or fifth year of significant growth. It’s exciting to see programs in many regions of the country catering to a diversity of communities, but we have yet to rigorously consider what effects those programs are actually having on their students and communities. Such research is vital to the strength, future, and defining of the movement, and several programs are beginning efforts to understand their achievements through pursuing assessment and evaluation. However, we also understand the challenges of assessment and evaluation for young programs with limited and often unsustainable resources.

Taking the lens of a director of an El Sistema-inspired program in the US, our goal throughout this project was to make assessment and evaluation as accessible as possible to those program directors who may not necessarily have the relevant expertise. In addition, we were interested in the possibility of united assessment and evaluation practices across El Sistema-inspired programs in the US. We imagined that with consistent documentation and analysis, collected from the very beginning and for an extensive period of time, it would perhaps be possible in the future to note the collective impact, if any, that El Sistema-inspired programs have had on communities across the US. While understanding that every program seeks to respond to the different needs and cultures of their local communities and might be interested in examining different outcomes, we hoped to initiate a consistent effort across developing El Sistema-inspired programs to start documenting now.

Representing the 2013 Sistema Fellows cohort, four of us decided to research and compile an explorative and illustrative document to offer to the field. This document defines key terms and concepts, discusses the importance of this research, outlines a process for initiating assessment, and demonstrates the designing of methods and tools relevant and specific to El Sistema-inspired work.

We offer the following explanations and ideas with the humble acknowledgement that we ourselves are not experts in assessment and evaluation, nor do we have much experience carrying out empirical research as such. However, we hope this document helps program directors and leaders make a small and consistent step forward in initiating and pursuing assessment and evaluation. We also highly encourage programs to begin working with their local expert researchers, research institutions, and universities to develop and implement documentation and measuring practices which capture the specific circumstances and practices of their programs. This document provides an appropriate foundation of introductory material for you to pursue those conversations with professional researchers.

Our research was informed by discussions with Psyche Loui, Margaret Sheridan, Edward Clapp, Raquel Jimenez, Kathe Swaback, Julia Gittleman, and Eric Booth. Research also began with resources from Community MusicWorks, the Boston Youth Arts Evaluation Project, and Boston Children’s Chorus. Toward the final stages of this project, we also sought feedback and received input from Shirley Brice Heath and Larry Scripp.
About Assessment and Evaluation

The following sections of this introduction are structured around formative questions derived from other guides to art evaluation.²

Why do we evaluate our programs and assess our students’ learning?

The terms “assessment” and “evaluation,” while highly related, refer to substantively different things. Assessment measures the student learning that takes place, whereas evaluation measures the quality of the learning experience (or programming). Both assessment and evaluation examine all potential effects of a program, including intentional effects (deliberate outcomes causally related to programming) and residual effects (programmatically unintended outcomes).

Most importantly, assessment and evaluation allow the organization to ensure that its unique mission is being fulfilled, and how well it is being fulfilled through the programming offered. Assessment and evaluation are keys to maintaining top quality in an organization – they help to clarify which aspects of a program one should keep stable and which one should change. This is examined primarily through student assessment; without knowing how students are progressing, it is impossible to identify the challenges of an organization and make improvement. Thus, for the sake of this document we will concentrate on assessment as the first step and a window into the quality a program offers.

Assessment and evaluation also respond to the needs and interests of all the stakeholders in an organization, encouraging reflection by board members, grant officers, potential donors, and other community stakeholders (principals, school teachers, community leaders). The process of assessment and evaluation can invite these stakeholders to identify their most important goals for the program they support, and how they define its success.³

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³ In addition to and including the reasons we list, Shirley Brice Heath organizes the reasons why organizations typically carry out assessment and evaluation into the following categories. However, they are not all relevant to the utilization approach, which we seek to outline in this document. She describes the reasons as: 1) To respond to the “powers that be” (funders); 2) For program directors to understand students’ perspective on the program; 3) To monitor curriculum and further inform programming; and 4) To fix the systematic and institutional problems which might be affecting your program. (Shirley Brice Heath, discussion, Sistema Fellows Program at New England Conservatory, Boston, April 11, 2013.)
For whom do we assess?

There are three levels of constituents who benefit from assessment/evaluation:

1) For the learner to understand his/her own learning by reflection. 4
2) For those inside the room: To help those directly involved with the learner to understand his/her learning (i.e teachers, parents) by sharing.
3) For those outside the room: To help external stakeholders such as funders to understand the learning which happens in the program by exploring. 5

Many would argue that a major audience for assessment and evaluation is donors and potential funders and that test scores, grades, and attendance are essential for this constituency. Instead, we suggest using the utilization approach where evaluation occurs from beginning to end for the purpose of its utility and how it will affect its users and actual use. This puts the focus on the first level of constituents, or the learners. This is also called participatory evaluation because the voices of those at the first two levels (the learners and those directly responsible for his/her learning) are heard and the documentation itself is proctored by someone directly involved in the student's learning, even if the next step, analysis, is completed by a qualified expert. Carrying out assessment solely for the purpose of a potential donor or grant-maker is not relevant to the utilization approach. Instead, we emphasize focusing on the roots of the organization and building assessment from core values and mission, as the method by which to best get at understanding the student’s learning.

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A note on teacher evaluation

One of the primary reasons for student assessment is to help determine the effectiveness of teaching. Although it is not one of the major points we pursue in this paper, it should also be noted that teachers and teaching practices are significant factors in the results and analysis of program documentation. Thus, teacher evaluation will inevitably be a major part of evaluating program effectiveness, and can be pursued through responses from students, parents, and colleagues. We recommend each núcleo identify what constitutes quality or successful teaching to them. Teacher evaluation should work in tandem with and affect future professional development.

Evaluating teachers is always done in alignment with the program’s mission and core values, just as other forms of assessment are carried out. Given the often two- (or more) fold objectives of most El Sistema-inspired initiatives (focusing on both musical and social goals), quality teacher evaluation is complex. For example, can a teacher effectively impart all the appropriate musical knowledge to a student, yet be unsuccessful in creating an environment that encourages a sense of personal agency or sense of community? Similarly, can they instill one or both of the latter two outcomes in their classes and yet end the year with students who do not reach their musical goals? The following questions represent some important considerations:

- What are the goals that are trying to be achieved?
- What steps are being taken and what practices are being used to achieve these goals?
- How is the curriculum connected and relevant to these goals (social or musical)?

We encourage programs to perform teacher evaluations from these angles and to acknowledge the complexities of teaching in both a social and musically oriented program.
Assessment consists of two major components: documentation and analysis. We focus on how to instigate the documentation process and how to foster a habit of documentation within an El Sistema-inspired program. Any núcleo director can begin with the most basic documentation through regularly and consistently collecting questionnaires, surveys, anecdotes, which is what we aim to simplify in this document. The following are the typical sequential steps in beginning documentation, which we pursued and model in this project. We define each step and demonstrate throughout this document an example of how we followed them for a hypothetical El Sistema-inspired program we defined out of our own interests and understanding of El Sistema.

1) **Identify core values and mission.**
2) **Define relevant and meaningful outcomes.**
3) **Build logic model.**
4) **Research and clearly define outcomes.**
5) **Define indicators of desired outcomes.**
6) **Develop tools for documenting and measuring these indicators.**
7) **Define process (including who will collect data, when data will be collected, where data will be stored) for carrying out documentation/measurement.**
8) **Collect data.**

Following documentation, the collected data must be analyzed to enabling the drawing of conclusions from the assessment. Following complete documentation practices, research can then move into the design of experimental research and clinical research in the direction of seeking to name objective truths out of conclusions made.

Carrying out fully designed experimental research necessitates resources such as control groups and large sample sizes, neither of which most El Sistema-inspired programs have. Instead, we chose to focus on exploratory research through first making efforts at documentation, which will provide a base of data which can later be analyzed. Larry Scripp has suggested the following progression of research processes. Documenting consists of the bottom few tiers.
Identifying mission – what do we assess and evaluate?

Defining what to evaluate is helpfully served by responding to the question: “What do we really value and how does this help us tell our story?” In an age where test scores and grades are often seen as definitive of a program’s success, particularly by funding parties, it is hard to move past these to other benchmarks. But if you can articulate the core values of your organization and focus on measuring those, others will in turn value and fund them. Core values are the things for which an organization is willing to lose everything to maintain and the lens through which every decision should be made. An organization’s core values should inform and be at the base of all decision-making related to an organization, including assessment and evaluation. Core values should be the first step in defining the desired outcomes being pursued. Edward Clapp has helpfully described the process by which desired outcomes are informed by core values: core values define the mission statement and vision, which then inform the programming. Programming then informs pedagogy, which finally informs the defining of desired outcomes.

Keen to follow this sequence of considerations, the four of us established a mission statement that we felt was representative of El Sistema-inspired work in the United States. We then chose three desired outcomes which we found interesting, which we believed El Sistema-inspired programs to significantly influence, and which emphasized the ensemble focus that often sets El Sistema-inspired programs apart from other music education programs. We found these outcomes to be meaningful and use them in this document as representative of outcomes which El Sistema-inspired programs might be interested in documenting. This is the mission we developed, which explicitly encompasses our desired and measurable outcomes. Mission: To enable youth to develop a strong sense of personal agency and community through ensemble-based musical literacy.

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2) Defining relevant and meaningful outcomes

Once you have identified your core values and mission, you can then derive these into the outcomes you seek to document and measure. **Outcomes** are the desired transformations or growth of individuals caused directly or indirectly by the program. These often reference increases or percentages and include short, medium and long-term durations of time. When choosing desired outcomes, it is important to note the difference between **intrinsic** and **instrumental** outcomes.

**Intrinsic outcomes** are those specific to the discipline and tend to be causative in nature – the programming and curriculum is designed directly to cause these outcomes. In the case of El Sistema-inspired programs, these would most likely include any outcomes that are benefiting the individual from a musical perspective. **Instrumental outcomes** are those external to the discipline. Because they are more general, they are tougher to measure and can only said to come about through correlative relationships. An example of an instrumental benefit in El Sistema-inspired programs is youth development (unless something in the curriculum or programming is curated specifically toward youth development).

One should select desired outcomes that demonstrate the goals of the program or organization. Adhering to the ideal that El Sistema-inspired programs seek to transform individuals and enhance communities, we chose the following three desired outcomes (each of these will be described in much further depth in the following sections):

1) **Musical Literacy (intrinsic):** The ability to identify and create musical ingredients, contextualize them within an ensemble, and form social emotional connections.

2) **Sense of Community (instrumental):** Has the student become more aware of his/her community? Has their sense of belonging or contribution within that community increased?

3) **Sense of Personal Agency (instrumental):** Has the student increasingly acknowledged his/her personal sense of control in evoking change in his/her own life?

The terms outputs, outcomes, and impact are often confused. **Outputs** are enumerable products that occur as a direct result of inputs. These would include, for example, the number of concerts performed or the number of students that now know how to play a musical instrument and/or sing.

**Impact** is the long-term change that affects the entire community; this is where you might label how you seek to influence the world to be a better place. El Sistema-inspired programs tend to refer to this as social change or social transformation. However, it is essential to define and clarify what social change means to you or your program. This definition and clarification is determined by establishing outcomes. For example, one of our desired outcomes is that students increase their sense of personal agency. The impact of deepening personal agency would be increased entrepreneurship and poverty-reduction (which our research in the following sections links and explains more thoroughly).
## 3) Building a logic model

### Description and how to build

A helpful way to animate the link between indicators, outcomes, and impacts, and to develop assessment and evaluation methods based upon mission and your unique theory of change is to devise a **logic model**. A logic model also helps to illustrate the correlation between your desired outcomes and the actual practices and inputs of your program. Establishing a logic model serves as a very useful first step in pursuing assessment and evaluation.

### Example blank logic model

**Mission Statement:** _________________________________.

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Theory of Change</th>
<th>Inputs*</th>
<th>Activities</th>
<th>Outputs*</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the current existing conditions in which your program is running? What needs or challenges face the community you are in or the constituents you aim to serve?</td>
<td>“If we do this… then we are looking for this change to happen…”</td>
<td>What you invest in: opportunities, climate, connections, resources, processes</td>
<td>Your programming and services</td>
<td>Enumerable products: # students served, # hours, # sessions, # performances</td>
<td>*All Inputs and Outputs must directly correlate by line item.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Short-term (what we see during programming)</th>
<th>Medium-term (our indicators/what we want to see)</th>
<th>Long-term (impact/what we want to eventually see in society)</th>
</tr>
</thead>
</table>

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Example logic model for our 3 outcomes

The **mission** of [our hypothetical] El Sistema-inspired program is to enable youth to develop a strong sense of personal agency and community through ensemble-based musical literacy.

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Theory of Change</th>
<th>Inputs*</th>
<th>Activities</th>
<th>Outputs*</th>
<th>Outcomes</th>
</tr>
</thead>
</table>
| Most young people in this community:  
  • don’t receive any music education.  
  • don’t have opportunities for arts or extracurricular activities.  
  • don’t receive education which emphasizes collective or citizenship skills.  
  This community experiences:  
  • poverty  
  • social fragmentation  
  • lack of opportunities to participate in musical performance. | If young people participate regularly and extensively in high-quality, ensemble-based music education, they will develop a strong sense of personal agency and sense of community through developing musical literacy. | Some examples of inputs would include: teachers and staff, musical instruments and equipment, safe environment, funding, network, professional development, parents and community support, snacks, etc. | High quality, ensemble-based music education that:  
  • Is free  
  • Has no barriers to entry  
  • Is frequent and intensive  
  • Performs frequently  
  • Emphasizes peer mentoring | Some examples of outputs would include the number of students served, the number of hours, number of sessions, number of performances, etc. | Short-term (what we see during programming)  
  • Students develop collective music-making skills.  
  • Students understand music. | Medium-term (our indicators/what we want to see)  
  Musical Literacy  
  Thriving performance-based and collective musical culture  
  → strong cultural heritage/preservation  
  → active participation in music-making. | Long-term (impact/what we want to eventually see in society)  
  Sense of Community  
  Stronger communities  
  → safety  
  → fewer gangs  
  → community pride | Sense of Personal Agency  
  Individual and collective empowerment  
  → increased entrepreneurship  
  → poverty reduction |

*All Inputs and Outputs must directly correlate by line item. i.e.

<table>
<thead>
<tr>
<th>Recruitment process</th>
<th>Admission process</th>
<th>Number of students</th>
</tr>
</thead>
</table>

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Our example work for steps 4-7 will be organized by individual outcome. This is because things such as indicators, tools, process, and analysis are specific for each individual outcome. However the following sections will continue to define the process of each of the following steps.

4) Research and clearly define outcomes

You will see in the following examples of how we went about researching and defining the outcomes we decided to use. El Sistema-inspiried work is especially conducive to being informed by work in other disciplines; for example, our work in personal agency drew extensively from developmental economics. It is also helpful to express clearly how the outcomes you chose relate directly to music education practices and/or El Sistema-inspired work. Finally, clearly defining the way in which that outcome is meaningful to you will help to then develop indicators and instruments which best get at the issues you are interested in.

5) Defining indicators of desired outcomes

The following chart helps to explain the differences between outputs, outcomes, and impact, and specifically, how indicators can be derived to express desired outcomes. (Figure9)

<table>
<thead>
<tr>
<th>Point of Measurement</th>
<th>What is Measured</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outputs</td>
<td>Effort</td>
<td>Implementation of Activities</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Effectiveness</td>
<td>Use of Outputs and Sustained Production of Benefits</td>
</tr>
<tr>
<td>Impact</td>
<td>Change</td>
<td>Difference from the Difference from Original Problem/Situation</td>
</tr>
</tbody>
</table>

Our indicators for our three desired outcomes are as follows (the research we undertook to establish these is explained in the following sections):

1) Musical Literacy  
   a. Ensemble Skills  
   b. Musical and Social Awareness
2) Sense of Personal Agency  
   a. Locus of Control  
   b. Self-Efficacy  
   c. Power To, Power Over, Power With, Power from Within
3) Sense of Community  
   a. Sense of Belonging  
   b. Sense of Contribution  
   c. Awareness

6) Developing tools for documentation

There are typically three different kinds of documentation tools which can be used: quantitative, qualitative, and art-based. While numbers and quantitative data are important, anecdotes or artistic responses can also significantly and meaningfully capture responses and should be no less valued. As Kathe Swaback says, “Children don’t live in test tubes [thus] numbers don’t tell all.”\(^\text{10}\) As much as our society appreciates quantifiable data, we can’t encapsulate a student’s learning or growth merely in graphs or statistics. We can understand a student more holistically by combining quantitative documentation with qualitative and art-based measurements.

When choosing or designing tools, it is important to consider their bias, reliability, and validity. One significant bias of most assessment tools is that of the learner him or herself. The fact that a student or family has self-selected into an El Sistema-inspired program, for example, means that there are certain aspects which are already unique to that student’s learning background. In addition, learners may deliver skewed responses: under what is called the Hawthorne Effect,\(^\text{11}\) people tend to behave differently when they know they are being studied. Bias also arises from the background and lens of the proctor and the relationship between the proctor and the student – these affect both how the assessor might interpret a student’s response as well as the quality of a student’s response based on their trust or pre-existing relationship with the proctor.

Finally, the instruments themselves might be biased. The way they are set up in language or scale used may cater to students’ strengths or weaknesses and/or influence students to choose the extremes. Bias arises from the way in which a student interprets a question or the responses, which might be triggered by the specific phrasing of a question. This is why it is important to have someone specifically proctor the survey and explain what each question means.\(^\text{12}\) If surveys are one of your tools, interviews can provide clarity as well in follow-up.\(^\text{13}\) Especially when working with young children, it is a challenge to design tools using appropriate language and vocabulary and while keeping their cognitive development in mind.

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\(^\text{12}\) Larry Scripp, discussion, Sistema Fellows Program at New England Conservatory, Boston, May 2, 2013.

\(^\text{13}\) Ibid.
Validity regards the appropriate use of a specific instrument. John Papay uses the metaphor of a thermometer to illustrate this idea.\(^{14}\) A thermometer is valid in measuring the temperature. However, while a thermometer always provides an accurate and unprejudiced reading of the temperature, it serves only that one purpose and can’t tell you about the weather overall. A thermometer can tell you what kind of clothing you should wear outside, but it is not helpful when you are trying to decide whether you should bring an umbrella because it doesn’t measure precipitation.\(^{15}\) Similarly, one single tool can’t assess all aspects of a student’s learning, and the design of these instruments is very challenging. To collect the most valid data, one should use a variety of instruments that gauge different aspects of learning from different perspectives, or what is called triangulation of data. Triangulated data consists of three different data sources, incidentally, the same constituencies for whom we assess and evaluate.

- Learners
- Internal stakeholders (teachers, staff)
- External stakeholders (parents, donors, board members, other community stakeholders)

Regardless of the tool bring used, the context and prior experience or character of each student is essential. The easiest way to obtain this is a pre-test from the inception of the program.\(^{16}\) For example, if analysis of collected data demonstrates that students show positive thoughts toward the program, but there is no initial measurement of how students felt initially towards music or the idea of such a program, it is difficult to know how the student felt prior to the program and could not necessarily be significant.


\(^{15}\) Edward Clapp, discussion, Sistema Fellows Program at New England Conservatory, Boston, November 16, 2012.

\(^{16}\) Shirley Brice Heath, discussion, Sistema Fellows Program at New England Conservatory, Boston, April 11, 2013.
7) Defining documentation process

Finally, it is important to define the process by which you will carry out documentation in your program. What are you hoping to find out and what is your specific purpose for assessment? When will you begin initial pre-test assessments? Who in the organization will collect the data or proctor the tools? How often will it be done? Will you simultaneously be documenting a control group? Who will analyze it and after how much time of documentation?

In addition, because assessment and evaluation should be a way to constantly adapt and improve the organization, we encourage developmental evaluation, where planning of the evaluation process, enacting the process, and evaluating occur simultaneously, as opposed to more traditional evaluation where these steps occur consecutively.

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17 control group: a group of students who are independent of the program, but undergo the same assessments. Data can then be compared between the focus group and the control group.

Our Three Illustrative Desired Outcomes

We chose desired outcomes which we felt made El Sistema stand apart from the explicit goals of other music education programs. At the same time, we still strongly suggest carrying out more typical assessments of music learning and desired residual effects, such as musical proficiency, attendance, and academic standing. We were also originally interested in the effect El Sistema might have on executive function skills. However, because it tends to be very costly to measure executive function and other cognitive developments in students, we chose to hone in on the social outcomes that might be more successfully documented without extensive external professional support.

In the following three sections, we present and explain the three outcomes which we chose to meaningfully define achievement in El Sistema-inspired work. These are 1) Musical literacy, 2) Sense of community, and 3) Sense of personal agency. In each section, we introduce the definitions of the outcome (and the relevant fields of inquiry which we sought out to inform those definitions), how that outcome relates to music education or El Sistema-inspired work, useful indicators, example tools for measuring those indicators, challenges, and further questions. The proposed tools are generally not yet ready for effective use – if you are interested in pursuing them in assessment of your program, we recommend that you consult with experts in the appropriate field to develop good tools. However, we hope that what we present in the following serves as a step toward measuring with regards to these outcomes, or that the work we did might serve as a model for the steps in research that are needed in pursuing whichever outcome is of interest to your program.
Musical Literacy

Definitions

Musical literacy became one of the three desired outcomes for our hypothetical El Sistema-inspired núcleo. Loosely defined, musical literacy is the ability to identify musical ingredients, follow their progress, and make sense of them within the context of a composition. Major components of musical literacy may include but are not limited to:

- Reading and writing music notation (or symbolic representations)
- Understanding of pitch and rhythm
- Improvisation skills
- Ensemble skills – “ensembleship”
- Problem-solving skills (within a musical context)
- Analysis of music
- Critique of music
- Articulation
- Phrasing
- Aural skills (musical ear)
- Singing skills
- Contextualizing music

Some questions that guided our inquiry

- Can students recognize notated music? To what degree?
- Can students demonstrate understanding of the relationship between note and rest values as they relate to time?
- Can students read and/or recognize melodic patterns?
- Can students read and/or recognize rhythmic patterns?
- Can students echo rhythmic figures? (Clapping, playing)
- Can students sight-read music appropriate to their level?
- Can students solve problems within a musical context?
- Are students able to write music?
- What relationships can students gather from the music?

Music is a rich experience, it has its own "grammar" and a logic dictated by the harmonic patterns of various frequencies sounded simultaneously and in series. In music, a large number of things take place simultaneously: can students hear them, follow them, remember them, reinterpret them, create relationships between them, and place them in context?

Of course, musical literacy is only one goal within the context of El Sistema-inspired programming. What values and skills are associated with participation in music programming? Answering this multi-dimensional question is crucial in order to understand the full effect that an El Sistema-inspired program can have on any given individual or community. This question is inevitably woven into every major section of this document. We were determined to examine the most appropriate indicators of Musical Literacy, with the constant reminder that our approach should encompass not only a group’s or
individual’s musical development but also consider the role students may carry out within the ensemble.

**Indicators:**

- Ensemble Skills
- Musical and Social Awareness

**Ensemble Skills**

The goal of **ensemble skills** is for each student to become aware that their instruments or voice can be engaged to achieve a cooperative musical result for which each member of the group is vitally responsible. The main reason we chose this outcome is because the learning in El Sistema is almost entirely through participation in ensembles, with emphasis on regular performances.

- Active/critical listening
- Ensemble balance
- Collaboration
- Error acknowledgement & correction
- Collective rhythmic precision
- Cooperation between players
- Following directions
- Intonation
- Ensemble tone quality
- Balance
- Phrasing
- Interpretation

*Note: More features can be specified to fit a particular musical context*

Some of these concepts may sound simple; they will read as common sense to any seasoned musician or music educator. However, they can often be overlooked or given insufficient importance.

**Musical and Social Awareness:**

Students take math classes; students may take science classes; but students become members of an ensemble. There is no doubt that a musical ensemble is a social unit; students soon realize that becoming a member of an orchestra, choir or band requires a sizeable time commitment. Participation – sooner or later – becomes a component of a student’s self-identity. Clear social structures soon develop among members and these tend to extend outside of rehearsal and performance. Note: *There is a through-line between student’s musical & social awareness and the indicators used to demonstrate student’s level of community engagement; this relationship will become apparent later in this document.*
Playing music in an ensemble can help children to take an interest, become involved, express their ideas or feelings, persist with difficulty, and take responsibility. It can create conditions that are socially supportive and aesthetically stimulating; an environment where students guide one another, have choice of movement, use of time and appropriate materials. In short, children can gain a greater awareness of the role they play within the ensemble and their musical community. This is precisely what El Sistema-inspired initiatives claim to achieve, but how do we begin to see it within the context of our programs?

Major components of Musical and Social Awareness may include but are not limited to:

- Student awareness/understanding of their role within the ensemble
- Degree of personal ownership of the ensemble
- Personal identity as member
- Student’s personal responsibility
- Student retrospective thinking
- Group identity
- Musical camaraderie
- Level of engagement

Creating a culture of self-reflection is crucial; here are some questions that guided our inquiry:

1. Where do I fit in the ensemble and do I belong there?
2. How do I feel when I play with my section? With the entire orchestra? By myself?
3. Why is listening to my instrument important?
4. Why is listening to other instruments important?
5. What are my responsibilities within the ensemble?
6. What have I learned from playing X piece of music?
7. How is rehearsal different/similar than English or Math class?
8. Did I give up/persist through a difficult passage?
9. Have I set goals for today? For next month/year?
10. How much am I focused on my part vs. other parts and/or the conductor?
11. How does my instrument contribute to the ensemble?

POTENTIAL INSTRUMENTS:

This Ensemble Rehearsal Critique chart is taken from ARTS PROPEL Handbook for Music; it is an incredibly useful and adaptable resource. This form can be administered once a month. It can be used to assess students in a variety of situations; i.e. immediately after rehearsal or performance; immediately after listening/viewing a recorded performance. “Location” refers to a specific place or section in the music.

19 Nyland, Acker pg. 334
ENSEMBLE REHEARSAL CRITIQUE

Write down your critique of the ensemble performance specifying LOCATION (where you performed particularly well or need to improve) and MUSICAL DIMENSIONS (such as rhythm, intonation, tone, balance, articulation, phrasing, interpretation, etc. or any dimension specified by the teacher). Using words such as "terrific" be sure to mention any links between your own or your section's performance and the ensemble as a whole. Also include remarks concerning REVISIONS OR PRACTICE STRATEGIES for yourself or the ensemble. Be sure to include the main problem in terms of its dimension and location in the piece you or the ensemble should practice on before or during the next rehearsal.

<table>
<thead>
<tr>
<th>Location</th>
<th>Dimension</th>
<th>My (Section's) Performance</th>
<th>For Myself (My Section)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location</th>
<th>Dimension</th>
<th>Ensemble's Performance</th>
<th>For the Whole Ensemble</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2.4 Ensemble Rehearsal Critique Form

ARTS PROPEL assessment form
Specific □ Suggested Revisions □ Critical Perspective □
USE OTHER SIDE OF PAGE FOR ADDITIONAL COMMENTS

DOMAIN PROJECT: ENSEMBLE REHEARSAL CRITIQUE

ENSEMBLE OR CLASS ____________________________
TEACHER
GRADE LEVEL(S) ____________________________
STUDENT (SCORE HIGHEST INSTANCES)

TEACHER SCORING KEY

IDENTIFICATION OF MUSICAL ELEMENTS IN CRITICAL JUDGEMENTS ABOUT PERFORMANCES

No response or not enough statements given
1. Does not refer to musical elements in performance (e.g., "bad", "great", "much better", "keep together")
2. Refers to isolated musical elements and/or makes overly broad, sometimes inappropriate or irrelevant references to the performance (e.g., "out of tune", "slappy rhythm", "trumpets too soft")
3. Refers to musical elements with increased specificity, coherence, and relevance to musical dimensions (e.g., the flutes played the eighth notes like quarter notes [rhythm]; the accents in the trombones need more punch [dynamics])
4. Makes many specific and appropriate references to musical elements in the performance (e.g., "the trumpets came in late and too loudly on measure 16 and never caught up until the end; I forgot to give the half notes two beats on measure 3 but I held the quarter notes longer to make up for it")

Sistema Fellows 2013
Strategies that personalize the music learning process, including self and group assessments can enable the students’ self-reflective capacity, nurturing their musical self-image.20 Following are some enlightening sample responses that are not only informative, but also delightful to read.

It is important to understand that rich documentation provides the framework of successful musical assessment strategies. This assessment form is effective because it operates across various musical dimensions and across various perspectives; it exposes student’s reflective understanding of the content within a musical context and the role they play within it.
Sense of Community

Background

One of the unique aspects of El Sistema philosophy and practice is collective learning and action. In the ensemble, members overcome challenges, share, strive, and advance as a group. Such cohesiveness is not without reason. Dr. Abreu is often quoted that the orchestra is the only group “that comes together with the fundamental purpose of agreeing with itself”. With the ultimate goal of high level of collaboration and cooperation, we look to the ensemble to be “a metaphor for society” (Abreu). If developing a community is indeed a pillar for certain El Sistema-inspired programs – and perhaps the movement as a whole – then it must be reflected in program assessment.

Our research began in looking for other like-minded arts organizations interested in strengthening and assessing the idea of community within their organization. After reviewing the helpful and informative resources from establishments such as Community MusicWorks and Boston Children’s Chorus, we began to explore other fields, including sociology and international development. Throughout our research we came across two terms that address the concept one’s relationship to and place within their community: Community Engagement and Sense of Community.

Definition: Why Sense of Community?

Community Engagement addresses the more active role of a participant in their community and uses “formal networks” to measure connections. Examples would include the frequency that they attend events or volunteer in their community. Although related, Sense of Community refers to more of the “informal networks” of individuals, often established through emotionally based connections and affect. When referring to Sense of Community, we look at not only current but also potential relationships among members.

What importance do Community Engagement and Sense of Community have in the greater social scheme of the students’ lives – beyond the walls of their núcleo? There is a strong relationship between one’s engagement and level of connection with their community and their improvement of quality of life. If El Sistema-inspired programs are not only musical but, at their core, social in their nature and mission, considering such ideas could make a significant impact on their ultimate success.

In order to determine these two terms’ relevance to El Sistema-inspired programs in the U.S., we considered various factors including age of participants, programming, neighborhoods, and families. While both are instrumental, we recognized the limitations of programs in significantly changing in the formal, more structured aspects of the daily lives of communities and the roles families and students play in them. Rather, it is more feasible for programs to make a lasting impact on how students emotionally and affectively define and relate to their community, which then has the potential to inspire systematic

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22 Ibid.
transformation. **Sense of Community** was then established as an outcome that most accurately speaks to the missions of many El Sistema-inspired programs.

### Indicators

How does one measure Sense of Community? The social science-based resource *The Sense of Community Index from Community Science*\(^{23}\) proved to be a valuable resource. Survey prompts that gauge an individual’s feelings toward their community are presented in clear and concise ways. For example,

- I get important needs of mine met because I am part of this community.
- I put a lot of time and effort into being a part of this community.
- It is very important to me to be a part of this community.
- Members of this community care about each other.

It is important to note that **community can and should be defined differently, depending on the students and program**. For a younger student, community may signify their family and friends, for others, their peers and teachers in school or in the núcleo, while for others it may extend much further than the walls of the site. Additionally, it may be necessary to substitute other words – for example, more place based words such as “neighborhood” – for extremely young students.

What, then, are the components of Sense of Community? How do we measure the various factors that contribute to a student’s relationship with those around her? Based on the patterns we saw, we formed three examples of **indicators**. These will inevitably differ from community to community.

**Feelings of belonging**

**Feelings of contribution**

**Awareness**

**Belonging** includes the strength of relationships between individual students and they closeness they feel to each other, as well as how much they feel they have in common with others. Group affiliation and membership are also a part of belonging. These can be measured by documenting responses and reactions of students to such topics as:

- Symbols of group identity

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Shared important events

Shared values

How being a part of the community makes one feel

Sense of one’s future in the community (e.g. how long they want/plan to be part of it)

Fitting in

**Contribution**

**Contribution** refers to whether and how much a participant feels that they have influence over their community and those around them. It can also include their desire to reach out to new people and form new relationships. Questions may address:

- Amount of time and effort one invests in their community
- One’s sense of the ability influence others
- Whether they feel their community can influence other communities
- Making new friends/trying to make new friends

**Awareness**

**Awareness** directly speaks to how one defines their community and who is a part of it. Besides asking this outright (especially to older students), other ways of approaching it could be:

- Recognition of other members
- Other members’ recognition of students
- Symbols of group identity

**Potential Instruments**

Below are more specific questions from the SCI. Note that they are taken from a sociological resource and are not yet tailored to a musical community and/or program. Thus, they should not be emulated exactly, but rather seen as a starting point. For example: "This community has good leaders" could be changed to, "This musical group has good leaders."
How well do each of the following statements represent how you *feel* about this community?

<table>
<thead>
<tr>
<th></th>
<th>Not at All</th>
<th>Somewhat</th>
<th>Mostly</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I get important needs of mine met because I am part of this community.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>2. Community members and I value the same things.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>3. This community has been successful in getting the needs of its members met.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>4. Being a member of this community makes me feel good.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>5. When I have a problem, I can talk about it with members of this community.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>6. People in this community have similar needs, priorities, and goals.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>7. I can trust people in this community.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>8. I can recognize most of the members of this community.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>9. Most community members know me.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>10. This community has symbols and expressions of membership such as clothes, signs, art, architecture, logos, landmarks, and flags that people can recognize.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>11. I put a lot of time and effort into being part of this community.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>12. Being a member of this community is a part of my identity.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>13. Fitting into this community is important to me.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>14. This community can influence other communities.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>15. I care about what other community members think of me.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>16. I have influence over what this community is like.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
There is a myriad of possibilities with which to measure Sense of Community and its various indicators. The default – and most common – would be a survey adapted to fit the language and capabilities of the appropriate age of the students (for example, graphics of different expressions that students can circle in place of a Leichert scale or "strongly agree – strongly disagree" statements). To develop these, it would be necessary to consult with a developmental psychologist in addition to the social science field. For more qualitative data, questions could be presented as open-ended or even as a type of journal exercise.

We also explored the possibility of art-based documentation and assessment, in both visual and performing mediums. For example, an exercise such as “draw a picture of your community or of those you feel close to” could be presented to kids. Drawing could also be extended to photography. Students could capture what or who they feel is important to them, or symbols of common identity on camera, documenting how their sense of community changes over time.

On the performing side, a theatrical skit or movement-based activity may encompass these notions, expressing what members believe about themselves and the values they share at various stages of their development. An obvious tool might be music, but we had varying opinions as to whether this could be effective, given that programs are music based and there may be technical barriers or other biases of both students and teachers that influence assessment. Through our exploration of art-based assessment and various discussions surrounding it, we saw many challenges in being able to analyze such form of documentation. They are likely more subjective than intended. One suggestion was that these kinds of documentation be used more as benchmarks: to track how the complexity of students’ work changes over months or years, reflecting their social and

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emotional depth. The focus would then shift slightly more to the individual than the community.

### Challenges

Biases: All forms of assessment come with their biases, and it is crucial to evaluate the potential biases of each study. There are numerous factors that would influence the responses of students, such as their own families, worldviews, and individual growth and maturation. The circumstances of each community and family and their consequent effect on students must also be taken into account.

### Conclusion

There are numerous approaches to discussing and assessing sense of community, or, for that matter, any issue regarding community. While we feel that Sense of Community is an integral part of El Sistema philosophy, it may not be relevant to every program’s mission statement. Similarly, the indicators that we focused on will most likely not be the best for every program and their particular interpretation of the word “community”. We believe it is important to go through this process of determining desired outcomes and their indicators, and, based on these decisions, consulting the appropriate people and doing thorough research to determine how these can be measured. Although a long and potentially challenging process, such questions and processes are invaluable to the learning of students and the growth and effectiveness of El Sistema-inspired programs.

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Sense of Personal Agency

Background

Why Personal Agency?

What are the individual-level transformations we hope to see students undergo through their participation in El Sistema-inspired programs? The emphasis in El Sistema tends to be about the collective transformation of a community, but ultimately, the site for much of this change is with the individual. We thus decided to concentrate on personal agency as a desired individual-level outcome of El Sistema-inspired work. The Latin etymological origins of the word “agency” brought us to the definition of agere as “to drive, lead, manage, perform, do.” “Agency” represents both a student’s sense of their own capacity as well as their taking action or actively pursuing endeavors they find to be meaningful.

Locating Agency in El Sistema

El Sistema-inspired work is perhaps especially conducive to the promotion of personal agency because of the intensity and ensemble model fundamental to its philosophy. Such rigorous and extensive pursuit of a consistently clear musical goal implies that students repeatedly experience attainment of goals through their own efforts. The adage “practice makes perfect” which is so inseparable from any music learning demonstrates that through continued efforts, one can attain preset objectives, and furthermore, that these objectives can continue to expand with time and one’s own growth. The range of possibility and the sense of control one has over their own potential for achievement get wider. Furthermore, while original musical goals may be determined by the teacher or external stimulus, as the student progresses and becomes more engaged with their craft, they will tend to start developing their own goals. In short, as the horizon of potential attainment gets wider, in a fashion typical to music learning, the student might also widen their own sense of control and capability.

The ensemble-based emphasis of El Sistema has been highlighted as significant for the citizenship skills it teaches – for someone to be a member of an ensemble community, they must understand their role in a larger whole. At the same time, this implies that one must have the capacity to influence others, further demonstration of the sense of power a musician might develop particularly through their playing with an ensemble.

Locating Agency in Economics Discourse

Since its inception, the El Sistema movement has found itself inextricably intertwined with economics, and specifically, poverty-reduction. It’s well-known that El Sistema’s founder, Jose Antonio Abreu, was a government-level economist, and it’s usually extrapolated that this profession hugely influenced the beginning of El Sistema; Abreu is often cited for making a connection between poverty reduction and music education. Furthermore, he often indicates that he sought to work with the poorest populations, and that an offering of music was an avenue out of poverty. His attitude is evident in the fact that the only published evaluation of El Sistema in Venezuela ever conducted was by the Inter-American Development Bank, which sought to emphasize that El Sistema could save
the Venezuelan government money, by lessening need for federal welfare in populations who participated in El Sistema. The now international El Sistema-inspired movement seems to have followed suit. Not only do most programs select to work only with the most impoverished sectors of their communities, there are even programs which blatantly put "poverty-reduction" in their mission statements.

Thus, it was exciting that as research on the concept of “personal agency” progressed, there were increasing links to the field of developmental economics. Going back in particular to the hugely significant work of Amartya Sen, agency is now specifically associated with work in microcredit institutions in developing countries (an initiative made famous by the Nobel Peace Prize receipt of Muhammad Yunus in 2006) and entrepreneurship. Extensive defining and theorizing on the concept of agency are also significant in the fields of philosophy (Marx, Hegel, Kant), sociology (Bourdieu, Giddens, Ortner, Mills), and social cognitive theory in psychology (Bandura). There have been definitions of agency used specifically in relationship to youth development goals; for example, in their evaluation of Community MusicWorks, WolfBrown defines agency as including self-esteem, motivation, and self-monitoring. However we will choose to focus on agency as understood in economics, first of all, for the narrative which has traditionally linked the El Sistema legacy with poverty-reduction, and second of all, because work in economics has provided us with extensive examples of indicators and instruments by which to measure agency.

### Definitions

- “people’s ability to act on behalf of goals that matter to them”
- "Agency is defined as an actor’s ability to make meaningful choices; that is, the actor is able to envisage options and make a choice."

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Defining agency with respect to empowerment

The word “empowerment” is discussed extensively with regards to youth development and social change; unfortunately, it has also become a loaded term with many connotations, which is why we originally chose to focus on agency instead. In economic terms, however, the link between agency and empowerment is less semantic and more functional in terms of how the two relate. Agency can be understood as a component of empowerment.

Empowerment is in fact what has been said to be directly correlated with development; in 2000 it was described by the World Bank as one of the three pillars of poverty reduction (in addition to opportunity and security). Empowerment is then composed of two elements: agency and opportunity structure. As Alsop and Heinsohn describe it, “Empowerment is defined as a person’s capacity to make effective choices; that is, as the capacity to transform choices into desired actions and outcomes. The extent or degree to which a person is empowered is influenced by personal agency (the capacity to make purposive choice) and opportunity structure (the institutional context in which choice is made).” While someday El Sistema-inspired programs might represent a redefining of opportunity structures (arguably, this is emerging in Venezuela now), in the present, El Sistema has no control over the norms and structures which govern society. Thus, the only outcome which serves as an effective measurement of El Sistema’s intervention is agency.

Indicators

There are several different sets of indicators which have been argued to capture personal agency, each of which approaches a slightly different definition of the components of agency. Here, we will discuss some of the indicators of agency which we have found to be potentially interesting and meaningful to El Sistema-inspired work. For clarity’s sake, we will include the potential instruments along with the description of the indicators; we have found that the instruments themselves often help to clarify and define the indicator directly.

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35 We define “opportunity structure” as “the institutional, social, political contexts of formal and informal rules and norms within which an actor pursues their interests.” (Alsop, Ruth, and Nina Heinsohn. *Measuring Empowerment in Practice: Structuring Analysis and Framing Indicators*. N.p.: World Bank Policy Research Working Paper Series No. 3510, 2005.)


37 Ibid. 6.
They include:

- **Locus of Control and Self-Efficacy**
- **Power Over, Power To, Power With, and Power from Within**
- **Bandura’s Self-Efficacy Theory**
- **Child-specific indicators**

### Locus of Control and Self-Efficacy

Adekunle and Henson examine agency with relationship to entrepreneurship, using Harper’s definition of personal agency belief being “a function of locus of control (contingency) and self-efficacy (competence).” They used the following instruments to measure locus of control and self-efficacy, in their study, drawing conclusions about determinants of entrepreneurship and the influence of thrift and credit societies in Nigeria. Note: self-efficacy in this study is defined as competence. In a later section, we will also discuss Bandura’s self-efficacy theory, which has a quite divergent definition to what is presented here.

#### Locus of Control Instrument

*This tool is used with respondents stating extent to which they agree or disagree on a 5-point Leichert scale*

<table>
<thead>
<tr>
<th>Locus of control scale.</th>
</tr>
</thead>
<tbody>
<tr>
<td>My success depends on whether I am lucky enough to be in the right place at the right time.</td>
</tr>
<tr>
<td>To a great extent my life is controlled by accidental happenings.</td>
</tr>
<tr>
<td>When I get what I want, it is usually because I am lucky.</td>
</tr>
<tr>
<td>My life is determined by my own actions.</td>
</tr>
<tr>
<td>When I get what I want, it is usually because I worked hard for it.</td>
</tr>
<tr>
<td>It is not wise for me to plan too far ahead, because things turn out to be a matter of bad fortune.</td>
</tr>
<tr>
<td>Whether or not I am successful in life depends mostly on my ability.</td>
</tr>
<tr>
<td>I feel that what happens in my life is mostly determined by people in powerful positions.</td>
</tr>
<tr>
<td>I feel in control of my life.</td>
</tr>
<tr>
<td>Success in business is mostly a matter of luck.</td>
</tr>
</tbody>
</table>

Source: Adapted from Rotter (1965), as cited in Mueller and Thomas (2000)

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Using this tool in an El Sistema-inspired program would definitely help to demonstrate whether or not a student's sense of control changes with their participation in the program. Of course, this tool is highly susceptible to perceiving the influence of other factors influencing a student's life. In particular, it is conceivable that responses to these questions would change dramatically with age. As a self-assessment tool, it also carries natural bias.

**Self-Efficacy Instrument**

[This tool is used with respondents indicating degree of certainty with which they could perform the tasks a 5-point Leichert scale]

### Table 3. Perceived self efficacy scale.

<table>
<thead>
<tr>
<th>Marketing</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Set and meet market share goals</td>
<td></td>
</tr>
<tr>
<td>Set and meet sales goals</td>
<td></td>
</tr>
<tr>
<td>Set and attain profit goals</td>
<td></td>
</tr>
<tr>
<td>Establish position in product market</td>
<td></td>
</tr>
<tr>
<td>Product market analysis</td>
<td></td>
</tr>
<tr>
<td>Expand business</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Innovation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>New venturing and new ideas</td>
<td></td>
</tr>
<tr>
<td>New products and services</td>
<td></td>
</tr>
<tr>
<td>New market and geographical territory</td>
<td></td>
</tr>
<tr>
<td>New methods of production, marketing and management</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Management</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce risk and uncertainty</td>
<td></td>
</tr>
<tr>
<td>Strategic planning and develop information system</td>
<td></td>
</tr>
<tr>
<td>Manage time by setting goals</td>
<td></td>
</tr>
<tr>
<td>Establish and achieve goals and objectives</td>
<td></td>
</tr>
<tr>
<td>Define organisational roles, responsibilities and policies</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risk-Taking</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Take calculated risks</td>
<td></td>
</tr>
<tr>
<td>Make decisions under uncertainty and risk</td>
<td></td>
</tr>
<tr>
<td>Take responsibility for ideas and decisions</td>
<td></td>
</tr>
<tr>
<td>Work under pressure and conflict</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial Control</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Perform financial analysis</td>
<td></td>
</tr>
<tr>
<td>Develop financial system and internal controls</td>
<td></td>
</tr>
<tr>
<td>Cost controls</td>
<td></td>
</tr>
</tbody>
</table>

Source: Chen. et al., 1998

Figure 40

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Of course, this instrument is impossible to use with young students and is irrelevant to El Sistema-inspired programming. However, it is easy to imagine the possibility to re-writing the tool with music specific competencies in mind. For example, under the innovation section, respondents could instead indicate the degree of certainty with which they can improvise, and under management, they could discuss their competency in leading a sectional rehearsal or practice session.

Power over, Power to, Power with, Power from within

In their work identifying workable indicators, Ibrahim and Alkire established a framework of criteria that included 1) being relevant to the population their work serves, 2) being internationally comparable, 3) the ability to assess empowerment both instrumentally and intrinsically, 4) the ability to assess changes in empowerment and agency over time, and 5) having a rigorous history of use. Based on these criteria, they settled on four indicators being power over, power to, power with, and power from within. These indicators, and the corresponding tools provided, are explained in the following chart. Again, the instruments presented below are not very directly applicable to El Sistema-inspired work, and both the content in questions and the language used is challenging for young students to use. However, these tools can be potentially re-written with the support of professional researchers or scholars who are experienced at building and writing instruments.

---

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Power over</th>
<th>Power to</th>
<th>Power with</th>
<th>Power from within</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relation to empowerment</strong></td>
<td>Empowerment as control</td>
<td>Empowerment as choice</td>
<td>Empowerment in community</td>
<td>Empowerment as change</td>
</tr>
<tr>
<td><strong>Definition</strong></td>
<td>Control over personal decisions</td>
<td>Household decision-making and domain-specific autonomy</td>
<td>Changing aspects in one's life (individual level)</td>
<td>Changing aspects in one's life (communal level)</td>
</tr>
<tr>
<td><strong>Potential Instrument</strong></td>
<td>How much control do you feel you have in making personal decisions that affect your everyday activities? [no control at all → control over all decisions] (^{42})</td>
<td>See figures “BOX II” and “BOX III”</td>
<td>1) Would you like to change anything in your life? [yes/no] 2) What three things would you most like to change? [list] 3) Who do you think will contribute most to any change in your own life? [myself → our community → national government] (^{43})</td>
<td>Do you feel that people like yourself can generally change things in your community if they want to? [yes, very easily → no, not at all]</td>
</tr>
</tbody>
</table>


\(^{43}\) Ibid. 29
BOX III – Indicator of domain-specific autonomy

Now I am going to describe three reasons why you do these activities, and ask you to tell me how true each one is.

Q1. How true would it be to say that your actions with respect to ________ [the domain] are motivated by a desire to avoid punishment or to gain reward?


<table>
<thead>
<tr>
<th>Domains</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Minor Household Expenditures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) What to do if you have a serious health problem</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) How to protect yourself from violence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Whether and how to express religious faith</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) What kind of tasks you will do</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q2. How true would it be to say that your actions with respect to ________ [the domain] are motivated by a desire to avoid blame, or so that other people speak well of you?

Q3. How true would it be to say that your actions with respect to ________ [the domain] are motivated by and reflect your own values and/or interests?

Source: Ryan and Deeci (adapted).

BOX II – Indicators of household decision-making

Q1. When decisions are made regarding the following aspects of household life, who is it that normally takes the decision?

<table>
<thead>
<tr>
<th>Domains</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Minor Household Expenditures</td>
<td></td>
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<tr>
<td>d) Whether and how to express religious faith</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) What kind of tasks you will do</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Q2. If answer in any of Q1 is different than respondent? =⇒ (Using this same table) To what extent do you feel you can make your own personal decisions regarding these issues if you want to?

<table>
<thead>
<tr>
<th>Domains</th>
<th></th>
<th></th>
<th></th>
</tr>
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<tbody>
<tr>
<td>a) Minor Household Expenditures</td>
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<td></td>
</tr>
<tr>
<td>d) Whether and how to express religious faith</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) What kind of work you will do</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>


Source: For Question 1, See Table 1. For question 2, (R. Altop et al., 2006)

Figure

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45 Ibid. 27.
Bandura's Self-Efficacy Theory

In her work on quantitative measurements of human agency, Alkire sought measures of agency that function in multiple domains. She uses Bandura’s concept of self-efficacy, wherein “if people perceive themselves to be more capable of accomplishing certain activities, they are more likely to undertake them.” You can get at measuring self-efficacy by examining:

- Their motivation, perseverance, and exerted effort
- Their goal representations, or their capacity for forethought
- Their anticipated outcomes (how readily they imagine positive versus negative outcomes)
- Their ability to override negative feedback and failure

Self-efficacy, particularly in Bandura’s definition, is often measured through the construction of scales. Tools can also be developed which formulate these questions using quantitative measurements such as a Leichert scale, or which seek to understand these through anecdotes and other qualitative measurements. Art-based measurement tools can additionally be used; for example, goal representation can be done through drawings, or the ability to override feedback and failure can be captured in performance situations. Of course, it is harder to draw consistent conclusions and analyze responses from art-based instruments.

Child-Specific Indicators and Instruments

As mentioned in previous sections, many of the indicators and instruments used to measure agency are challenging to use with younger students because 1) they make reference to habits irrelevant to a child’s life and 2) they are presented in highly inaccessible language. It has also been pointed out that measuring agency in young children is a challenge because they are simply developmentally less able to draw connections between their present and future capabilities; this makes measuring changes in agency over time problematic.

However, in these cases, we may be able to examine children’s agency by what they demonstrate in their actions instead of how they respond to questions and prompts. For example, Samman and Santos seek to measure children’s agency by investigating on the following prompts taken from the Young Lives survey:

- Whether they try hard
- Whether they can improve their situation in life

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47 Ibid. 238.
48 Ibid. 241.
Other Challenges

As you can see, there have been a large variety of indicators and accompanying tools posited for the measurement of agency, in particular, as the concept relates to empowerment and economics. There are a couple of issues with using the existing discourse of economics and measurements of agency from that field to carry out the assessment which El Sistema-inspired programs are keen to pursue. First of all, measurement of agency has typically been done with one-off data collection, capturing agency only at one point in time; this sort of research is used to determine the development of policy or a decision to build a development program. However, El Sistema-inspired programs would seek multiple measurements of agency over a long period of time, and would focus on changes (hopefully increases, expansions, deepening) in agency related to the intervention of music education.

In addition, most studies of agency work primarily with adults, and especially with traditionally disempowered demographics such as rural women. This means that most instruments which have been developed would be difficult to use with younger students. In addition, most instruments have been written with the lifestyle of adults in developing communities in mind, and ask questions, for example, related to religious worship, household expenditure, and farming practices. These would need to be re-written to be made relevant to young people, and perhaps particular to urban and culturally diverse lifestyles.

Finally, indicators and instruments for measuring agency have been seen as problematic for being culturally biased, and for not taking into account differences in definitions and valuation if individual versus collective empowerment in different cultural contexts.51

Thus, we emphasize that these indicators and tools are not yet ripe to be utilized in El Sistema-inspired assessment. They need to be adapted to the specific contexts of what El Sistema-inspired programs seek to measure and molded into tools capable of being used by younger students. This is where it is recommended that a program interested in pursuing agency as an outcome enlist the support of expertise and build liaisons with university departments and researchers trained in developing instruments. Natural fits for departments to pursue would include: developmental psychology, international development, economics, international education, business schools (working with entrepreneurship in developing countries), or public health.

51 For more discussion on this issue, see Harper 2003 and Alkire 2005.
References

**Introductory Material**


**Musical Literacy**


**Sense of Community**


**Sense of Personal Agency**


### Acknowledgements

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- Raquel Jimenez (Research Assistant, Harvard University Project Zero)
- Shirley Brice Heath (Professor of Linguistics, Stanford University, and Professor of Anthropology and Education, Brown University)
Who we are

About the Sistema Fellows Program

The Sistema Fellows Program is a professional training program hosted at New England Conservatory in Boston and designed for ten postgraduate musicians and music educators who are passionate about creating careers for themselves that connect music, youth, and social change. Past participants in the Program have gone on to guide the development of numerous El Sistema-inspired programs across the United States and beyond. Between September and May, the Sistema Fellows engage in an intensive curriculum that includes leadership, communication, non-profit strategy, funding, operations, evaluation and assessment, and educational philosophy and policy. The learning is a combination of classroom seminars and experiential work in the field. In the fall semester, Fellows spend four weeks in residence at El Sistema-inspired programs of their choosing across the US. There is also a month-long residency in Venezuela in the spring semester. To put their learning into practice, Fellows are required to spend the subsequent year serving the emerging field of El Sistema-inspired initiatives.52

About Group of 4

The 2012-2013 cohort of Sistema Fellows chose to focus on several different projects throughout the year. Four of the fellows – Andrea Landin, Carlos Roldan, Elaine Sandoval, and Sara Zanussi – took on this project to better understand and support the El Sistema-inspired field in assessment and evaluation. Andrea is a cellist from Los Angeles, California who graduated from Oberlin with a B.M. in music performance and B.A. in anthropology. She has worked in Guatemala doing anthropological fieldwork and working in arts education. Carlos was born in Ecuador and received his B.M. in trumpet performance with a minor in biology at San Diego State University. He is a founder of the non-profit organization SAHLUD, which brings health services and music education to communities in Ecuador. Elaine is from San Jose, California and has received her B.A. in liberal arts/humanities from Soka University of America and her Master's in ethnomusicology from Oxford University. Sara is from Minnesota, where she has helped to co-found Advocates for Community through Musical Excellence, an El Sistema-inspired program. She has her B.A. in music from Luther College and has recently taught music in Tanzania where she used music as a vehicle to unite communities.53

52 Excerpted from http://necmusic.edu/sistema-fellowship
53 http://necmusic.edu/sistema-fellows