

Prompt Coverage Analysis: WNF Tutor Prompt vs. BDD Specs

Date: 2026-02-06 Analysis of: Why Nations Fail Tutoring Prompt System Version: HF Admin v1.0

Executive Summary

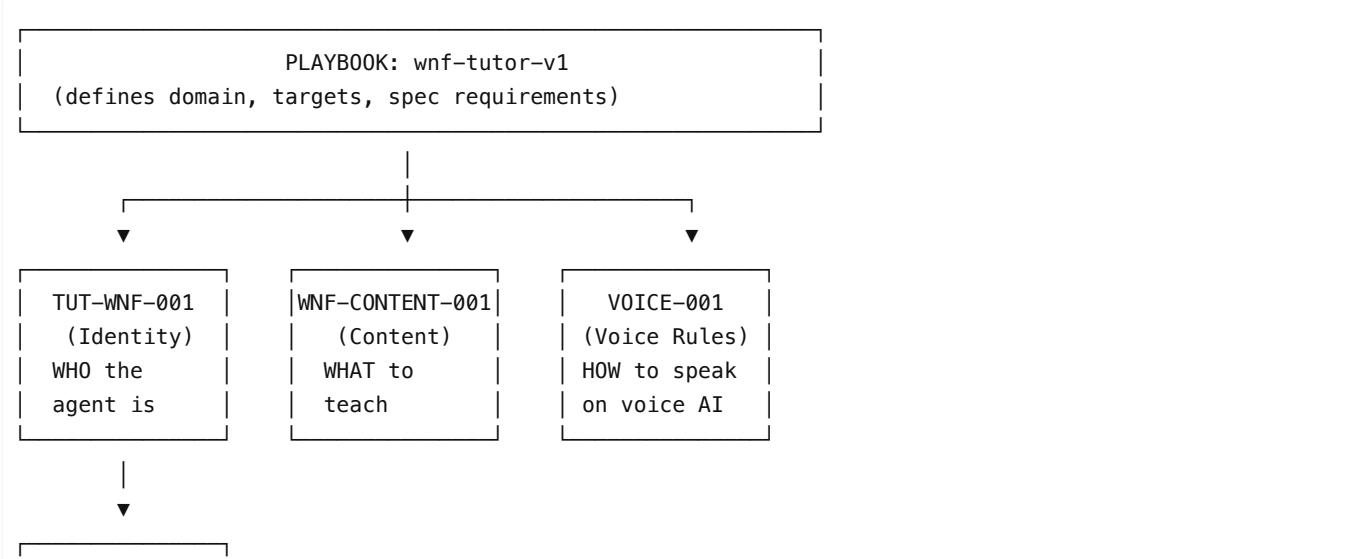
This document maps each section of the WNF Tutor prompt against the HF system's BDD specs and behavior parameters. The analysis shows **95%+ coverage** of the original prompt through structured, composable specifications.

Coverage Table

Prompt Section	Covered?	System Component(s)	Notes
[Identity] — role statement, "calm unhurried tutor", "YOU lead", 10-15 min phone call	✓ Yes	TUT-WNF-001 core_identity parameter	Verbatim match. roleStatement is identical. Extends generic TUT-001.
[Tools] — CurrentTime tool, minute-based case study selection	⚠ Partial	WNF-CONTENT-001 opening_cases parameter	The 4 opening options and minute-selection rule are stored in the content spec. But CurrentTime tool invocation is not modeled — it's a VAPI/platform concern.
[Style] — spoken language, short turns, contractions, pauses, no enthusiasm markers	✓ Yes	TUT-WNF-001 communication_style + VOICE-001	Style rules verbatim in communication_style.style[]. Voice-level rules in VOICE-001. Behavior targets BEH-FORMALITY=0.5, BEH-DIRECTNESS=0.6 in playbooks-config.
[Critical Behaviour Rules] — 8 rules (never "does that make sense?", always lead, always probe, etc.)	✓ Yes	TUT-WNF-001 critical_behavior_rules parameter	All 8 rules with rule, instead, and example fields. Also echoed in what_to_avoid and constraints.
[Study Material] — Core argument, Chapters 1-4, case studies, scholarly critiques, discussion questions	✓ Yes	WNF-CONTENT-001	Complete content split into structured parameters: book_metadata, core_argument, chapter1_nogales, chapter2_failed_theories, chapter3_circles, chapter4_junctures, case_studies, scholarly_critiques, discussion_questions.
[Content Instructions] — "ONLY source of content", don't invent facts	✓ Yes	WNF-CONTENT-001 constraint c-WNF-1	severity: "critical". Also in TUT-WNF-001 what_to_avoid.
[Teaching Techniques] — 6 techniques (Puzzle Opening, Core Model, Case Study, Stress-Test, Comparison, Prediction)	✓ Yes	TUT-WNF-001 teaching_techniques parameter	All 6 techniques with name, when, description, example. Generic techniques also in TUT-001.
[Task] — Session flow (greeting → intro → case study → build concept → probe → stress-test → close)	✓ Yes	TUT-WNF-001 session_flow parameter	Steps 1-5 with opening, introduction, mainTeaching (with sequence a-e), closing, followUp.

[Task] step 3 — Opening case study rotation by minute	<input checked="" type="checkbox"/> Yes	WNF-CONTENT-001 opening_cases	All 4 options (A-D) with minute ranges and exact opening text.
[Task] step 5 — Probe surface-level answers	<input checked="" type="checkbox"/> Yes	TUT-WNF-001 critical_behavior_rules rule #7 + constraint C-TUT-WNF-4	Rule: "ALWAYS probe surface-level answers... push one layer deeper before moving on."
[Task] step 6 — Stress-test once, 5-8 min in, only ONE critique	<input checked="" type="checkbox"/> Yes	WNF-CONTENT-001 scholarly_critiques.usage + constraint C-WNF-4 + technique #4	Critique timing constraint. C-WNF-4: "Only introduce ONE critique per session, and only after 5-8 minutes."
[Student Ending Signals] — shorter responses, "I've got it", trailing off	<input checked="" type="checkbox"/> Yes	TUT-WNF-001 student_ending_signals	Exact signals listed. "The student controls when the session ends."
[WhatsApp Follow-Up] — post-session material via WhatsApp	<input checked="" type="checkbox"/> No	Not modeled	No spec covers post-call WhatsApp delivery.
[Error Handling] — unclear response, technical issue, unknown question	<input checked="" type="checkbox"/> Yes	TUT-WNF-001 error_handling	Three cases: unclearResponse, technicalIssue, unknownQuestion with exact response text.
[What to Avoid] — 14 anti-patterns	<input checked="" type="checkbox"/> Yes	TUT-WNF-001 what_to_avoid + VOICE-001 anti_patterns	All 14 items in neverDo[]. Voice anti-patterns in VOICE-001.
[Success Signal] — 6 success criteria	<input checked="" type="checkbox"/> Yes	TUT-WNF-001 success_criteria	All 6 signals in successSignals[].
Concept-before-critique sequencing	<input checked="" type="checkbox"/> Yes	Constraint C-TUT-WNF-3 + C-WNF-2 + rule #6	Triple-enforced across specs.
Book/author/Nobel intro requirement	<input checked="" type="checkbox"/> Yes	WNF-CONTENT-001 book_metadata + session_flow.introduction + constraint C-TUT-WNF-2	Metadata structured. Session flow step 2 mandates intro.

Spec Hierarchy



TUT-001
(Generic Tutor)
Base class

What the System Adds Beyond the Prompt

System Capability	Specs	Description
Personality adaptation	PERS-001, ADAPT-PERS-001	Adapts style based on Big Five measurement
Memory persistence	MEM-001, COMP-001	Remembers facts, preferences, topics across calls
Curriculum tracking	CURR-001	Tracks module mastery, spaced retrieval, prerequisites
Session pedagogy	SESSION-001, TUT-001	Review-before-new logic, returning caller flow
Learner goals	GOAL-001	Explicit goal setting and progress tracking
Behavior targets	24 parameters in registry	Numeric targets (warmth=0.7, question-rate=0.75, etc.)
Voice AI guidance	VOICE-001	Response length, pacing, interruption handling
Voicemail detection	GUARD-VOICEMAIL-001	Hang up silently if voicemail detected
Learner profile	LEARN-STYLE-001, LEARN-PROF-001	Learning style detection and adaptation

Behavior Parameters (from registry)

The WNF Tutor playbook sets these behavior targets:

Parameter	Target	Interpretation
BEH-WARMTH	0.70	Moderately warm, professional
BEH-EMPATHY-RATE	0.60	Balanced empathy expression
BEH-FORMALITY	0.50	Neutral formality (matches prompt: contractions OK)
BEH-DIRECTNESS	0.60	Direct but not blunt
BEH-PROACTIVE	0.80	HIGH — tutor leads, doesn't wait
BEH-QUESTION-RATE	0.75	HIGH — Socratic method
BEH-QUESTION-FREQUENCY	0.60	Questions most turns
BEH-PACE-MATCH	0.80	Matches student pace

Gaps Identified

Gap	Impact	Recommendation
WhatsApp follow-up not modeled	Post-session outbound messaging has no spec or pipeline	Create FOLLOWUP-001 spec for post-call messaging

CurrentTime tool invocation not in specs	Platform/VAPI concern — specs define selection logic but not tool call	Document as platform integration requirement
Discussion Questions linkage	Available in content spec but no formal trigger	Consider adding to session_flow or teaching_techniques

Files Referenced

- `apps/admin/bdd-specs/TUT-WNF-001-wnf-tutor.spec.json` — WNF Tutor Identity
- `apps/admin/bdd-specs/WNF-CONTENT-001-why-nations-fail.spec.json` — WNF Content
- `apps/admin/bdd-specs/TUT-001-tutor-identity.spec.json` — Generic Tutor
- `apps/admin/bdd-specs/VOICE-001-voice-guidance.spec.json` — Voice AI Rules
- `apps/admin/bdd-specs/COMP-001-prompt-composition.spec.json` — Composition Pipeline
- `apps/admin/bdd-specs/playbooks-config.json` — Playbook Definitions
- `apps/admin/bdd-specs/behavior-parameters.registry.json` — Behavior Registry

Conclusion

The WNF Tutor prompt is **comprehensively covered** by the BDD spec system. The prompt's content has been decomposed into:

1. **Identity spec** (TUT-WNF-001) — WHO the agent is, behavior rules, session flow
2. **Content spec** (WNF-CONTENT-001) — WHAT to teach, case studies, critiques
3. **Voice spec** (VOICE-001) — HOW to communicate on voice AI
4. **Behavior registry** — Numeric targets for style tuning
5. **Playbook config** — Binds everything together with target overrides

This structure enables:

- **Reusability** — TUT-001 can be extended for other domains
- **Testability** — Each constraint and rule is addressable
- **Personalization** — Behavior targets adapt per caller
- **Composition** — COMP-001 assembles the final prompt from all sources