

Figure 4.2, Types of EF Assessment Tools, conceptualizes these four types of assessment tools and highlights the relative pros and cons associated with each.

DIAGNOSTIC INTERVIEWS AND CONVERSATIONS

In general, the goal of using a diagnostic interview is to begin to form an impression about how the child uses her EF skills in naturalistic environments. This insight also helps inform decisions about the types of other assessment tools that may be needed and may suggest early thoughts about the child's particular EF profile. Sometimes, simply asking the right questions can also help to jump-start certain aspects of the therapeutic process, such as detecting gaps in awareness, recognizing environments that are overstimulating or underorganized, or forming hypotheses about the child's underlying language skills.

This section provides three sets of **Sample Interview Questions** for your use:

- Sample EF Interview Questions for the Parent or Caregiver, Appendix 4.1
- Sample EF Interview Questions for the Teacher, Appendix 4.2
- Sample EF Interview Questions for the Child, Appendix 4.3

It is not the intent that you ask only these questions, in only this order. Use the Sample Interview Questions as is, or use them as a starting point from which to proceed when establishing initial diagnostic conversations.

As with any other diagnostic conversation, **adapt your questions as the informant presents various examples** and characterizations of the child. You may choose to expand your line of questioning significantly into one particular aspect of EF, or you may stay with a broad perspective. When thinking about the kinds of questions to ask a parent or teacher, consider also asking how often these behaviors are observed, to what degree they interfere with the child's ability to function independently, and how often and what kind of cues are needed.

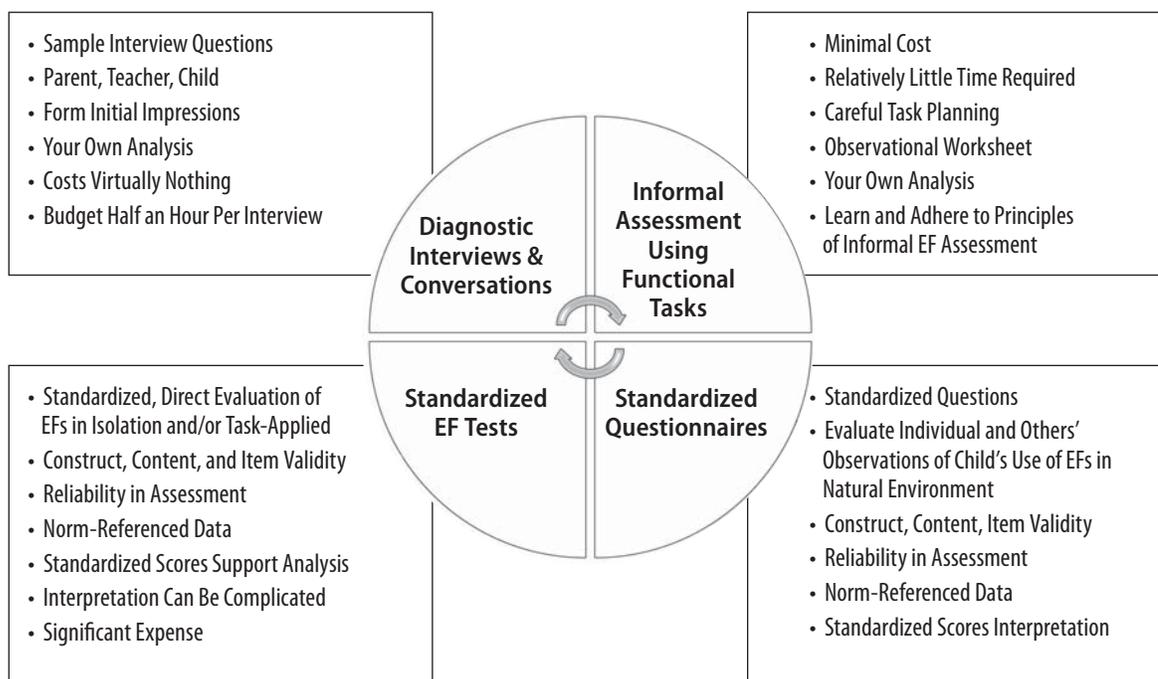


Figure 4.2. Types of EF assessment tools.

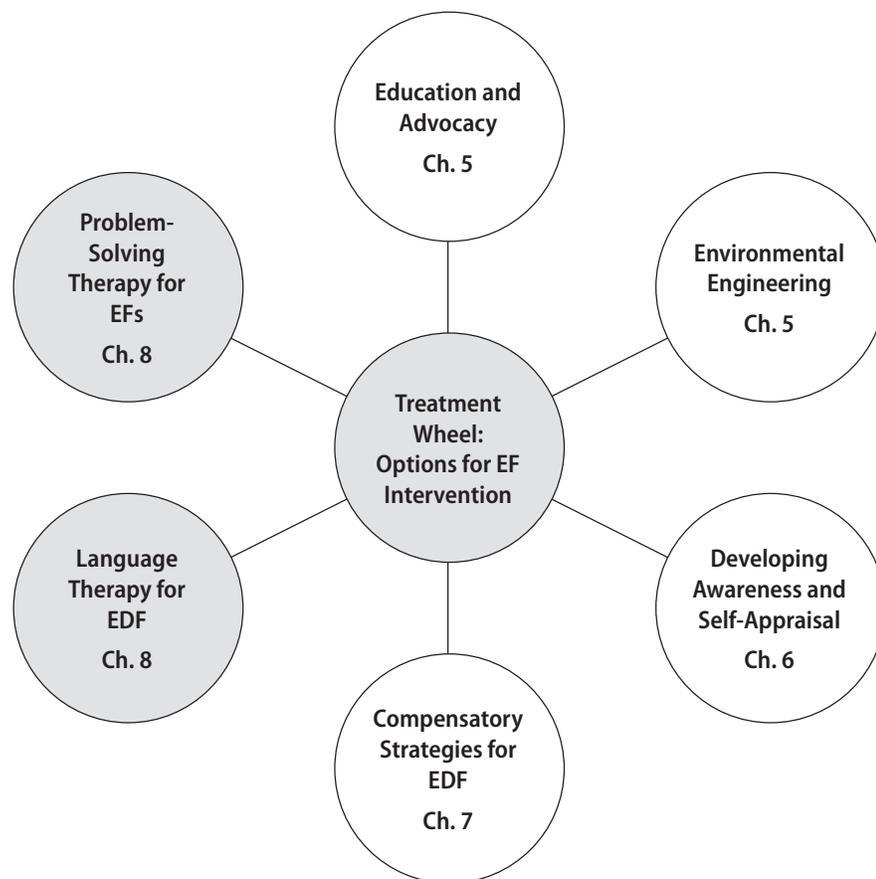


Figure 8.1. The Treatment Wheel: Language therapy and problem-solving therapy for EFs.

that will be addressed in this chapter, with particular attention paid to aspects of language therapy that can directly support certain EF skills.

The SLP will also need to make decisions about which EF skill to provide direct intervention for. This obviously requires a solid working knowledge of the child's EF profile so that we can select the most appropriate EF skill for intervention. But we also need to consider an entirely different way of conducting therapy.

Problem-Solving EF Therapy is an intervention method that we have used quite successfully over the past decade. Rooted in the fundamental tenets of discovery learning, problem-solving therapy methods provide the child with hands-on opportunities to *practice using actual EF skills*, such as sustained attention, initiation, inhibition, shifting, planning, monitoring, and regulating. While working on actual tasks, the child either does, or does not, use his EF skills. Outcomes are entirely open ended. Consequences are real-world, real-time extensions of the child's EF skills—specifically, self-monitoring, self-regulation, and use of language to reason and predict. Cueing hierarchies and thought-provoking questions are used to scaffold the child's use of his own EF skills to the greatest degree possible.

Finally, as we cannot address all EF skills at one time, we need to discuss ways to prioritize the various intervention options. The final element of this chapter will explore certain EF profiles and offer starting points and options for prioritizing treatment. Depending on the child's

ability to generate specific action-phrases; robust, abstract semantics; complex syntax; inferencing and reasoning skills; descriptive narratives that can defend, explain, convince, or otherwise argue; and proscriptive language that is strategic, plan oriented, and can predict.

EF-Related Language Needs

- Sentence structures *adequate for self-talk and thus, self-regulation*
 - Metacognitive verbs *to describe mental actions, thus making cognitive “activity” concrete or tangible*
 - Capacity to generate specific action-verb phrases *for starting, shifting, stopping, and other means of self-regulation*
 - Robust, abstract semantic base *from which to compare, differentiate, or otherwise conclude patterns; capable of determining whether information is relevant or not to a main idea*
 - Complex syntax *capable of delineating cause and effect, transition, sequence, and other types of relationships*
 - Verbal reasoning skills *allowing for analysis (break down parts), synthesis (integrate parts), conclusion (infer, deduce), and prediction (anticipate, project)*
 - Narrative language *sufficient to explain, teach, convince, counter, negate, or otherwise regulate behavior*
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Notice that this list is, more or less, organized in terms of least-to-most complex. We often see children in our clinic referred for an EF evaluation, who end up being seen for both a language and an EF assessment. Why? In most cases, the child has had language evaluated only cursorily, or not at all. Some children received early intervention for language delays, but were dismissed somewhere before middle school, with language systems that were deemed “adequate” for academic and social purposes. And yet, when we pick up the case file, we note that language therapy stopped once the child achieved basic sentence structure or demonstrated the ability to regurgitate basic similarities and differences.

Yes, we are SLPs at heart, and yes, we have been there and done that. But this book is about EF skills, and this chapter is about language as it applies to planning. Therefore, let us make two very important points: (a) early language therapy can be thought of as laying the foundation for 10 years from now, when the child is a teen or young adult, and (b) language therapy for the adolescent is just as critical as it is for the young child. The prefrontal cortex of the adolescent brain is undergoing massive network reorganization. Life experiences are shaping the maturation and use of EF skills. Life is tossing the adolescent daily curve balls to manage, appealing yet risky behaviors to control, major decisions to plan through, and an increase in daily life-skills demands.

So, in addition to the foundational language skills you work to develop with the individuals on your caseload, let’s add the following:

1. Build a vocabulary of verbs, not just nouns. Verbs convey action, movement, intent, and causality. Verbs provide opportunity for specifying exact, precise behavior. Prompts such as “Tell me what he’s *doing*” are just as important as “Tell me what it is.” Encoding action verbs triggers motor networks in the frontal and prefrontal cortex (Tettamanti et al., 2005). Verb-naming abilities are linked to EF skills (Piatt, Fields, Paolo, Koller, & Troster, 1999). Engaging verbs elicits activity in the primary, premotor, and adjacent prefrontal cortices (Pulvermüller, Lutzenberger, & Preissl, 1999). Think about what kinds of verbs