

A Practitioners' Perspective on Developmental Models, Metrics and Community

Chad Stewart, Zach Smith and Norio Suzuki

Abstract: This article builds on a paper by Stein and Heikkinen (2009), and suggests ways to expand and improve our measurement of the quality of the developmental models, metrics and instruments and the results we get in collaborating with clients. We suggest that this dialogue needs to be about more than stage development measured by (even calibrated) stage development-focused, linguistic-based, developmental psychology metrics that produce lead indicators and are shown to be reliable and valid by psychometric qualities alone. The article first provides a brief overview of our background and biases, and an applied version of Ken Wilber's Integral Operating System that has provided increased development, client satisfaction, and contribution to our communities measured by verifiable, tangible results (as well as intangible results such as increased ability to cope with complex surroundings, reduced stress and growth in developmental stages to better fit to the environment in which our clients were engaged at that time). It then addresses four key points raised by Stein and Heikkinen (need for quality control, defining and deciding on appropriate metrics, building a system to evaluate models and metrics, and clarifying and increasing the reliability and validity of the models and metrics we use) by providing initial concrete steps to:

- Adopt a systemic value-chain approach
- Measure results in addition to language
- Build on the evaluation system for instruments, models and metrics suggested by Stein & Heikkinen
- Clarify and improve the reliability and validity of the instruments, models and metrics we use

We complete the article with an echoing call for the community of Applied Developmental Theory suggested by Ross (2008) and Stein and Heikkinen, a brief description of that community (from our perspective), and a table that builds on Table 2 proposed by Stein and Heikkinen.

Purpose of this Article

We appreciate the outreach by Tom Murray and Jonathan Reams to invite us into the “community of engagement” (not yet a “community of practice”) around building a network (and eventually Institute?) for Applied Developmental Theory—as well as Ross (2008) for the original call for the Institute, and Stein and Heikkinen (2009) for picking up the call.

Our purpose in writing this article includes three objectives:

1. Propose a concrete (meaning it has been used and refined with several groups of end-user clients as well as integral practitioners) and granular (meaning it includes multiple levels of technologies that allow users to “drill down” into increasingly narrow and precise applications) application of Ken Wilber's Integral Operating



System (IOS) for our dialogue around the innovation and application of developmental models and metrics because a quality control focus and concentration on linguistic-based metrics are necessary, but by no means sufficient.

2. Contribute to the creation and increased coherence of a collaborative community that improves the functionality and ethical application of developmental models with individuals, organizations and societies.
3. Attempt to contribute to the dialogue in ways that “integrate first, second, and third person perspectives, and illustrate an author's embodiment of higher (second tier, integral, meta-systematic, etc.) levels of ethical and psycho-socio-systemic reflection” from a perspective of “authenticity/vulnerability/empathy and rigor at levels rarely seen in academic discourse” (Murray & Reams, invitation letter to this dialogue).

Objective #1 is addressed in the content of the article, while Objective #2 is the context we are building through our dialogue about creating a coherent community of practice around improving the functionality and ethical application of developmental models and metrics, and Objective #3 is the process of how we engage in this dialogue.

Background and Bias

As part of our attempt to embody Objective #3, we shall begin with a brief overview of our background and bias. Our work in building communities within organizations and within communities among organizational leaders has led us to a deep respect for the need to manage the dilemmas raised by respecting and integrating multiple perspectives, abstract models and concrete metrics and tools. Having spent over ten years working as change agents within and for large corporations, government organizations and NPOs biases us towards “what is possible right now, with these people to whom we have a fiduciary responsibility, in this context” while also attempting to move with these people towards a more ideal position over time. Furthermore, we are biased by our experience and results with our colleagues and clients in:

- Talent development (executive team development, succession planning, leadership competency development),
- Organization development (M&A integration, cultural integration, systems & processes improvement, performance improvement),
- Change management (cultural transformation from one structure, state, system and/or stage of development to one more fitting to its environment based on demands on the organization from its value-chain and market), and
- Social entrepreneurship in building and running our own organizations (Abound, Integral Japan, Interkonnections) in Japan and the US.

These experiences and results bias us toward:

- Weaving together practical application and emergent design in the field (the use, adaptation and creation of technologies that work at that point in time and in that specific context with those specific people) with research and theory-building in the

think-tank (building and refining models and metrics that serve as general guidelines for fieldwork and are improved by what emerges from the field) over taking either stance alone.

- A “fit-to-role” perspective that we should be looking at “multi-dimensional degree of fit” as a set of metrics over a single “higher is better” metric.
- The need to simultaneously and cohesively evolve both individuals and the system and community that houses those individuals to be more “fit-to-role” over either an “individual focus” or “organizational focus” (our experience indicates that without cohesive transformation, the effect is diluted and reversion to previous patterns is likely).
- “Dilemma management” (individual & collective plus current & target poles) and legal (e.g. “personal information” law in Japan) approach to the ethical question of how much “developmental” information a person or team should share internally (and in what form and to what degree this information should be accessible by HR, a person’s managers, and top management) over a “coach-client privilege” approach. Usually we have created “leadership profiles” that are available to the leader’s manager, manager’s manager, CHRO, and program sponsor—CEO or Senior VP. Often the members have chosen to share their developmental information with their team.
- “Results orientation” that measures and improves both “lead indicators” (predictors of performance such as developmental stage and level of competencies directly related to the task at hand for individuals and cultural stage and degree to which systems and processes are able to deal with the task at hand for organizations) and “lag indicators” (“qual-and-quant” measurements of actual results such as level of trust by team members and project costs reduced for individuals and social reputation, brand image, increased profitability and return-on-investment, increased number of people fed, educated and pollution mitigated for organizations). Most integral-related developmental models and instruments that we have seen to date are focused exclusively on “lead” indicators and therefore deprive both suppliers and customers of these models and instruments of the ability to truly test half of the benefit to the individual or organization. Notably, most of the clients we have worked with have at one point or another expressed some variation of “honestly, I just want the results.”
- Requirement of fieldwork and client-needs to adjust or transform models, metrics and instruments to reflect changes in clients, context and the market environment over keeping these tools static

In short, we see ourselves as world-class developmental practitioners and guidance professionals, but not world-class organization and community leaders or academics. Therefore, we are strongly interested in collaborating with world-class organization and community leaders and academics to work through (among other issues) the complexity raised by the points above.

Given the current approaches to working with developmental models and metrics, we also strongly feel the need for a more concrete granular integral framework for addressing development. Before briefly presenting one such framework and its applicability to our community and identifying and resolving the core issues we face, we will take a first look at some of the models and instruments capable of assessing development at individual and collective levels.

Developmental Models and Instruments

For the reasons stated above, we propose that our community address developmental models and instruments designed to measure “lead” and “lag” indicators of performance at individual, team, organizational and larger society (e.g. city or national) levels of scope. We also propose that our community clearly indicate:

1. Which models and instruments are most relevant and qualified to measure lead and lag metrics (indicators) for which purposes—and why.
2. Which models and instruments are least (or not) relevant and qualified to measure lead and lag indicators for which purposes—and why.

Here, we provide a partial list of developmental models and instruments by level of scope. After discussing the framework and related issues involved in using and adapting the models and instruments in the next section, we conclude with a “work in progress” chart at the end of the article which builds on the chart presented by Stein and Heikkinen (2009) and provides our current perspective of which models and instruments are more and less relevant and qualified for which purposes and why. We look forward to continuing to refine this chart with the community.

Table 1. Partial List of Models and Instruments by Scope

Model	Instrument(s)	Scope	Supplier
Abundance / Sustainability	Organizational Sustainability Scorecard	Team Organization	Interkonnections
	City & Community Sustainability Scorecard	City/Community Region	
Cultural Transformation Tools	Individual Values Assessment	Individual	Values Centre
	Leadership Values Assessment	Individual	
	Small Group Assessment	Team	
	Cultural Values Assessment	Organization (Nation)	
Developmental Model of Intercultural Sensitivity (DMIS)—by M. Bennett	Intercultural Developmental Inventory (IDI)	Individual	Hammer & Associates
Constructive Developmental Framework	Developmental Assessment (Cognitive + Emotional/Social + Needs)	Individual	Interdevelopmental Institute
Ego Development	SCTi/MAP	Individual	Cook-Greuter & Associates

Leadership Capacity	360 CAP	Individual	Interkonnections
	Leadership Interview	Individual	
	Leadership Questionnaire	Individual	
	Leader Profile	Individual	
	Team 360 CAP	Team	
Leadership Development Framework	Leadership Development Profile	Individual	Harthill UK
Lectical Assessment System	LERA, LLRA, LDMA, LRJA, LSUA, LIMA, LMLA, LMSA	Individual	Developmental Testing Service
Requisite Organization (including Complexity of Mental Processing—CMP)	Requisite Organization Platform by ROII. No instruments found by GO Society.	Organization (Jacques' original work could also be used with Individuals)	Jacques (theory now available through Global Organization Design Society, RO Internatl. Institute)
Spiral Dynamics	Values Test	Individual	Spiral Dynamics Group
	Change State Indicator	Individual	
	CultureSCAN--Personal	Individual	
	ManagerSCAN 360	Individual	
	BusinessSCAN, SchoolSCAN	Organization	
	CommunitySCAN	Community	
	CultureSCAN	Team, Organization, Community, Nation	
Subject-Object Theory	Subject-Object Interview	Individual	Kegan, Lahey & associates

Given the sheer number of instruments available, especially individual-focused instruments, it initially appears that competition is inevitable. To some degree this may be the case, but an integral analysis of the instruments (see below) will show that most of the instruments are only practically useful for specific purposes and/or in specific circumstances—and that many of these conditions do not overlap. Using the instruments too far outside of these specific conditions fails to serve the client, and holds the possibility of damaging the reputation of the “developmental model and assessment” market. As self-proclaimed leaders of this community, it is in the best interest of ourselves, our clients and our colleagues to clarify which models and instruments are effective (and ineffective) in which conditions. The framework outlined below will help us in assessing the efficacy of the models and instruments in various conditions.

Concrete Granular “5C” Framework

We propose that one of our collective purposes in this dialogue and community-building initiative is to take a practical “concretized” integral approach to the metrics, measurement and application of developmental models in order to add perceived and actual value to our clients (e.g. change leaders, organizational leaders, HR professionals, and the communities within which

they operate), our colleagues and ourselves. For this to occur, it is necessary and (as a concrete next step) sufficient for us to include and integrate the rigor of traditional means of judging models and metrics (e.g. “validity” and “reliability”) while also transcending them by placing them within a fully integral framework. Based on our collective experience as change agents we believe such an applied framework needs to include all five of the minimal integral requirements proposed by Wilber’s Integral Operating System (1995, 2000, 2006), namely quadrants, stages/levels, styles/types, streams/lines, states/consciousness in a way that can be easily applied and adapted by various constituencies (on a wide scale). Without this scalability, we will be less able to attract clients who will actually purchase, use and measure the results of products (instruments) and services based on these models, as well as interesting colleagues to collaborate on improving the instruments and related services.

Since we have spent the last 10 years evolving and refining a framework with US, European and Japanese-based corporations, government organizations and NPOs (after originally working with the 4Q and Spiral Dynamics and other organization development tools in these organizations), we are proposing the use of this applied framework (“5Cs”) as a starting point for this community. (We originally called it “5S” for spheres/quadrants, stages, styles, streams and states, but clients kept saying “McKinsey has a 7S framework”).

These interwoven “5Cs” are:

1. Context Interface
2. Core Capacity
3. Character
4. Competencies
5. Consciousness

It is also crucial to implement these 5Cs in a cohesive way.

We shall briefly cover each of the 5Cs and their cohesion, and then use the 5Cs to address some of the issues raised by Stein and Heikkinen (2009) as well as new issues that come to light in using the 5Cs to address the innovation and application of developmental models and metrics. Since readers of the IR are “integral savvy,” we shall assume competence in the integral operating system (IOS), and build our brief overview of the 5C on top of this assumed shared understanding.

Context Interface

Context Interface begins with the integration of a slightly modified version of Ken Wilber’s “4 Quadrants” or “4Q” (it has simply been turned counter-clockwise 90°) with the “Iceberg Model” from intercultural studies. The lower half of the diagram is the invisible (“below the waterline”) dimension of individuals and groups that cannot be seen, such as values, beliefs and emotions, perceptions, mindsets and assumptions of individuals; and the culture, climate, collective consciousness, norms and shared assumptions of groups. The upper half of the diagram shows the visible (“above the waterline”) behavior of individuals (their actions and reflection) and groups (their structures, systems, processes and dynamics) and the results they

generate. Without conscious practice, the number, relationship and complexity of these factors in each situation makes the situation difficult for us to grasp, and easy to misunderstand. By mapping and adjusting to the influence and relationships of these various elements, we are able to better understand, act and reflect on the intersection of our external environment and behavior, our internal drivers and filters, and the results we co-create.

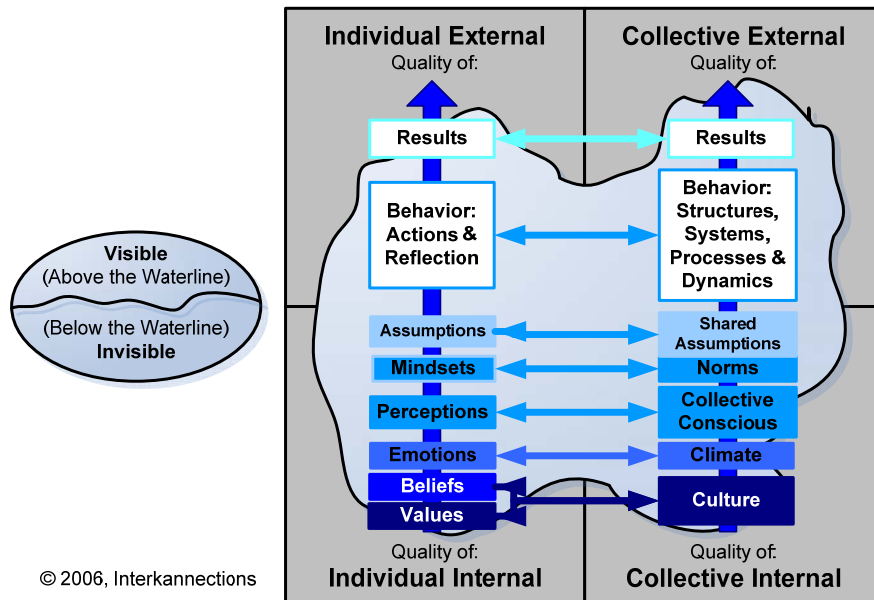
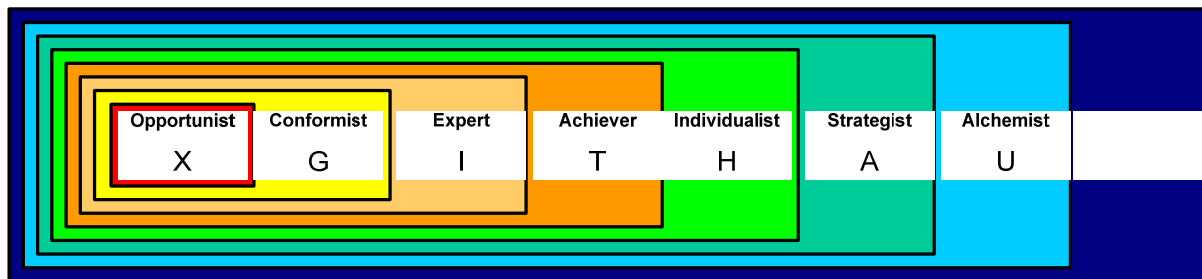


Figure 1: Context Interface (Integration of Wilber “4Q” with the Iceberg Model).
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Many granular technologies build from this first Context Interface diagram, but for the purposes of this article, the Iceberg 4Q will suffice.

Core Capacity

Our Core Capacity is the baseline from which we perceive, understand and act in the world on a relatively stable basis. The internal dimension of capacity is often called “stages” or “lines” in the developmental literature. In an initial burst of research, we cross-referenced developmental stage models created and used by 19 teams of developmental researchers and practitioners and found a high degree of correlation on both the internal stages (structures) and contents between these teams (charts that show the correlation is available on the Interkonnections website). The research identifies distinct stages in human development based on cognitive, emotional, ethical, needs, social, and values models (and often metrics) and the ego that unifies them. We have integrated this knowledge with the latest research in leadership and global management competencies to create our Leadership Capacity model (“X” to “O”), shown below correlated to each of Dr. Susann Cook-Greuter’s stages of Ego Development (2002, 2004). We will not go into the levels (“X” to “O”) here, but interested parties can find these in the “Leading Evolutionary Change” whitepaper on the Resources page of the Interkonnections website. The color scheme is similar to that suggested by Wilber (2006), but has been customized to use Spiral Dynamics (except for “Expert” / “I”) and other color schemes according to the needs of the context of application.



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Figure 2: Leadership Capacity Stages Correlated with Stages of Ego Development.
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Character

As people and professionals, the character of each of us is both unique and is strongly influenced by a variety of “styles” that have emerged within ourselves and the cultural environments in which we were raised and shaped. The “style” influences that our clients have found most useful and influential to work with (and therefore the base which we can add to as a community) include:

- Personality style (e.g., Enneagram, DiSC, Myers-Briggs)
- Organizational hierarchy and functional (R&D, Production, Sales, HRD, flat, distributed networks, etc.) styles
- Organizational cultural style (Gareth Morgan’s organizational styles, stages of organizational culture development ala Barrett and Adizes)
- National/ethnic cultural style (polarity management & dimensions of culture, Enneagram, stages of cultural development)
- Gender style (masculine and feminine, yin-yang)
- Family pattern style (discussion-based, authoritarian, no model or theory)
- Educational environment style (discussion-based, context based, experiential, drilling, no model or theory)
- Religious and/or philosophical style (mono-theistic & poly-theistic, internal & external locus of responsibility and control)

Competencies

Competencies are the specific skills that allow us to engage in a specific activity or practice (e.g., being a parent, running an organization, leading a project or division, building a community, playing tennis, playing the piano, mixed martial arts, writing a book, painting a picture, singing, applying and improving developmental models, etc.) and achieve a certain level of results.

To use a metaphor that is meaningful to most of our clients, Core Capacity is the “size of the container” that we have to perceive, understand and act in the world and Competencies are what goes into that container. Both of these must be matched to the context. If the context requires a

project leader, then the Capacity of “T” (Achiever/Orange) may be most appropriate because this is the stage at which project management and integration can really begin to be leveraged. Competencies should also reflect the needs of project leadership (e.g., time management, schedule management, budget control, communication, risk management, etc.).

Even a world-class MBA professor or leadership researcher who has a Core Capacity of “A” (Strategist/Yellow or Teal) would be unlikely to successfully lead a project or organization (and may cause considerable damage) if they have not successfully led teams or organizations before and have not been trained in the Competencies of project management or running an organization. Conversely, project leaders approaching project management at an “I” (Expert/between Blue or Amber and Orange) center of gravity can severely slow or damage the project due to a tendency to focus more on the parts than the whole.

In working with change leaders, change projects and organizations, we have found it useful to focus on both the specific Competencies required by a person for a project or situation in a specific context as well as the Categories (groups) of Competencies that are required for specific kinds or levels of change projects and/or organizational leadership.

Consciousness

In the 5C framework, Consciousness (our “state” of being) is the way in which we perceive, understand and act in the world moment to moment. The quality of our Consciousness affects the quality of our experience, results and affect on and with other people and our environment/context. Our quality of Consciousness in any given moment is affected by our health and balance within and between several spheres of Consciousness. For our work, we focus on four interconnected spheres of Consciousness:

1. **Body (Physiological):** This is the awareness of movement of energy in the body, how we breathe, how we sleep and dream, how we align ourselves and our posture, how we are affected by what we eat and drink, the quality and amount of exercise we get, our body temperature, and other physical conditions.
2. **Emotions (Affective):** This is how well we assess and manage the feelings, sensations and moods that arise within us such as joy, anger, sadness, boredom, frustration and hope—how we respond to them and, sometimes, how we feel pulled from one pole to another in short periods of time.
3. **Mind (Cognitive):** This is how we process information, what we commit to, how we organize meaning and information to exchange it and communicate with others, and our ability to predict and change the consequences of our actions.
4. **Connection (Social & Spiritual):** This is our felt sense of connection to that which we sense is beyond us, both in terms of a wider group of people and a deeper way of being. It includes faith, our mission/purpose, development and application of values, sense of potential, and the level of resonance, trust and conflict we have with others.

“5C” Coherence

Each of the “5Cs” brings an important perspective and set of questions to the application and improvement of developmental models and metrics. As integral practitioners and theorists, we know that insufficiently addressing any one of the “5Cs” (by whatever name and level of granularity) can leave a critical gap in awareness, assessment, individual action and aligned action that can create problems in supporting the development of individuals, organizations and cities and communities. As powerful as each of the “5Cs” is by itself, however, their true transformational power lies in understanding and engaging the connections and interplay between the “Cs” and bringing them into coherence as they relate to each specific undertaking, environment, and the people involved—and then taking that learning back into the refinement of the evolving model and metrics in a virtuous cycle of development. The way that we judge the effectiveness of our 5C Coherence is to measure the specific results that accrue in a six-level model of “stages of sustainability.” We will not provide an overview of the Stages of Sustainability here, but interested parties can find these in the “So, How Sustainable Are We?” whitepaper on the Resources page of the Interconnections website. The model actually has 10 stages (including the “levels of un-sustainability”) and is still a work in progress, but has been tested with corporate, government and NPO clients and allows us a reasonably accurate method (from the perspective of ourselves and our clients) of judging the developmental results of a person or organization’s actions because it focuses on real-world results (external, verifiable phenomena). It therefore allows us an external cross-check (using both lead and lag indicators) to the results of most developmental models which are primarily (often highly accurate) assumptions of internal development (and provide mostly lead indicators only). In the end, we cannot prove that someone is operating at an “A”/Strategist/Yellow or Teal “center-of-gravity,” but we can prove that the organization they are leading is producing triple-bottom-line value to their employees, customers and community (e.g. Burgerville’s full health care coverage for even part-time employees, bio-degradable utensils, all power purchased from wind-energy credits, financial contribution to education, financial out-performance of industry competitors in same location).

Using the 5Cs and their Coherence, we shall now turn to “our current top 4” issues that we suggest our community address related to the use and improvement of developmental models and metrics.

“Current Top 4” Issues of Developmental Models and Metrics

In our developmental guidance work with clients, we have found that an effective place to begin is to work together in defining the scope and framework of our initiative, discovering the core issues, and crafting initial solutions. We appreciate the issues proposed by Stein and Heikkinen (2009), including:

1. The need for quality control.
2. Defining and deciding on appropriate metrics, and
3. Building a system to evaluate models and metrics.

4. Clarifying and increasing the reliability (are the instruments and metrics accurate) and validity (do the instruments and metrics measure what they claim to measure) of models and metrics.

We suggest expanding the frame of these four issues as described below. We also suggest distinguishing “metrics” from “instruments” since some instruments provide one metric (e.g. MAP) and others provide multiple (e.g. organizational sustainability scorecard). Stein and Heikkinen initiate a dialogue on several other issues, but here we will respond to/build on those above because we perceive them as “core issues” (root causes) rather than “presenting problems” (surface level issues that stem from core issues) for our community. We look forward to working with members of this community on uncovering these and other core issues and collaborating on cohesive solutions to resolve them. In the spirit of this exploration, here are our “current top 4:”

1. Adopt a Systemic Value-Chain Approach: We suggest expanding our community's discussion from the current QC focus (Stein & Heikkinen, 2009) to include additional “nodes” of the value-chain. Usually, this includes internal value-chain nodes (strategy, HR, operations, IT, R&D, production, quality control, sales & marketing, service/delivery, customer service, etc.), external value-chain nodes (supply chain entities, customers, end-users, competitors, strategic partners, etc.) and SPECTREM entities and factors: Social, Political/Governmental, Economic, Cultural, Technological, Religious, Ecological and Military. For our purposes, however, an effective next step would be to look at eight nodes:

1. Strategic Partnerships/Community-building (how do we gather our “best in class” members of the Applied Developmental Theory community and collaborate while also building our mutual bottom-lines—rather than simply competing as small niche players in the leadership development, OD, change management and similar markets?)
2. Strategy (what are we intending to do with the models and instruments and how will we do this—5C analysis?)
3. Clients & Customers (which current and potential customers “fit” our strategy from a “5C” perspective?)
4. R&D (what tools do we have now, how can they be improved, and what new tools do we need to develop?)
5. HR—including Production & Service/Delivery (who do we have that can develop, improve and implement those tools and how do we develop these people to meet these demands?)
6. QC (how do we set and maintain quality control standards in the community?)
7. Sales & Marketing (how do we increase our work with our current and target customers?)
8. Customer Service (how do we ensure that we are meeting our customers' needs and receive useful feedback that improves strategy, R&D, HR and QC?)

Naturally, we are suggesting that we gather people together who can add 5C value to our community. We propose that members should be able to provide high-quality input and performance (competencies) to one or more nodes (functional character) that illuminates the value-chain (context interface) in a way that is mutually respectful, supportive and collaborative (consciousness) while operating at a high level of perception, understanding and action

(capacity) and individually and collectively delivering cohesive results (cohesion/sustainability stages).

2. Measure Results in Addition to Language: Stein and Heikkinen (2009) state that

building a metric entails moving from ... everyday interpretation of language towards more systematic modes of differentiating between different types of linguistic performances. Importantly, with the exception of a few experimental paradigms (e.g., Piagetian balance beam tasks) all developmental metrics entail the interpretation of linguistic performances. This point is often overlooked. (p. 10)

As far as we know, the “experimental” part is correct. We also started out using solely linguistic-based instruments that used soft or calibrated metrics to measure lead indicators such as personal “action logics” and cultural stages. However, we kept running into the issue that our clients have all preferred results over “valid” and “reliable” metrics. Therefore, we have also built and “trialed” instruments with clients that measure both the internal (“below the waterline”) capacities, character styles (and individual consciousness) as well as external (“above the waterline”) context interfaces, competencies, behaviors and results of individuals (leader profile, 360 CAP) and organizations (business sustainability scorecard). We are currently developing one for cities & communities (city & community sustainability scorecard) as well. Although these are far from perfected, it does seem that externally verifiable metrics that measure lead and lag indicators are easier to cross-check (by colleagues) and understand and use (by clients). If part of our intention is to get fully integral (IOS-based) instruments and metrics in widespread use, we need to create and sell instruments, and “packages” of instruments (blatant plug for collaboration) that covers the full range of the IOS and are appealing to clients and potential clients (e.g. provide measurement of results). For example, if a potential client wants us to help them develop a leadership and engineering team that can produce a new eco-car that will outsell the Toyota Prius and reduce energy consumption by 15% and raw material usage by 10%, it is better for everyone involved if we can say more than “the cultural center-of-gravity of your organization is ABC, a requisite version of your organization would be DEF, the action logics of your leadership team are GHI, and your LDMA results indicate that your should focus on improving JKL next.” It is beneficial if we can say something like: “Your current financial, social and ecological results are MNO (cohesion/sustainability stages) while your mission, targets and value-chain requires them to be PQR (context interface). This requires A-L (capacity shift above), changing from a production and sales focus to a value-chain integration focus (character/culture) and building STU competencies in your leadership and R&D teams (competencies) while increasing employee loyalty by X% in this economic environment by building a reputation day by day of becoming a truly sustainable organization (consciousness). All of this indicates that we should do VWX to get that car built.” And then follow up every 3-6 months showing them the improvement in both lead and lag indicators—including the actual financial, social and ecological results. If we do this with an increasing number of corporate, governmental and NPO clients, our hypothesis (and experience) is that the interest in developmental models and instruments (with their associated metrics) will continue to increase.

3. Creating an Evaluation System for Models, Instruments and Metrics: Stein & Heikkinen (2009) call for “languages of evaluation that focus on the most important qualities that bear on

the worth of both metrics and models” (p. 13). Interestingly enough, once the evaluation is complete, the “last metrics standing” are the Lectical Assessment System (LAS) instrument (which is directly linked to Stein), the Hierarchical Complexity Scoring System (HCSS) instrument (which is noted as “an early version of the LAS”), and perhaps the Requisite Organization (RO) model (it is noted that the creator of RO, Jacques, and his colleagues drew parallels between their metrics and those of Fischer and Commons, whose work serves as the foundation for the HCSS and LAS). Hmmm, this self-promotion is rather like ourselves and the 5C framework. OK, so we can all acknowledge a strong “T/Achiever/Orange” streak in at least several members of our budding community. On the other hand, certain other members of the community (e.g. Cook-Greuter and Beck) seem to be less interested in leveraging that T/Achiever/Orange streak. Combining this issue of “wisdom with limited self-promotion” in some members with the need to create an evaluation system that is meaningful to clients as well as colleagues leads us to add a few categories to “Table 2” in Stein & Heikkinen (2009, pp. 17-18). Again, our hats off to them for initiating this part of the process. We are certainly not experts in psychometric quality, and therefore look forward to partnering with community members who are. As stated before we do stand by our experience with several large-scale interventions and wide-ranging work with hundreds of organizational leaders. So, by leveraging our community’s diverse perspectives, we should be able to come up with a concise and powerful evaluation system. We suggest:

1. Expanding “metric” to “model,” “instrument” and “metrics” (see above).
2. Adding “scope” since most models, instruments and metrics can be used with either individuals or groups (it is neither time nor cost effective—and usually inaccurate—to “roll up” dozens or 100s of LAS or MAP instruments into a composite “organizational culture baseline” score) and some collective-focused instruments are built to assess an organization, but would not work with a city.
3. Adding “indicators” since listing the lead and/or lag indicators provided makes it easier to see what the model or instrument is measuring.
4. Adding “5C categories” since our developmental assessment of organizations and selection planning of candidates above Senior Manager roles should include their current, target and growth in context interface, character/cultural style, competencies, consciousness and degree of coherence as well as capacity (see #2 above).
5. Adding “language” since most instruments are available in only a few languages and some may not work across language barriers (e.g. sentence completion tests do not work grammatically in Japanese in our experience).
6. Expanding the content of “source” by adding feedback and perspectives from value-chain stakeholders in addition to academics.
7. Changing “publication type” to “evaluation type” and expanding the categories to include fieldwork (e.g. “pre-test with colleagues,” “focus group,” “client trial”).

8. Expanding “aspect of psychometric quality addressed” to “reliability & validity” (see Issue #4 below).

We add these categories to Table 2. Sources not found in the References section are found in Stein and Heikkinen (2009).

4. Clarifying and Increasing the Validity & Reliability of Instruments, Models & Metrics: Stein & Heikkinen (2009) are clear that they are focusing solely on developmental psychology models and metrics based on linguistic responses (and all instruments and models in their article deal solely with Core Capacity). Within these parameters, they seem to be concerned about the validity and reliability of the instruments, models and metrics they discuss (again, with the exception of the LAS, HCSS and RO). This is an extremely important point, especially if we work solely with Core Capacity-focused, linguistic-based, developmental psychology instruments and market to and work with our clients consistently from a “T/Achiever/Orange” point of view that assumes “the truth is out there” and can be disclosed by one or more instruments. This is a conundrum that we have not often shared, since in virtually all work with clients to date (after a single, mutually-traumatic experience with a former key client), we have mitigated this risk using one or more of the following practices:

1. Provide the client with a “Quality of Results Rating” (QORR) that shows the rough reliability of the instrument alone and when packaged with other components. This is all we have done to date when the client is purchasing only the instrument results (more than 99% of our clients to date have purchased packages such as leadership coaching, executive development, OD or change management rather than single instruments). Since over 99% of our hundreds of clients have chosen packages, the QORR is based on the results of our instruments cross-checked against longitudinal scores from multiple instruments, observations and lag indicators and cross-checked against what the clients DO and GET (see #3 below).
2. Provide scheduled time for our scoring team community of practice (COP) to consistently refine and granulate the categories that we make within our meta-model and use within our instruments to define specific metrics. Our COP also consistently cross-checks our meta-model and categories against evolving and new models, metrics and instruments that claim to measure the same things, engages in learning from thought leaders, and engages in dialogue with key colleagues. These are our primary ways of dealing with validity.
3. Engage the client in a “5C” dialogue that helps identify “where they are,” “where they are going,” and how we can be most helpful in their journey. Although this often involves Core Capacity transformation (since most of our clients are G, I or T people in the roles of intercultural managers (requires “H” results) or multi-national organizational leaders (requires “A” results), it also almost always involves some combination of Consciousness, Context Interface, Character, Competencies and Cohesion since the key phrase here is “requires results” and NOT “requires Core Capacity.” We have found (learned in our traumatic experience and verified in every case afterwards) that even “pre-conventional” leaders like to discover for themselves

“where they are” and not be told by consultants who are not actually responsible for the results themselves. We are speaking here of the organization leaders we have encountered, and cannot confirm whether this pattern holds true in the general population.

4. Provide three forms of feedback: what the clients have done (DO) and the results they get (GET) in addition to what they say and what judge of their interior from how they respond on instruments (BE). This provides a very concrete form of “tangible to intangible” or “visible to invisible” reliability cross-check to use the 4Q Iceberg model. Since “psychometric” checks deal only with intangible (internal) reliability and validity and does not include the reliability & validity of tangible results such as those provided by lag indicators (e.g. profits increased, increased number of lives saved, tons of carbon sequestered, etc.), we suggest expanding our definition of “development” to include tangible/visible measurement as well.

To summarize, developmental models, metrics and instruments need to be about more than stage development measured by (even calibrated) Core Capacity-focused, linguistic-based, developmental psychology metrics that produce lead indicators and are shown to be reliable and valid by psychometric qualities alone. Development, client satisfaction, and contribution to our communities additionally have benefited greatly from a cohesive 5C approach with clear, verifiable real-world results. A community that addresses these issues and produces a systematic and clear overview of which instruments, models and metrics best (or even moderately) provide tangible value to which clients in what contexts and conditions and works to improve the instruments, models, metrics and overview is the community that we want to co-create with you. As a first step, we end this article by building on Table 2 from Stein and Heikkinen (2009) and the invitation to help us continue to evolve this work together.

Warm regards, Chad, Norio and Zach.

Table 2. Capacity Models and Instruments

Model	Instrument(s)	Scope	Metrics/5C Categories	Indicators	Type
Abundance / Sustainability	Organizational Sustainability Scorecard	Team Organization	Context Interface, Core Capacity (14 sustainability lines)	Lead + lag	Certified objective scorer + self-scored (tangible)
	City & Community Sustainability Scorecard	City/Community Region	Context Interface, Core Capacity (14 sustainability lines)	Lead + lag	Certified objective scorer + self-scored (tangible)
Cultural Transformation Tools	Individual Values Assessment	Individual	Core Capacity (values line), Character	Lead	Self-scored (intangible)
	Leadership Values Assessment	Individual	Core Capacity (values line), Character	Lead	Self-scored (intangible)

Model	Instrument(s)	Scope	Metrics/5C Categories	Indicators	Type
	Small Group Assessment	Team	Core Capacity (values line), Character	Lead	360 (intangible)
	Cultural Values Assessment	Organization Nation	Core Capacity (values line), Character	Lead	360 (intangible)
Developmental Model of Intercultural Sensitivity (DMIS)—by M. Bennett	Intercultural Developmental Inventory (IDI)	Individual	Core Capacity (intercultural line)	Lead	Self-scored (intangible)
Constructive Developmental Framework	Developmental Assessment (Cognitive + Emotional/Social + Need/Press)	Individual	Core Capacity (whole + emotional & social lines), some Consciousness, some Context Interface	Lead	Certified objective scorer (intangible)
Ego Development	SCTi/MAP	Individual	Core Capacity (whole)	Lead	Certified objective scorer (intangible)
Leadership Capacity	360 CAP	Individual	Competencies, some Core Capacity	Lead + lag	360: Self +4-10 (intangible + tangible)
	Leadership Interview	Individual	Core Capacity (whole), some Competencies	Lead	Certified objective scorer (intangible)
	Leadership Questionnaire	Individual	Core Capacity (whole), some Competencies	Lead	Certified objective scorer (intangible)
	Leader Profile	Individual	Competencies, Core Capacity (whole), some Consciousness, some Context Interface	Lead + lag	Certified objective scorer + 360 CAP results (tangible + intangible)
	Team 360 CAP	Team	Competencies, some Core Capacity	Lead + lag	360 (intangible + tangible)
Leadership Development Framework	Leadership Development Profile	Individual	Core Capacity (whole)	Lead	Certified objective scorer (intangible)
Lectical Assessment System	LERA, LLRA, LDMA, LRJA, LSUA, LIMA, LMLA, LMSA	Individual	Core Capacity (cognitive line, other?)	Lead (lag?)	Certified objective scorer (intangible)?

Model	Instrument(s)	Scope	Metrics/5C Categories	Indicators	Type
Requisite Organization (including Complexity of Mental Processing—CMP)	Requisite Organization Platform by ROII. No instruments found by GO Society.	Organization (Jacques' original work could also be used with Individuals)	Core Capacity (cognitive line, other?)	Lead (lag?)	Certified objective scorer (intangible)?
Spiral Dynamics	Values Test	Individual	Core Capacity (values line)	Lead	Self-scored (intangible)
	Change State Indicator	Individual	Core Capacity (values line)	Lead	Self-scored (intangible)
	CultureSCAN-- Personal	Individual	Core Capacity (values line)	Lead	Self-scored (intangible)
	ManagerSCAN 360	Individual	Core Capacity (values line)	Lead (lag?)	360(intangible)?
	BusinessSCAN	Organization	Core Capacity (values line)	Lead (lag?)	360(intangible)?
	SchoolSCAN	Organization		Lead (lag?)	360(intangible)?
	CommunitySCAN	Community	Core Capacity (values line)	Lead (lag?)	360(intangible)?
	CultureSCAN	Team, Organization, Community, Nation	Core Capacity (values line)	Lead (lag?)	360(intangible)?
(Subject-Object Theory?)	Subject-Object Interview	Individual	Core Capacity (whole)	Lead	Certified objective scorer (intangible)

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Interkonnections is a team of change leaders committed to helping our clients evolve their organizations, leadership and talent in ways that sustain and create value economically, socially and eco-systemically at both the global level and the communities within which they operate. We do this by working with them to create a cultural and systemic tipping point of abundance where together we are able to continually improve performance and generate added value along a triple bottom line of prosperity, people and place for ourselves, our organizations, communities, cities and the ecosystems that sustain us. We do this to help meet the changing needs of our clients and communities in the 21st Century, and leave the world a better place for our children.

Chad Stewart is a Principal of Interkonnections, Co-Director of Integral Japan, Director of the Assessment and Development Center at the Intercultural Communication Institute (ICI), Projects Director for Abound and Vice-Chair of the American Chamber of Commerce Japan's CSR Committee. Since 1995, he has created in-house Learning & Development (L&D) systems and led change management, leadership pipeline, and OD projects in multinational corporations that have saved clients hundreds of millions of dollars, created and saved international product lines, smoothed M&A transitions, transformed a "leaderless" division into the regional talent bank for a Fortune 100, and improved triple-bottom-line performance. He has also worked with cities and prefectures, SMEs, NPOs and the UNCRD, and has lectured at the Kyoto University MBA School. Chad holds a Master's Degree in Intercultural Relations from ICI and is certified in the MAP/Leadership Development Profile, Spiral Dynamics integral Levels 1 and 2, Cultural Training Tools, and other L&D and change management technologies. He works in English and Japanese.

Zach Smith is a Principal of Interkonnections, Director of Abound (a sustainability leadership organization that works with organizations and cities) and Director of Eco Nikko (an organization focused on individual health and development through retreats in Nikko, Japan). With over 10 years experience in human and organization development, his areas of expertise

include human resources strategy and management, learning program design and implementation, coaching, facilitation, whole systems change and sustainability. He works with Fortune 100 and 500 organizations across a wide range of industries including accounting, airline, automotive, banking and financial, food service, IT, management consulting, petroleum, pharmaceutical and retail as well as regionally based organizations and start-ups. Zach has provided sustainability workshops for Antioch University in the US from where he also received a Masters in Organization Development and Change. He works in English and Japanese.

Dr. Norio Suzuki *is a Principal of Interkonnections and Director of Integral Japan. He has over 10 years of experience in human psychology and development (assessment, consulting, coaching, and training) with Fortune 500 companies, NPOs, and individuals. A large part of this work is in developing Leadership Pipelines and conducting Executive Coaching and Leadership Assessments in corporations. Norio holds a Ph.D. in Humanities from the California Institute of Integral Studies (CIIS), and is certified in Susann Cook-Greuter's MAP/Leadership Development Framework and Profile, Spiral Dynamics integral Levels 1 and 2, and Harvard's Negotiations for Strategic Success. He also led the CIIS community that used the Subject/Object Interview while acquiring his Ph.D., and is the official translator of the book "Integral Life Practice" into Japanese. He works in Japanese and English.*