# An Artificially Intelligent CDF Coach: Considerations regarding App-based executive coaching

An app-based coaching system needs to foster in its user a CDF-based 'coach persona', and in the client a higher level of self-awareness of the coaching conversation. Such an app would use social-emotional prompts and clusters of TFs in order to re-fashion the coaching dialogue according to strictures derived from CDF interview protocol, focused on "lean and agile" coaching: The app would:

- 1. Reduce chances of anecdotal input from the client, thus deepening the universe of discourse
- 2. Raise the coach's self-awareness of what s(he) puts into that universe in real time
- 3. Empower the coach to place targeted social-emotional responses -- questions and comments -- to prompts chosen by clients (as suggested by the app)
- 4. Make cognitive prompt proposals, whether DTF moments of thought forms, for triggering succinct, "scorable" client answers
- 5. In general, shift behavioral 'persuasion' to developmental 'listening'.

Because developmental coaching in the sense of the Constructive Developmental Framework is in its infancy, practiced by a small community often mixing behavioral and developmental coaching, the notion of an app-based, 'strictly' developmental coach in the sense of CDF is an attractive idea. In this blog, I am envisioning what such a device could look like, what kinds of knowledge of CDF its use would presuppose, and what its benefit for clients would be.

#### The Nature of CDF-based Coaching

Developmental coaching is rarely practiced in its pure form. This is the case because very few coaches have learned developmental theory and themselves are for the most part in a other-dependent position of meaning making, thus defined by, and dependent, upon clients' expectations. This state of mind of the coach is of little benefit above all to executives who often are self-authoring, and thus tend to be more highly developed than the coaches they are assigned to or hire.

When thinking of a way out of this dilemma that holds up self-organization in organizations, both in individuals and teams, the notion of an artificially 'developmental' coach becomes an attractive one since it would accelerate upgrading conventional coaching practice, and thereby funnel new benefits to managers and executives who increasingly are asked to work in environments of a high degree of informational and conceptual complexity.

What has been missing in professional coaching for a long time is the notion of coach and client being developmentally 'in the same boat', thus equally under lifelong development as adults (which accounts for the possibility that the client may be more highly developed than the coach). The benefits of realizing this simple notion, both in the emotional and cognitive domain of coaching, are tremendous.

Simply put, coaching from this perspective changes into an undertaking in which the primary focus is put on the quality of coaching dialogue for both parties of coaching, a quality which is developmentally an expression of self-organization. This new focus is based on a notion familiar

from CDF, that in a professional conversation 'every word counts' since verbal language embodies concepts whose depth is often merely skimmed, both in emotionally and cognitively focused conversations. An artificially intelligent CDF-coach app is able to go into depth on concepts alive at the boundary with unconscious verbal articulations.

Missing also has been the realization that a professional coach does not simply employ his "little personality" (whatever it may be), but uses his private self *professionally*, i.e., protected as well as enlivened by a mask or 'persona' that is based on positioning himself vis a vis clients as a self-authorer different from his or her little personality (as is required in clinical practice).

Leaving behind his merely behavioral personality, the coach becomes an (applied) epistomologist, as is needed for emphatically developmental coaching. This professional turn a developmental coach needs to make becomes decidedly easier to accomplish when it is, as in CDF, supported by a coaching methodology focused on depth, rather than breadth, of movements-in-thought.

It is here that a CDF-based coaching 'app' can achieve a revolution. This revolution would comprise the following facets:

- 1. The app would force a strict distinction between social-emotional and cognitive coaching concerns, not in order to separate but rather link them.
- 2. The app would serve as an in-depth interviewing or 'intake' tool, enabling the coach to set limits to what can be said by the client, in the sense of reducing the breadth of client input to depth, both of awareness and listening.
- 3. This would be achieved by the app by guiding the coaching to become highly selective both about the experiential domain discussed and the responses fashioned to client concerns.
- 4. A coach-guiding app would require the coach to study developmental theory in both of its branches, social-emotional meaning making and cognitive sense making, as modeled by CDF.
- 5. By implementing such an app, the behavioral notion of coaching, now dominant, would be "put in its place", to be used more selectively, and without conflicting with a strictly developmental coaching strategy.

# **Basic App Design**

Wherever client responses can be 'filtered' to reduce the merely associative, 'anecdotal', use of language, coaching conversations gain not only in conceptual precision but also therapeutic depth and effectiveness. For this reason, the app here envisioned is above all a 'noise reducer' that cuts down on clients' tendency to walk "all over the place", whether the domains walked through are emotional, cognitive, or psychological.

The app thus enforces a clear delineation between what is emotional, cognitive, and psychological, domains of consciousness which, in the app's "expert" use, can be linked as the coach decides is best, based on his/her adult-developmental understanding of the client. In short, the separation the app achieves between the three domains in question is a means to an

end, not an end in itself; it is meant to enable linking disparate but intrinsically co-defined domains of human functioning.

From the vantage point of these notions, the app's design is tripartite: (A) social-emotional, (B) psychological, and (C) cognitive.

## А

Clients' social-emotional issues can best be elicited by using prompts chosen by the client as topics of conversation that put the client in charge of the coaching conversation. One subset of these prompts (e.g., "important to me") is geared to boosting the client's self-confidence, while a second subset, when chosen by the client, helps the client articulate what is a problem for him or her, or is not working as it should. The app's language model needs to help the client to clearly articulate either concern to the fullest.

# В

Clients' psychological issues can be addressed by making use, for instance, of M. Aderman's 'Need/Press' Questionnaire. The questionnaire distinguishes 3 clusters of 'traits': self-conduct, approach to tasks, and interpersonal perspective (emotional intelligence). In the psychological module of the app, the client is prompted to speak to 1 of 6 issues in each of the 3 clusters, presented in the App in a suitable wording that invites client articulation of strengths and weaknesses stemming from self-observation.

C. Clients' cognitive issues are addressed within CDF's "Three Houses" metaphor which distinguishes between a client's "Task House", "Organizational House", and "Self House". In the first, the client's function and roles are at issue, while in the second, the influence of the client's organizational environment on his/her work gets a hearing. In the third, the client's professional (not private) self is evoked in reference to his/her motivation to do the work in question and the career path the client envisions relative to it.

In all three domains, conceptual clarity in terms of DTF moments of dialectic and thought forms (TFs) is a major focus. This focus entails that the app both prompts and enables the coach to proceed like a highly flexible and holistic thinker whose task it is to challenge the client's ability to raise his/her level of self-awareness. In other words, the app heightens both the coach's and the client's real-time functioning.

## Inter-module Linkages (Example)

The separation of modules A, B, and C is strictly operational, in the sense that it is meant to guarantee that the rich interconnections between the modules can be instantiated by the coach in line with the real-time needs of the client.

For instance, a client may have chosen to converse about what is *important to him* in leading a specific team. He has thereby placed himself in (or is nudged by the coach into) the social-emotional domain where self-positioning, self-observation, and perspective-taking are at issue, and where the question arises what social-emotional 'stage' the client presently occupies.

At this point, an app would suggest pertinent comments and questions the coach could be entertaining, and could suggest 'testing the upper or lower' limit of the zone of meaning-making (RCP) the client is perceived by the app to be in.

A CDF-approach to social-emotional issues is that they are inseparable both from psychological and cognitive topics. For example, what is important to a client always has a psychological aspect as well as a cognitive one. The psychological aspect may trigger 'approach to task' issues, or else 'self-conduct' issue, and may also entail a peculiar way of taking perspectives on others in the sense of emotional intelligence.

A conversation about what is important to a client also has a purely cognitive core which concerns the systemic details of what is important, their unfolding in real time, past, present, or future, and the way they transform for the client over time, and can be influenced by way of the client's agency. Here, too, the app could make suggestions to the coach about which specific moment of dialectic to pursue further, or even what thought form to probe for as s(he) proceeds with the social-emotional prompt s(he) is presently working from (given enough time to do so).

Clearly, the app must facilitate making possible connections between all three domains of consciousness here in play which a coach who is a CDF-expert would naturally want to put into relationship with each other, for the sake of gaining clarity about what is important to the client.

#### **Scoring Hierarchy**

Conversations guided by the app are referred to as "sessions". Each session is timed and recorded, as well as transcribed for the sake of evaluating the coach and "scoring" the client. Rather than scoring single sessions, bundles of 5 or 10 sessions are evaluated to create a larger data base.

## Coach

Coach evaluation by app is presently a *terra incognita*, having to do with principles of coaching supervision. Supervision models abound. Therefore, a CDF-commensurate model needs to be established. Coach evaluations can be crafted in terms of the coach's CDF-competence, coaching strategy pursued, perspicacity (fluidity of thinking), and closeness to the client's "trains of thought". These aspects can be partly inferred from the timing, expressed self-positioning, and cognitive perspicacity ('challenging index') that characterize the coach's interventions.

#### Client

Regarding the client, the app follows a three-fold scoring protocol: social-emotional issues are scored first since they strongly ground and inform psychological ones. Scoring outcomes in these domains are input to the app's cognitive scoring module in order to guide the "cognitive reading" of the client's part of the session text.

To put this differently, one could say that social-emotional and psychological findings are used to formulate "cognitive scoring hypotheses" regarding both the proportional weighting of moments of dialectic in the client's part of the session, and the explicit evaluation of characteristic 'thought form constellations' occurring in client utterances. In this way, the app connects all three scoring dimensions for feedback to both coach and client, viewing both parties from two different vantage points.

An alternative scoring strategy consists of using cognitive scores as predictors of socialemotional ones. This makes good sense since holding a social-emotional center of gravity without appropriate cognitive support will fail, especially if the risk factor for slipping to lower levels is high. For instance, a low systems-thinking index points to lack of holistic thinking and lack of both psychological and social-emotional adaptability, especially if the dominant dimension in the cognitive score is Context fixated on by purely logical thinking.

More specifically, social-emotional scoring regards the RCP – risk, clarity, potential – index of the client, while cognitive scoring focuses on the client's fluidity index generally, and cognitive score in particular.

The RCP arrived at by the app shows the proportions in terms of which a client can be said to be at a specific center of gravity (referred to as "clarity") relative to lower (risk) and higher (potential) stages. The cognitive score arrived at by the app shows the proportions in terms of which a client's present thinking is resident in the four moments of dialectic and how these proportionally relate to each other in terms of thought forms used during the coaching session (expressed in %). Finally, psychological scoring, initially done 'by hand' by the coach, is oriented to the three self-domains of *self-conduct, task approach and interpersonal perspective*, in terms of the established Need/Press or an equivalent scoring scale.

#### Session Reports

Sessions are timed to ½ or 1 hour such as to be comparable between clients and client populations. In its later versions, the app issues a "session report" separately for the coach and the client, in a format beneficial to each.

#### Summary

Developmental coaching in the strict sense of DTF is still a stepchild of the coaching industry, in part because learning to think in terms of adult development is not easy for most coaches, is costly, and takes time.

For these reasons, designing CDF-based apps for executive coaching and mentoring is an entirely necessary undertaking. CDF is a storehouse of well-honed procedures that enliven real-time coaching sessions and steer them in the direction of cognitively crisp entailments in all three domains of consciousness briefly explored above.