The International
Coaching Federation

Artificial Intelligence Coaching Framework and Standards: Examples

coachingfederation.org

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1. Introduction

Technology and AI systems can be applied in many different sectors and industries to generate optimal output. This document illustrates several examples of AI Coaching Systems currently available and snapshots of functionality and user experiences and is a complementary document to the International Coaching Federation (ICF) Artificial Intelligence (AI) Coaching Framework and Standards and International Coaching Federation (ICF) Artificial Intelligence (AI) Coaching Framework and Standards: Questions Stakeholders Should Ask.

1.1 Working Group Members

In April 2021, the International Coaching Federation (ICF) convened a small working group, the Artificial Intelligence Coaching Standards Working Group, with expertise in technology, coaching, and standards development. The working group consisted of:

- Matt Barney (XLNC and TruMind.ai)
- Joel DiGirolamo (International Coaching Federation)
- David Drake (The Moment Institute)
- Olivier Malafronte (Université Côte d'Azur and Rypple.ai)
- Harry Novic (Rocky.ai)
- Jonathan Reitz (FLUXIFY)
- Nicky Terblanche (University of Stellenbosch Business School and coachvici.com)

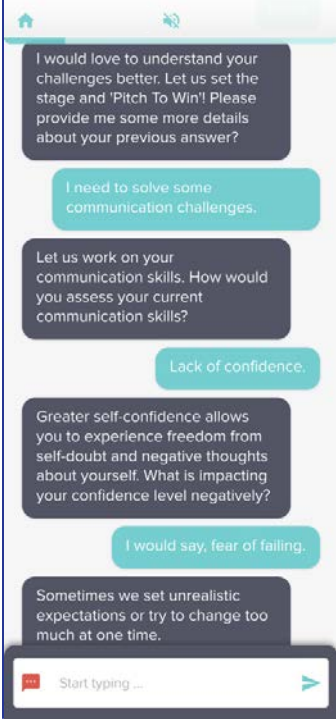The working group, and an external expert on professional standard setting finalized these standards in 2024.
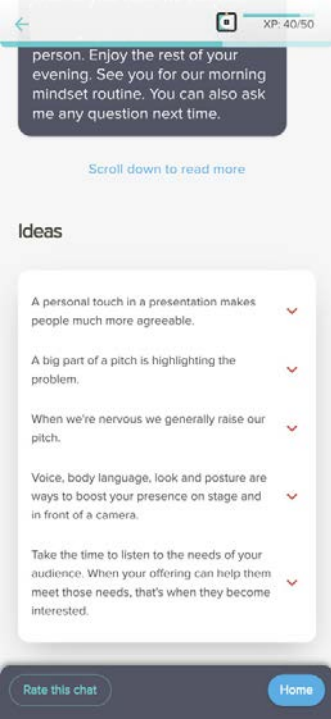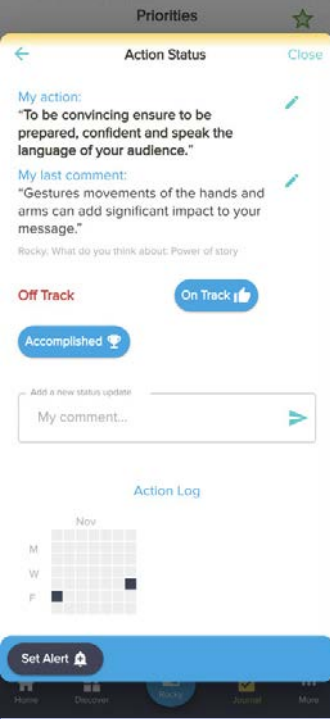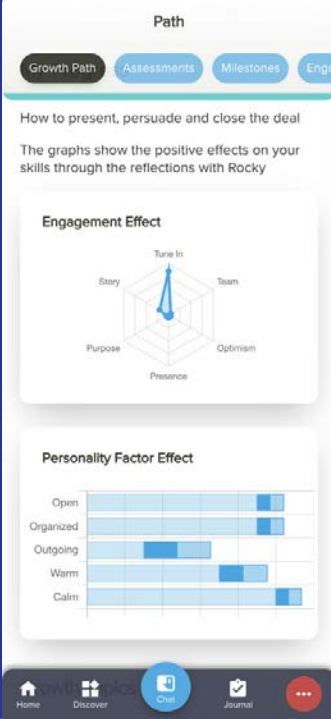
2. Example AI Coaching Systems

2.1 Example Illustration 1: Conversational AI Coaching App: Chatbot Interface

This application is an interactive self-coaching app that provides human-like coaching conversations with a chatbot interface that intends to increase self-awareness and inspires with questions and ideas through regular 5-minute reflections. The solution is tailored for young professionals who want to grow their soft-skills and develop a forward thinking solutions mindset. The application can be used by coaches to extend their services in between 1-on-1 coaching cases to keep clients engaged and to reinforce learning or by individuals to experience a light form of affordable self-coaching.

Application type: Conversational
Snapshots of functionalities and user experiences:
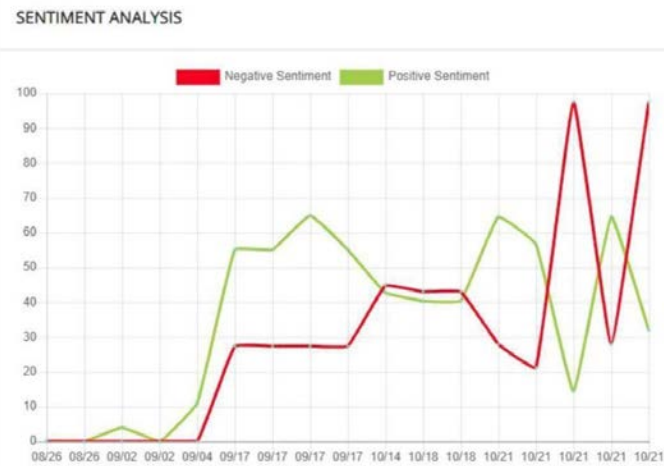
Coaching Chatbot	Inspirations	Follow-ups	Measurements
Conversational AI coach and chatbot for regular 5-minute reflections based on defined growth paths, current challenges, and goals.	The AI coach is generating personalized and tailored ideas that match to current challenges and intentions of the user.	The AI coach is assigning the challenges and intentions of the user into follow-up tasks and monitors their achievements.	The user activities and engagements are measured to visualize personal development progress.

2.2 Example Illustration 2: Sentiment AI of Journaling

The science of learning and emotions suggests that when people journal about the lessons they've learned from experience--applying coaching, for example--it helps them in a variety of ways. First, it helps them process the information more deeply, making retention better. Scheduled reminders to journal help clients remember to capture the lessons they've learned from applying expert or AI coaching in-between or instead of live sessions with a human coach. Second, there is also evidence that a healthy mix of emotions when learning and practicing is important. When a client experiences overly negative emotions, it is a sign that they are trying to perform a task that is too difficult, and if this persists, they may give up completely. On the other hand, when they experience overly positive emotions, it is also deleterious as it suggests they may not be stretching themselves enough, or not seeing things that they could be doing better. AI embedded into journaling that measures this emotional mix can help human coaches monitor and support clients in-between sessions, and plan live sessions based on their progress (or lack thereof).

Application type: Data-Processing
Snapshots of functionalities and user experiences:

| Sentiment Measurement of Journal Entry	Sentiment Trend Analysis
Client's journal sentiment measured (Coach view)	Trend of AI measurements of coaching client's journal emotions

2.3 Example Illustration 3: Conversational AI Coaching Platform: Avatar

AI technologies combined with machine learning and natural language processing enable access to coaching avatar interfaces (man, woman, or symbols) to provide users with a self-coaching activity before, during, or after coaching sessions, when individuals do not have access to coaching, or when organizations want to educate people in their organizations about coaching. Use cases can be leadership development, goal setting, situated reflection for decision-making or priorities check, conflict resolution, or the development of interpersonal, intrapersonal, or contextual capabilities. Use cases can be for workers, learners, and students. In this example the companies Davi The Humanizers and PocketConfidant AI combine their technologies to produce the avatar interface and interaction capabilities.

Images and illustrations used at the Society for Industrial and Organizational Psychology (SIOP) 2022, conference paper available on ResearchGate
https://www.researchgate.net/publication/360345784_Artificial_Intelligence_Coaching_The_Future_is_Here

Application type: Conversational
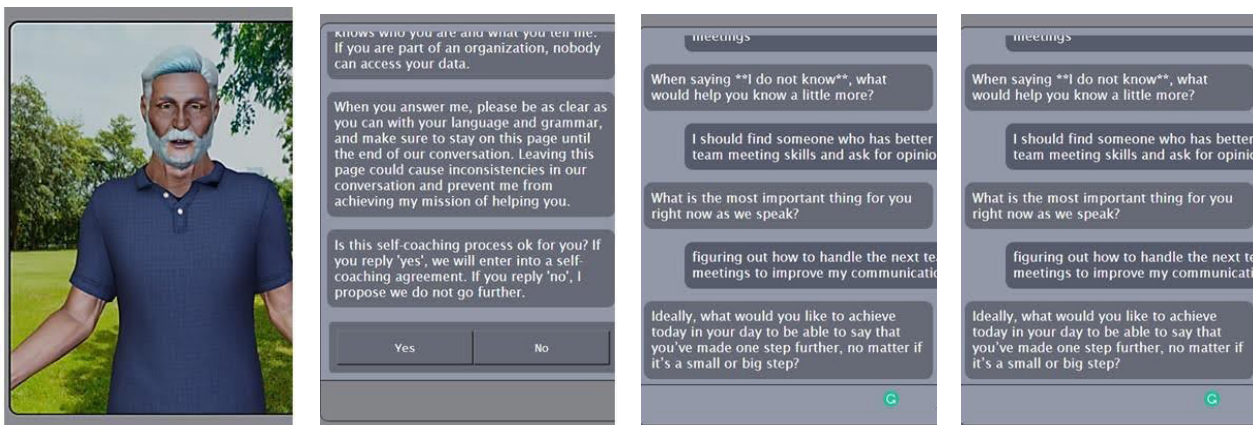
Multi Modalities
✔ Visual
✔ Audio
✔ Writing

✔ Ethical framework
✔ Agreement

✔ Active listening
✔ Questioning
✔ Clarification
✔ Goal

✔ Evaluation
✔ Accountability

Standards elements present in this AI Coaching Application example:

- Elements A + B (AI Ethics, Establishes and Maintains Agreements, Cultivates Trust and Safety) are achieved through providing information about ethics, privacy and coaching principles that are used, and asking users whether they agree to the proposed principles.
- Elements B + C (Maintains Presence, Embodies a coaching mindset, Listens Actively, Evokes Awareness) are achieved through the integration and use of key coaching behaviors in interactions with users (e.g., active listening, questioning, clarification or summarizing, goal formulation, evaluation, supports accountability, offers calendar functionalities.
- Elements D (Facilitates Client Growth) is achieved by facilitating reflection on and formulation of goals, resources, priorities and what has been learned during the conversation.
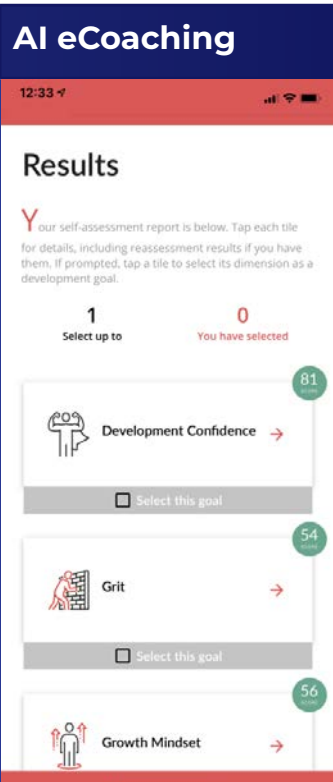
- Elements E (Coaching Reliability Measures, System Usability) are achieved through qualitative user feedback, ratings on progress and satisfaction of the experience as well as academic research analyzing both AI Coaching Application's and users' behaviors and outcomes (Malafronte & Loufrani-Fedida, 2023).

- Elements F (Security and Privacy, Resilience and Accessibility) are addressed by not requiring nor collective personal identifiable information such as names, email addresses or IP addresses. Research data is disclaimed and approved by user consent, application is accessible on more than one device and browser and works 99% of the time.

2.4 Example Illustration 4: Scheduled eCoaching

The AI platform provides an approach to assess clients, set goals, and deliver AI eCoaching at specific days and times to help them practice deliberately, concertedly, and purposefully. It further gives the client the ability to set subsequent nudges to journal about the lessons they've learned from that application of AI coaching, while giving a human coach private, confidential visibility to journal entries and chat exchanges.

Application type: Scheduling
Snapshots of functionalities and user experiences:

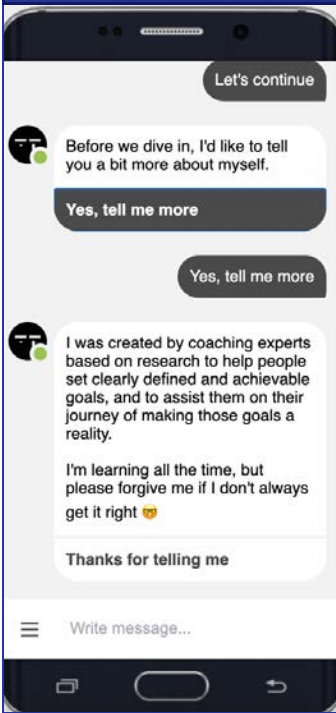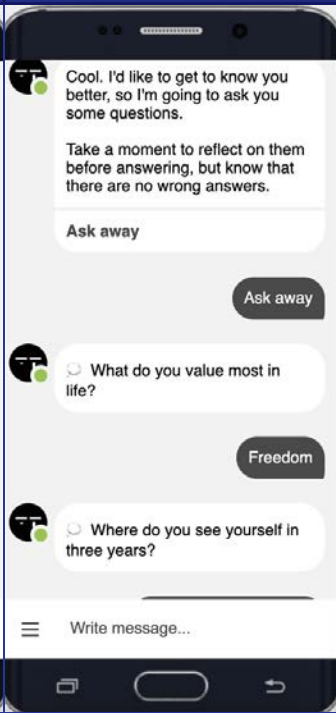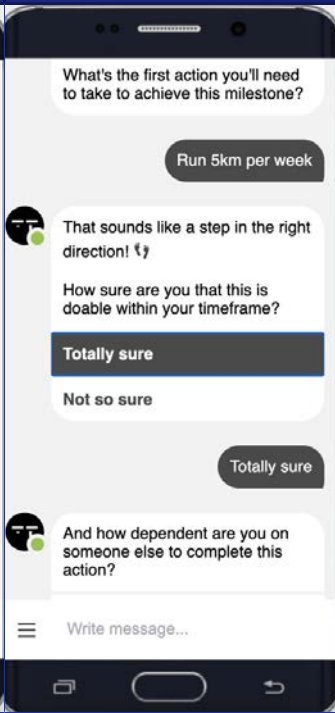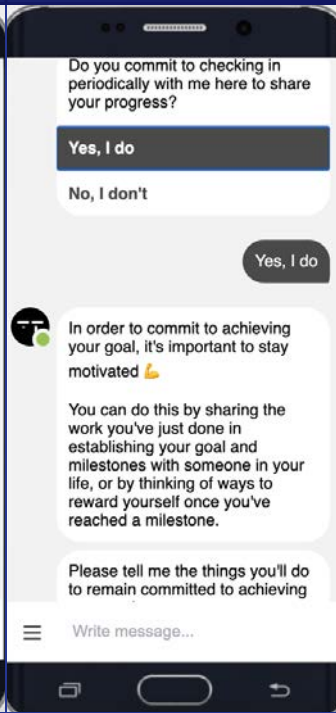| Assessment	Measurement	Scheduling	AI eCoaching
Client influences stakeholders to complete 360 and finishes computer-adaptive self-assessment	Quantitative results with AI interpretation of what they mean so a goal can be set	Client schedules goal-specific AI nudges or eCoaching that is in their "goldilocks" zone (not too hard or easy)	Client gets eCoaching push notification to practice and journal, captured in an interface visible to self and human coach

Automatic Reminders	Journal

Scheduled reminders to help clients journal and deepen lessons learned	Cloud allows coach to view journal, nudge, and ask and answer questions in between live sessions

2.5 Example Illustration 5: Conversational AI Coaching: Goal Attainment Chatbot

This AI chatbot coach uses the GROW model and goal theory to help clients identify and set goals and action plans, and monitor goals attainment progress.

Application type: Conversational
Snapshots of functionalities and user experiences:

Disclosure	Reflection	Action setting	Accountability
The AI coach shares openly it's abilities and limitations	Open ended questioning helps deepen the client's reflections and insights	Client actions are reviewed for relevance and feasibility W	Client is encouraged to take responsibility and accountability

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