APPENDIX 6: The Cognition Hypothesis, Task Design, and Adult Task-Based Language Learning

Table 1: Descriptive Statistics for Speaker Production on Here and Now (Simple) Versus There and Then (Complex) Narratives (Robinson, 1995a) p.70

	Narrative production					
	MPU M/SD	SPT M/SD	PPU M/SD	WPP M/SD	%LW M/SD	%TLU M/SD	
Here and Now	2.5/1.6	1.5/3.7	15.7/6.1	5.5/2.7	47.7/5.9	62.5/30.3
There and Then	2.2/1.3	1.5/6.1	17.2/10.1	4.2/1.6	52.3/7.4	78.4/24.2
Probability	ns	ns	ns	p =.09	p <.05	p =.06

Key: MPU = Multi-propositional utterances; SPT = S nodes per T-unit; PPU = Pauses per utterance; WPP = Words per pause; %LW = percentage of lexical words per utterance; %TLU = percentage of target-like use of articles

Table 2: Descriptive Statistics for Speaker Production and Hearer Interaction on Simple and Complex Versions of a Map Task (Robinson, 2001b) p.73

	Speaker production			Hearer production		
	TTR M/SD	%EFC M/SD	WPC M/SD	CPC M/SD	CC M/SD	CR M/SD	
Simple	4.3/1.4	58/17	6.6/1.4	1.05/0.8	1.9/2.3	0.8/1.0
Complex	3.6/1.1	62/13	5.9/1.3	1.05/0.8	4.5/3.5	1.5/1.4
Probability	p = .01	p = .13	p = .03	ns	p < .01	ns

Key: TTR = Token type ratio; %EFC = percentage of error free C-units; WPC = Words per C-unit; CPC = Clauses per C-unit; CC = Confirmation checks; CR = Clarification requests.

Table 3: Descriptive Statistics for Responses to the Map Task Difficulty Questionnaire (Robinson, 2001b) p. 73

	Difficulty M/SD	Stress M/SD	Ability M/SD	Interest M/SD	Motivation M/SD
Simple	3.5/2.1	3.7/2.3	5.0/2.1	5.0/2.1	5.3/2.1
Complex	5.4/2.3	4.8/2.4	4.4/2.0	5.7/2.1	5.2/2.3
Probability	p <.01	p <.01	p =.07	p =.08	ns

Key: TTR = Token type ratio; %EFC = percentage of error-free C-units; WPC = Words per C-unit; CPC = Clauses per C-unit; CC = Confirmation checks; CR = Clarification requests.

Table 4
Descriptive Statistics for Information-Giver, Speaker Turn taking, and Uptake and Incorporation, on Tasks at Different Levels of Reasoning Complexity (Robinson, 2000) p. 78

	Reasoning Low M/SD	Task Mid M/SD	Complexity High M/SD	
Number of turns				
(with aizuchi, T1)	3.85/3.0	4.8/4.0	7.6/5.7	
(without aizuchi, T2)	3.2/2.4	2.9/2.1	5.6/4.7	
Uptake and incorporation				
Uptake partial	2.2/2.4	3.2/2.2	6.5/3.6	
Uptake exact	2.7/1.8	2.2/2.1	2.2/2.2	
Uptake partial per turn	0.94/0.81	1.57/1.0	2.7/3.0	
Uptake exact per turn	1.6/1.8	157/1.8	1.2/1.6	

Table 5: Correlations of aptitude, intelligence and working memory with narrative production at four levels of reasoning complexity (Niwa, 2000 in Robinson, 2000 p.80).

	Narrative production									
	Accuracy		Fluency			Complexity				
	EFT	TIME	WPS	SBP	WPP	WPT	SPT	TTR		
Reasoning complexity										
Narrative 1 (simple)				ns	Apt*	ns	ns		ns	ns
	ns	ns								
	-.48									
Narrative 2				ns	Apt*	ns	ns		ns	Apt**
	ns	Apt**								
	-.5				-.59		.61			
Narrative 3				ns	Apt*	ns	ns		ns	ns
	ns	ns								
	-.42									
Narrative 4 (complex)				Int*	Apt*	ns	Apt/*		WM*	ns
	ns	ns								
	WM**									
	-.45	-.44		-.45/	-.47					
	-.55									

Key: * = p < .05; ** = p < .01; ns = p > .05; EFT = percentage of error free T-units;
TIME = time on narrative; WPS = words per second ; SBP = seconds between pauses;
WPP = words per pause; WPT = words per T-unit; SPT = S nodes per T-unit; TTR = type token ratio.