From Input, Output, and Comprehension to Negotiation and Attention: An overview of Theory and Research on Learner Interaction in SLA

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This presentation will begin with an historical overview of theory and research on the role of learner interaction in the processes and sequences of second language acquisition. The overview will highlight the foundational constructs of input, output, interaction, and comprehension, and current constructs of negotiation and attention, and emphasize the ways in which these constructs have illuminated the processes of second language acquisition, the needs of the learner, and the approaches that facilitate effective L2 outcomes. Following specification of these cognitive and linguistic processes and needs, examples of interaction-based approaches will be provided. These include research-validated strategies, materials, and tasks that provide opportunities for learners to interact in the L2 as they negotiate its meaning and attend to its linguistic forms and features.

Input as a theoretical construct (Corder, 1967)

<table>
<tr><td colspan="3">L2 available for ‘intake” (linguistic forms and structures that can be processed by the learner)</td></tr>
<tr><td colspan="3">Comprehensible Input (Krashen 1975); Available through:</td></tr>
<tr><td>Unmodified Passages, Texts</td><td>Input at I + 1 level</td><td>Pre-modified Passages, Texts</td></tr>
<tr><td></td><td colspan="2">Contextual Cues; Enhancements: Visual Highlighting, Vocal Emphases, Repetition, Attention Getting Devices</td></tr>
</table>

Modified Interaction, / Negotiation of Meaning / Interaction Modified through The Negotiation Of Meaning (Long 1980; Varonis, & Gass, 1985)

Input made comprehensible through:	Confirmation Checks, Clarification Requests, Signals of Incomprehension >> Responses of Modified Input
Comprehensible Output >>> Pushed Output	Swain, 1985
Stimulus for Learner's Syntactic Processing	Aid to Retrieval of Emergent L2 Features
Available through: Opportunities to Speak and Respond; Self-monitoring	

Table 1: Findings and Observations on Comprehensible Input, Interaction, and Comprehensible/Pushed Output

Findings on French Immersion Achievement (Swain, 1985-1995) Students' grammatical achievement was lower than than their comprehension of spoken or oral texts
Possible Reasons: (1) Classroom emphasis on comprehension limited students' opportunities to produce and process the L2 syntactically, retrieve emergent features, notice their L2 needs. (2) Teachers' use of imperative and present verb forms limited scope of grammatical features available as L2 input

Table 2
Findings on published research: Content-based Programs/Classrooms Immersion, LSP, Sheltered, Thematic/N=35 (Pica & Jo, 1998) Emphasis on Global Proficiency as a Measure of L2 Learning

L2 Constructs	n studies	% distribution
Global L2 Proficiency	32	91
Reading/Writing/Literacy Skills	1	3
L2 Grammar	2	6

Table 2 (Continued)
Findings on published research: Content-based Programs/Classrooms Immersion, LSP, Sheltered, Thematic/N=35 (Pica & Jo, 1998) Emphasis on Global Proficiency as a Measure of L2 Learning

Comparison Groups Inappropriate/Non-existent		
Comparison Groups	**n studies**	**% distribution**
L2 Learners In FL Classrooms	10	29
NSs Of The L2 In The Academic Mainstream	6	17
L2 Learners In FL Classrooms & NSs in Academic Mainstream	4	11
No Comparison Groups Studied	15	43

Table 3: During classroom communication, teachers tended to focus on communication rather than negotiation of message meaning. Production of output was invited, but does not result in pushed output (Pica, Washburn, Evans, & Jo, 1999; Pica, 2002; Pica & Washburn, 2002, 2004; Pica , 2009)

(a) Repetition, rephrasing, and recasting, without signals of incomprehension:	
Teacher	Students
	yeah if he's still proud he mustn't show his humiliation *by don't give money*
right it's his humiliation that would show	

(b) Greater emphasis on maintaining communication flow than on comprehensible/pushed output:	
Teacher	Students
	the daughter have *a pretty good* but she also *hope* to get married but she *think* about her mother. so they *are* worried each other you know
mm-hmm (a)	
	so they *pretend* they *think* they really have a good life at that time, but when the her mother *go* to China back
mm-hmm (a)	
	and her mother *change change his* un thinking and being and then uh her daughter *think* that she can get married and her mother can *independ* on others
really? I had a very different point of view (a)	

(c) Opportunities for production of output, without expectation of pushed output:	
Teacher	Students
There's another conflict in the mother, something else is- the mother is thinking a lot about	*go back China*
going back to China is one thing…what's another?	

Table 4: Comprehensible Input, Interaction, and Comprehensible/Pushed Output Are Necessary, but not sufficient for Language Acquisition

Learners need:
1. Input that supplies positive evidence and negative evidence on relationships of L2 form, function, meaning (Long, 1996).
For all L2 form, function, meaning relationships
And especially low salience L2 form, function, meaning relationships:
Perceptually difficult to notice (3rd singular)
Infrequent (indirect questions in spoken and written communication)
Not transparent in communicative value (articles the, a, and zero to refer to items previously mentioned)
Highly complex (modal verbs for argument building)

2. Opportunities to *attend to/notice* positive and negative evidence on relationships of L2 form, function, meaning
Focus on Form in Contexts of Meaning (e.g., through communication breakdown: Long, 1996; Long & Robinson, 1998)
Notice the Gap between IL/TL (Schmidt & Frota, 1986)
Notice the Hole in IL (Doughty & Williams, 1998)
Positive Evidence can be noticed through:
Authentic samples of language, especially those modified through visual and auditory enhancement, repetition, rephrasing

Negative Evidence can be noticed through:
Preemptive rules
Explicit error correction
Negotiation of Meaning: Implicit signals during negotiation of meaning, including Confirmation checks (did you say a book?), and clarification requests (what did you say?)
Negotiation of Form and Prompts to learner output that encourage modification, e.g., Not, I have book. What should you say? You said I have book. Can you say I have a book? book is incorrect

Attention types
Incidental: Attention to Relationships of L2 Form/Function/Meaning, as communication problems arise. (Long & Robinson, 1998)
Implicit: Attention to of Relationships of L2 Form/Function/Meaning in “focused tasks” that require specific linguistic features for task completion. (Doughty & Varela, 1998; Doughty & Williams, 1998; Ellis, 2003)
Explicit: Attention to of Relationships of L2 Form/Function/Meaning through form focused instruction (described by Spada, 1997)

3. Socially created co-construction of knowledge and cognitive processes (Swain, 1998, based on Lantolf, with Pavlenko, 1995)

Hypothesis testing; Lexical learning within Zone of Proximal Development (distance between actual developmental level, determined by independent problem solving, and potential developmental level, determined by problem solving in collaboration with interlocutor (Swain, 1998; Vygotsky, 1978)

4. Learner Involvement: (Hulstijn 2001; 1998; Laufer & Hulstijn, 2001), that activates cognitive processes, L2 outcomes through, a) **Need (to understand meaning; b) Search (for answers); c) Evaluation (e.g. compare; apply to future context)**

5. Opportunities to participate in different kinds of communication and interaction	Conversation and Discussion **Negotiation** of Meaning **Task-based** Interaction that promotes **Attention** to Form, Function/Meaning Relationships

Table 5: Overview of Tasks in Teaching and Research

Tasks for Communicative Language Teaching (Brumfit & Johnson, 1979; Morrow and Johnson, 1979) and Language for Specific Purposes syllabi and methods (Jupp and Hodlin, 1975).
Problem solving map tasks, information sharing activities (Natural Approach, Krashen & Terrell,1983)
Two way, closed, convergent tasks, e.g., Spot the Difference and Odd Man Out (Long, 1981); Information sharing and transfer tasks (Gass & Varonis, 1983); Dictogloss (Swain, 1998)

Table 6: Task based interaction has revealed about and beyond comprehensible input and output:L2 learning processes and the learning of relationships of form/function/meaning

Tasks as Instructional Activities for Students and Teachers	
Professional References	**Brumfit & Johnson, 1979; Morrow & Johnson, 1979, Jupp & Hodlin, 1975**; Ur, 1981, 1988
Scholarly Publications	Ellis, 2003; **Krashen & Terrell, 1983**; Nunan, 1989
Student Textbooks	Anger et al, 1989; Harmer & Surguine, 1987; Helgesen et al, 2000

Table 7: Tasks as Instruments for Data Collection and Interventions/Treatments for Researchers

Task Purposes	Studies
Support Provision of Meaningful, Comprehensible and/or Modified Input	Doughty & Pica, 1986; Gass & Alvarez-Torres 2000; Gass & Varonis, 1983; Iwashita, 2003; Izumi, 2002; Long, 1980, 1981; Pica & Doughty, 1985a, b; Porter, 1986; Spada & Lightbown, 1999
Stimulate Feedback, including Explicit Correction and Recasts	Doughty & Varela, 1998; Iwashita, 2003; Leeman, 2003; Long, Inagaki, & Ortega, 1998; Mackey & McDonough, 2000; Mackey & Oliver, 2002; Mackey & Philp, 1998; McDonough, 2005; Muranoi, 2000; Nobuyoshi, & Ellis, 1993; Oliver, 1995, 2000; Philp, 2003; Pica, Lincoln-Porter, Paninos, & Linnell, 1996; Takashima & Ellis, 1999

Table 7: Tasks as Instruments for Data Collection and Interventions/Treatments for Researchers

Task Purposes	Studies
Generate Opportunities for Modified Interaction	Doughty & Pica, 1986; Doughty & Varela, 1998; de la Fuente, 2002; Gass & Varonis, 1983; Gass & Alvarez-Torres 2005; Kowal & Swain, 1994; Leeman, 2003; Long, 1980, 1981; Mackey & McDonough, 2000; Mackey, Oliver, & Leeman, 2003; Oliver, 1995, 2000; Pica 1991; Pica & Doughty, 1985 a, b; Pica, Kang, & Sauro, 2006; Pica, Lincoln-Porter, Paninos, & Linnell, 1996; Porter, 1986; Smith, 2005; Swain, 1998; Swain & Lapkin, 2001
Draw Attention to Relationships of Form/Meaning/ Function	Long, 1996; Long & Robinson, 1998; Doughty & Williams, 1998

Table 8: Theoretical Grounding: Relationships between Tasks and Attention Types

Attention Type	Application to Task Based Research
Incidental: Attention to relationships of L2 Form/Function/ Meaning occurs incidentally, as the need to repair comprehension/production problems arise in the context of communication. (Long & Robinson, 1998)	**Incidental:** Attention to relationships of L2 Form/ Function/Meaning occurs incidentally in tasks, as comprehension/production problems arise during task completion. (Long & Robinson, 1998)
Implicit: Attention to relationships of L2 Form/Function/Meaning occurs implicitly as the need to supply specific or required forms arises in order to communicate a function or meaning in the context of communication. (Doughty & Varela, 1998; Doughty & Williams, 1998; Ellis, 2003)	**Implicit:** Attention to relationships of L2 Form/Function/Meaning occurs implicitly in tasks that require specific, often obligatory, forms for task completion. (Doughty & Varela, 1998; Doughty & Williams, 1998; Ellis, 2003)

Table 8: Theoretical Grounding: Relationships between Tasks and Attention Types

Attention Type	Application to Task Based Research
Explicit: Attention to relationships of L2 Form/ Function/Meaning occurs explicitly through form focused instruction and corrective feedback (described , e.g., by Spada, 1997), in follow up to learners' need for form or rule as revealed in the context of communication	**Explicit**: Attention to relationships of L2 Form/ Function/Meaning occurs explicitly through form focused instruction, as needed, in follow up to tasks in which learners revealed need for assistance with forms, in the context of communication.

Table 9: Theoretical Grounding: Relationships between SLA and Task Purposes

Time Frame	*SLA purpose: Promote L2 development*	*Task purpose*
From 1981 (Long, 1980) to present: (reviewed in Ellis, 2003; van der Braden, Norris, & Bygate, 2008)	**Directly through task implementation:** (e.g., Mackey, 1999) **Indirectly through interaction for:** a) input comprehension (Pica, Young, & Doughty, 1983), b) output modification in response to feedback (Pica, Lincoln-Porter, Paninos, & Linnell, 1996); c) collaborative learning (e.g., Swain & Lapkin, 1998); d) negotiation of meaning (Long, 1981).	Provide a context for Researcher Treatment/Intervention

Table 9: Theoretical Grounding: Relationships between SLA and Task Purposes

Time Frame	*SLA purpose: Promote L2 development*	*Task purpose*
More Recently: From 1993 (Long, 1993) to present: (reviewed in van den Branden, Bygate, & Norris, 2008)	**Directly through task implementation:** (e.g., Doughty & Varela, 1998; Mackey & McDonough, Pica, Kang, & Sauro, 2006) **Indirectly through:** **Attention processes** (Pica, Kang, & Sauro, 2006)**:** a) noticing of low salience forms and their functions b) intake to STM; c) awareness of L2 form/function/meaning **Learner involvement:** (Hulstijn 2001; 1998; Laufer & Hulstijn,) a) need (e.g. understand meaning); b) **s**earch (e.g. for answers); c) evaluation (e.g. compare; apply to future context	Provide a context for Researcher Treatment/ Intervention AND Facilitate and activate: Cognitive processes Learner involvement L2 learning processes and outcomes

Table 10 : Findings on Tasks in SLA Research

Study	Task Format	Task Title and/or Description	Treatment/ Intervention Form Focus	Treatment/ Intervention: Intensity, Duration	Length of Study	Findings
Ammar, A. & Spada, N. (2006).	Task as Context for Treatment/ Intervention of Recasts and Prompts	One Way Picture Description	Recasts and Prompts as Feedback to errors in French 3rd person possessive determiners *his and her* Preceded by: Explicit instruction, cloze passage practice	45 minutes instruction and cloze passage practice; 30-45 minutes picture task completion	Four weeks	Prompts more effective overall: High-proficiency learners benefited equally from prompts, recasts; Low-proficiency learners benefited significantly more from prompts than recasts.

Table 10 : Findings on Tasks in SLA Research

Study	**Task Format**	**Task Title and/or Description**	**Treatment/ Intervention Form Focus**	**Treatment/ Intervention: Intensity, Duration**	**Length of Study**	**Findings**
Doughty & Varela, 1998	Task as Context for Treatment/ Intervention of Corrective Recasts in response to past formation errors Preceded by Task as Instrument for learner suppliance of past forms in obligatory contexts	Oral and written reports of classroom science experiments	Corrective recasting of oral errors, circling of written errors on ***English L2 simple*** and ***conditional past***	Five sessions/ Week /four weeks	Twenty-two weeks, due to delayed post testing after treatment	Large, significant and durable effect for Past Formation

Table 10 : Findings on Tasks in SLA Research

Study	**Task Format**	**Task Title and/or Description**	**Treatment/ Intervention Form Focus**	**Treatment/ Intervention: Intensity, Duration**	**Length of Study**	**Findings**
de la Fuente, 2002	Task as Context for Treatment/ Intervention of researcher intervention to encourage pushed output in negotiation	Follow Directions for Map Placement of Pictures of Targeted Vocabulary	Negotiation with and without pushed output Receptive and productive **vocabulary**	Two 20 minute sessions	Three weeks, including 1 week and 3 week delayed post-testing after treatment	Positive effects for negotiation on vocabulary comprehension, for negotiation with pushed out put on vocabulary acquisition, productive retention

Table 11: Task-Based Interaction: Directions for Research and Practice on Comprehensible Input and Output

1. Need for Long Term Study of Relationships of L2 Form/Function/Meaning in SLA	
Treatment Intensity Comparison of Studies that used Tasks to Focus on Form	
Iwashita, 1999	One session/12 weeks
Doughty & Varela, 1998	Five sessions/week/4 weeks
Spada & Lightbown, 1999	Four 60 minute sessions/week/2 weeks
Pica, Kang, & Sauro, 2006	2-hour sessions/3 days
Takashima & Ellis, 1999	One 45-minute session/3 weeks
Smith, 2005	One 30 minute session week/4 weeks

Table 11: Task-Based Interaction: Directions for Research and Practice on Comprehensible Input and Output

1. Need for Long Term Study of Relationships of L2 Form/Function/Meaning in SLA	
Treatment Intensity Comparison of Studies that used Tasks to Focus on Form	
Izumi, 2002	Six 30-60 minute sessions/2 weeks
Mackey & McDonough, 2000	Three 50-minute sessions/week/1 week
Mackey & Oliver, 2002	Three 30 minute sessions/week
Mackey & Philp, 1998	Three 15-25 minute sessions/week
Nobuyoshi & Ellis, 1993	One session/week for 2 weeks
Oliver, 1995	30- minute session per week/2 weeks

Table 11: Task-Based Interaction: Directions for Research and Practice on Comprehensible Input and Output

1. Need for Long Term Study of Relationships of L2 Form/Function/Meaning in SLA	
Treatment Intensity Comparison of Studies that used Tasks to Focus on Form	
Swain & Lapkin, 1998	Two sessions
Newton & Kennedy, 1996	One 120 minute session/group
de la Fuente, 2002	Two 20 minute sessions
Gass &Alvarez Torres, 2005	Two 20- minute sessions
Muranoi, 2000	Three 30 minute sessions/weekly class
Swain, 1998	One dictogloss/week/3 weeks

Table 11: Task-Based Interaction: Directions for Research and Practice on Comprehensible Input and Output

1. Need for Long Term Study of Relationships of L2 Form/Function/Meaning in SLA	
Treatment Intensity Comparison of Studies that used Tasks to Focus on Form	
McDonough, 2005	Three 10 minute sessions
Long, Inagaki, & Ortega, 1998	One 40-minute session
Iwashita, 2003	One session
Leeman, 2003	One 20-minute session

Table 12: Total Length Comparison of Studies with Delayed Posttesting that used Tasks to Focus on Relationships of L2 Form/Function/Meaning in Comprehensible Input and Output

Study Length of Study	*Treatment Intensity, Duration*	*Length of Study*
Doughty &Varela, 1998	5 sessions/week/4 weeks	22 weeks
Iwashita, 1999	1 session/week/12 weeks	12 weeks
McDonough, 2005	Three 10 minute sessions	8 weeks
Muranoi, 2000	Three 30 minute sessions/weekly class	8 weeks
Smith, 2005	One 30 minute session week/4 weeks	6 weeks
Spada & Lightbown, 1999	Four 60 minute sessions/week/2 weeks	6 weeks

Table 12: Total Length Comparison of Studies with Delayed Posttesting that used Tasks to Focus on Relationships of L2 Form/Function/Meaning in Comprehensible Input and Output

Study Length of Study	*Treatment Intensity, Duration*	*Length of Study*
Takashima & Ellis, 1999	One 45-minute session/3 weeks	6 weeks
Swain & Lapkin, 1998	Two sessions	5 weeks
Swain, 1998	One dictogloss/week/3 weeks	4 weeks
de la Fuente, 2002	Two 20 minute sessions	3 weeks
Izumi, 2002	Six 30-60 minute sessions/2 weeks	3 weeks
Iwashita, 2003	One session	1 week
Leeman, 2003	One 20-minute session	1 week

Table 13a: Text and Form Selection

Text Selection: based on Content Course Curriculum, Student Familiarity and Interest	
Form Selection: based on Linguistic Theory and SLA Research	
Easier to notice & learn	**More difficult to notice & learn**
Perceptual Saliency	
progressive ing	third singular -s
irregular past	regular past -ed
Frequency	
simple past	past perfect

Table 13a: Text and Form Selection

Easier to notice & learn	More difficult to notice & learn
Transparency of Form, Function & Meaning	
Quantifiers plural –s tense markers for time modal verbs of ability pronoun referents for single topics	Articles third singular –s tense markers for generalizations modal verbs of probability pronoun referents for multiple topics sociolinguistic rules & pragmatic speech acts

Table 13a: Text and Form Selection

Easier to notice & learn	**More difficult to notice & learn**
Students' Developmental Needs & Readiness for Learning	
-saliency. -transparency, +functionality of form/function/meaning	
L2 Forms	Functions & Meanings in Film Texts
Determiners, ArticlesPronouns, Connectors, Conjunctions	Refer to Text Elements, Distinguish General & Specific Text Elements;Organize & Distinguish New & Given InformationMark Transitions, Make Connections
Verb Tense, Aspect, Modality	Build Arguments, Make Predictions, Suggestions, Speculations;Organize & Sequence Information; Refer to Sequence & Duration

Table 13b: Criterion a. To be authentic, tasks should comply with curricular and classroom objectives

Purpose Statement: The purpose of this activity is to help you become more accurate and precise in your speaking and writing		
and to review and edit information more carefully	and to organize informationmore carefully	and to report information accurately
Spot the Difference	Jigsaw	Grammar Communication

Table 13b: Criterion b. Tasks must be easy to use directly, and as a basis for new activities

Features	Examples
Single, pre-specified goal	Reconstruct story or report
Gap between information given to participants and information required to meet goal.	Individually held sentences from story or report
To fill gap/reach goal, participants must verbally exchange and combine their information.	Participants combine sentences

Table 13b: Criterion c. Tasks should encourage learning of Relationships of L2 Form/Function/ Meaning in Comprehensible Input and Output

Three approaches/formats:

Incidental: Attention to of Relationships of L2 Form/Function/Meaning occurs incidentally in tasks, as comprehension and production problems arise in task completion. (Long and Robinson, 1998)

Implicit: Attention to of Relationships of L2 Form/Function/Meaning occurs implicitly in tasks that require specific linguistic features for task completion.(Doughty & Varela, 1998; Doughty & Williams, 1998; Ellis, 2003)

Explicit: Attention to of Relationships of L2 Form/Function/Meaning occurs explicitly through form focused instruction (described by Spada, 1997), as needed, after completion of tasks with implicit format.

Table 13b: Criterion d. Tasks should provide reliable data on learning, teaching processes, outcomes

Attention and Interaction Processes across Task Steps					
Tasks, Cognitive Processes, Learner Involvement					
Task Step	**1. Read original passage**	**2. Read Version A or B of original passage**	**3. Choose between phrases in Versions A and B. Justify choices**	**4. Recall choices from Step 3. Insert in cloze of original; Explain, justify**	**5. Compare choices with original/Identify differences; List/use to complete original**
Attention Processes	**Notice** low salience forms that encode function, meaning	**Notice** low salience forms that encode function, meaning. **Display awareness** of form, function, meaning through explanation,justification	**Notice** low salience forms that encode function, meaning **Notice differences** between forms that encode function, meaning;	Recall forms from Step 3 to reveal i**ntake from STM** **Intake** for further application to text passage completion **Display awareness** of form, function, meaning through explanation and/or justification	**Notice the gap** between needed and unneeded forms **Intake** for further task application to list or passage **Display awareness** of form, function, meaning through explanation and/or justification

Table 13b: Criterion d. Tasks should provide reliable data on learning, teaching processes, outcomes

Attention and Interaction Processes across Task Steps					
Tasks, Cognitive Processes, Learner Involvement					
Task Step	**1. Read original passage**	**2. Read Version A or B of original passage**	**3. Choose between phrases in Versions A and B. Justify choices**	**4. Recall choices from Step 3. Insert in cloze of original; Explain, justify**	**5. Compare choices with original/Identify differences; List/use to complete original**
Involvement	**Need** to understand passage	**Search** for differences	**Evaluate** choice of differences by comparing choices	**Evaluate** choices by comparing choices with application to cloze passage completion	**Evaluate** choice of differences by comparing choices, apply to list or passage completion

Table 14: Research Tasks

Figure 1: Task Step 1. Passage Excerpt for Task Step 1 (R. Ellis, 2003:160)
(1) Our main concern here is with the structured input stage of a lesson as this involves the use of focused tasks. (2) In Ellis (1995: 98-9) I list some general principles for designing this kind of focused task, which I call ‘interpretation tasks’. (3) These include the following: An interpretation task consists of a stimulus to which learners must make some kind of response. (4) The stimulus can take the form of spoken or written input. (5) The response can take various forms, for example, indicate true-false, check a box, select the correct picture, draw a diagram, perform an action, but in each case, the response will be completely nonverbal or minimally verbal. (6) The activities in the task can be sequenced to require first attention to meaning, then noticing the form and function of the grammatical structure, and finally error identification. (7) Learners should have the opportunity to make some kind of personal response, i.e., relate the input to their own lives.

Figure 2a. Task Steps 2 and 3: *Spot the Difference* Versions for Articles and Determiners
Incidental Format: Modification to noun or premodifier

Differences are underlined for illustration. Forms are not underlined in student versions	
Version to Student A	Version to Student B
(1) Our main concern here is with the structured input stage of a lesson as this involves the use of focused tasks. (2) In Ellis (1995: 98-9) I list some unusual principles for designing this kind of focused task, which I call 'interpretation tasks'. (3) These include the following: An interpretation task consists of a stimulus to which learners must make some kind of response. (4) The stimulus can take the style of spoken or written input. (5) The response can take various forms, for example, indicate true-false, check a box, select the correct picture, draw a picture, perform an action, but in each case, the response will be completely nonverbal or minimally verbal. (6) The activities in the task can be sequenced to require first attention to meaning, then noticing the form and function of the grammatical structure, and finally error confusion. (7) Learners should have the opportunity to make some kind of personal response, i.e., relate the input to their own lives.	(1)Our main concern here is with the structured input stage of a lesson as this involves the use of focused tasks. (2) In Ellis (1995: 98-9) I list some general principles for designing this kind of focused task, which I call 'interpretation tasks'. (3) These include the following: An interpretation task consists of a stimulus to which teachers must make some kind of response. (4) The stimulus can take the form of spoken or written input. (5) The response can take various forms, for example, indicate true-false, check a box, select the correct picture, draw a diagram, perform an action, but in each case, the response will be completely nonverbal or minimally verbal. (6) The activities in the task can be sequenced to require first attention to meaning, then noticing the form and function of the grammatical structure, and finally error identification. (7) Learners should have the opportunity to make some kind of personal response, i.e., relate the output to their own lives.

Figure 2b. Task Steps 2 and 3: *Spot the Difference* Versions for Articles and Determiners
Implicit Format: Modification to article or determiner

Differences are underlined for illustration. Forms are not underlined in student versions	
Version to Student A	Version to Student B
(1) Our main concern here is with the structured input stage of a lesson as this involves the use of focused tasks. (2) In Ellis (1995: 98-9) I list some general principles for designing this kind of focused task, which I call 'interpretation tasks'. (3) These include the following: An interpretation task consists of a stimulus to which the learners must make some kind of response. (4) The stimulus can take a form of spoken or written input. (5) The response can take various forms, for example, indicate true-false, check a box, select the correct picture, draw the diagram, perform an action, but in each case, the response will be completely nonverbal or minimally verbal. (6) The activities in the task can be sequenced to require first attention to meaning, then noticing the form and function of the grammatical structure, and finally an error identification. (7) Learners should have the opportunity to make some kind of personal response, i.e., relate the input to their own lives.	(1)Our main concern here is with the structured input stage of a lesson as this involves the use of focused tasks. (2) In Ellis (1995: 98-9) I list the general principles for designing this kind of focused task, which I call 'interpretation tasks'. (3) These include the following: An interpretation task consists of a stimulus to which learners must make some kind of response. (4) The stimulus can take the form of spoken or written input. (5) The response can take various forms, for example, indicate true-false, check a box, select the correct picture, draw a diagram, perform an action, but in each case, the response will be completely nonverbal or minimally verbal. (6) The activities in the task can be sequenced to require first attention to meaning, then noticing the form and function of the grammatical structure, and finally error identification. (7) Learners should have the opportunity to make some kind of personal response, i.e., relate input to their own lives.

Figure 3. Task Step 4: Cloze Version of Figure 1 Passage

1) Our main concern here is with the structured input stage of a lesson as this involves the use of focused tasks. (2) In Ellis (1995: 98-9) I list _____ for designing this kind of focused task, which I call 'interpretation tasks'. (3) These include the following: An interpretation task consists of a stimulus to which _____ must make some kind of response. (4) The stimulus can take _____ of spoken or written input. (5) The response can take various forms, for example, indicate true-false, check a box, select the correct picture, draw_____, perform an action, but in each case, the response will be completely nonverbal or minimally verbal. (6)The activities in the task can be sequenced to require first attention to meaning, then noticing the form and function of the grammatical structure, and finally_____. (7) Learners should have the opportunity to make some kind of personal response, i.e., relate _____ to their own lives.

Figure 4. Task Step 5: Read Original Passage with Noun Phrases Underlined and Compare

1) Our main concern here is with the structured input stage of a lesson as this involves the use of focused tasks. (2) In Ellis (1995: 98-9) I list some general principles for designing this kind of focused task, which I call 'interpretation tasks'. (3) These include the following: An interpretation task consists of a stimulus to which learners must make some kind of response. (4) The stimulus can take the form of spoken or written input. (5) The response can take various forms, for example, indicate true-false, check a box, select the correct picture, draw a diagram, perform an action, but in each case, the response will be completely nonverbal or minimally verbal. (6) The activities in the task can be sequenced to require first attention to meaning, then noticing the form and function of the grammatical structure, and finally error identification. (7) Learners should have the opportunity to make some kind of personal response, i.e., relate the input to their own lives.

Figure 4. Task Step 5: Read Original Passage with Noun Phrases Underlined and Compare

Incidental and Implicit Formats: **Compare the passage with the one that you and your partner wrote**. If you and your partner find any differences, explain the reasons to each other. Write your reasons next to the numbers below. You can write as many reasons as you would like. You don't have to write reasons next to all the numbers.

1.
2.
3.
4.

Explicit Format: Compare the passage with the one that you and your partner wrote. If you and your partner find any differences in the way you used a and the, you can find the reasons for the difference in the chart below. (Learners provided with rules encoded with minimal metalinguistic terminology)

Sentence	If you/your partner used:	instead of the correct, under-lined answer:	You didn't follow this rule for using articles:
2	article the, or no article at all	I list some general principles	Do not use article the with words in a general category. Do not leave out the article when you have a general modifier that describes a word. In sentence 2, some general principles refers to a small number of principles that Ellis will list.
3	article a or the	stimulus to which learners must make some kind of response	Do not use article the with words in a general category. In Sentence 3, learners refers to learners in general.
4	article a or no article at all	the form of spoken or written input	Use article the with words that are described right after them. In Sentence 4, the form is followed by spoken or written input, which describes the kind of form the stimulus can take.

To practice these rules, copy the correct answers into the passage below.

1) Our main concern here is with the structured input stage of a lesson as this involves the use of focused tasks. (2) In Ellis (1995: 98-9) I list _____ for designing this kind of focused task, which I call 'interpretation tasks'. (3) These include the following: An interpretation task consists of a stimulus to which _____ must make some kind of response. (4) The stimulus can take _____ of spoken or written input. (5) The response can take various forms, for example, indicate true-false, check a box, select the correct picture, draw_____, perform an action, but in each case, the response will be completely nonverbal or minimally verbal. (6)The activities in the task can be sequenced to require first attention to meaning, then noticing the form and function of the grammatical structure, and finally_____. (7) Learners should have the opportunity to make some kind of personal response, i.e., relate _____ to their own lives

Figure 5a. *Jigsaw Task* Versions for Articles and Determiners, for Steps 2 and 3

Incidental Format: Modification to noun or premodifier

Version to Student A	Version to Student B
Sentence 1. Our main concern here is with the structured input stage of a lesson as this involves the use of focused tasks.	Sentence 1 Our main concern here is with the structured input stage of a lesson as this involves the use of focused tasks.
Sentence #_____The stimulus can take the style of spoken or written input.	Sentence # _____ The stimulus can take the form of spoken or written input.
Sentence #_____ These include the following: An interpretation task consists of a stimulus to which learners must make some kind of response.	Sentence # _____ These include the following: An interpretation task consists of a stimulus to which teachers must make some kind of response.
Sentence #_____ Learners should have the opportunity to make some kind of personal response, i.e., relate the input to their own lives.	Sentence #_____ Learners should have the opportunity to make some kind of personal response, i.e., relate the output to their own lives.
Sentence #_____In Ellis (1995: 98-9) I list some unusual principles for designing this kind of focused task, which I call ‘interpretation tasks”	Sentence #_____ In Ellis (1995: 98-9) I list some general principles for designing this kind of focused task, which I call ‘interpretation tasks’.
Sentence # _____ The response can take various forms, for example, indicate true-false, check a box, select the correct picture, draw a picture, perform an action, but in each case, the response will be completely nonverbal or minimally verbal.	Sentence # _____The response can take various forms, for example, indicate true-false, check a box, select the correct picture, draw a diagram, perform an action, but in each case, the response will be completely nonverbal or minimally verbal.

Figure 5b. *Jigsaw Task* Versions for Articles and Determiners, for Steps 2 and 3. *Implicit Format*: Modification to article or determiner

Version to Student A	Version to Student B
Sentence 1. Our main concern here is with the structured input stage of a lesson as this involves the use of focused tasks.	Sentence 1 Our main concern here is with the structured input stage of a lesson as this involves the use of focused tasks.
Sentence #_____The stimulus can take a form of spoken or written input.	Sentence # _____ The stimulus can take the form of spoken or written input.
Sentence #_____ These include the following: An interpretation task consists of a stimulus to which the learners must make some kind of response.	Sentence # _____ These include the following: An interpretation task consists of a stimulus to which learners must make some kind of response.
Sentence #_____ Learners should have the opportunity to make some kind of personal response, i.e., relate the input to their own lives.	Sentence #_____ Learners should have the opportunity to make some kind of personal response, i.e., relate input to their own lives.
Sentence #_____In Ellis (1995: 98-9) I list some general principles for designing this kind of focused task, which I call ‘interpretation tasks”	Sentence #_____ In Ellis (1995: 98-9) I list general principles for designing this kind of focused task, which I call ‘interpretation tasks’.
Sentence # _____ The response can take various forms, for example, indicate true-false, check a box, select the correct picture, draw a diagram, perform an action, but in each case, the response will be completely nonverbal or minimally verbal.	Sentence # _____The response can take various forms, for example, indicate true-false, check a box, select the correct picture, draw the diagram, perform an action, but in each case, the response will be completely nonverbal or minimally verbal.

Figure 6a. *Grammar Communication Task*: Versions for **Verb Forms**, for Steps 2 and 3. ***Incidental Format*: Modification to verb**

Version to Student A	Version to Student B
Our main concern here is with the structured input stage of a lesson as this involves the use of focused tasks. (2) In Ellis (1995: 98-9) I list some general principles for designing this kind of focused task, which I show 'interpretation tasks.'(3)These include the following: An interpretation task consists of a stimulus to which learners must make some kind of response. (4) The stimulus can take the form of spoken or written input. (5) The response can show various forms, for example, indicate true-false, check a box, select the correct picture, draw a diagram, perform an action, but in each case, the response will be completely nonverbal or minimally verbal. (6) The activities in the task can be followed to require first attention to meaning, then noticing the form and function of the grammatical structure, and finally error identification (7) Learners should have the opportunity to make some kind of personal response, i.e. relate the input to their own lives.	Our main concern here is with the structured input stage of a lesson as this involves the use of focused tasks. (2) In Ellis (1995: 98-9) I list some general principles for designing this kind of focused task, which I call 'interpretation tasks' (3) These include the following: An interpretation task consists of a stimulus to which learners must say some kind of response. (4) The stimulus can be the form of spoken or written input.(5) The response can take various forms, for example, indicate true-false, check a box, select the correct picture, draw a diagram, perform an action, but in each case, the response will be completely nonverbal or minimally verbal. (6) The activities in the task can be sequenced to require first attention to meaning, then noticing the form and function of the grammatical structure, and finally error identification. (7) Learners should like the opportunity to make some kind of personal response, i.e., relate the input to their own lives.

Figure 6b. *Grammar Communication Task*: Versions for **Verb Forms**, for Steps 2 and 3. ***Implicit Format*: Modification to verb modal or ending**

Version to Student A	Version to Student B
Our main concern here is with the structured input stage of a lesson as this involves the use of focused tasks. (2) In Ellis (1995: 98-9) I list some general principles for designing this kind of focused task, which I can call/could call 'interpretation tasks.' (3) These include the following: An interpretation task consists of a stimulus to which learners might make /can make some kind of response. (4) The stimulus can take/could take the form of spoken or written input. (5) The response should take/ takes various forms, for example, indicate true-false, check a box, select the correct picture, draw a diagram, perform an action, but in each case, the response will be completely nonverbal or minimally verbal. (6) The activities in the task are sequenced/must be sequenced to require first attention to meaning, then noticing the form and function of the grammatical structure, and finally error identification (7) Learners should have/could have the opportunity to make some kind of personal response, i.e. relate the input to their own lives.	Our main concern here is with the structured input stage of a lesson as this involves the use of focused tasks. (2) In Ellis (1995: 98-9) I list some general principles for designing this kind of focused task, which I call/ might call 'interpretation tasks.' (3) These include the following: An interpretation task consists of a stimulus to which learners could make/ might make some kind of response. (4) The stimulus should take /takes the form of spoken or written input. (5) The response can take/could take various forms, for example, indicate true-false, check a box, select the correct picture, draw a diagram, perform an action, but in each case, the response will be completely nonverbal or minimally verbal.(6) The activities in the task can be sequenced/could be sequenced to require first attention to meaning, then noticing the form and function of the grammatical structure, and finally error identification. (7) Learners can have/ might have the opportunity to make some kind of personal response, i.e., relate the input to their own lives.

Research Findings

Study 1: (Pica, 2002 and Pica, Kang, and Sauro, 2006)
Purpose: To examine the effectiveness of **Implicit Format tasks** designed to promote SLA processes,
i.e., to help task participants:
1. Notice L2 forms and the functions and meanings they encode.
2. Notice the gap between interlanguage and L2, especially for low salience forms.
Design: 6 pairs intermediate English L2 learners carried out 3 different types of tasks in their classrooms.
Tasks designed to draw attention to Articles, Determiners, Pronouns, Connectors,
Verb Morphology, Modals

Research Findings

Study 2: Pica, Sauro, Lee, 2007 and Pica, Sauro, Lee, and Peng, 2007

Purpose: To compare the effectiveness of Incidental, Implicit, and Explicit Formats on SLA processes/outcomes, Noticing, Oral Production, and Knowledge (based on Grammaticality Judgment test scores)

Design: 6 pairs intermediate English L2 learners carried out 3 different formats of *Spot the Difference* tasks in their classrooms. Tasks designed to draw attention to Articles, Determiners.

Noticing: All participants showed notable gains.

Production: Incidental and Explicit participants showed greatest gains.

Knowledge: Explicit participants showed notable gains. Others made no gains.

Findings

Task Participants noticed and compared forms in relation to meaning/function:	
Step 3. Choose between sentences/among phrases in Passage Versions A, B. Justify choices. (*Jigsaw* task, based on review of *Philadelphia*, Ebert, 1997, pp. 593–594)	
Sentence__ Since Andrew believes he had been fired because of his illness, he plans to fight the firm in court.	
	Sentence__ Since Andrew believes he has been fired because of his illness, he plans to fight the firm in court
Oh yeah, seven. He recog, ah. Ah since Andrew believes he had been fired because of his illness, he plans to fight the firm in court. Right?	
	Uh-huh. Since Andrew believes he has been fired because of his illness, he plans to fight the firm in court. In court.

Findings

Task Participants noticed and compared forms in relation to meaning/function:	
Step 3. Choose between sentences/among phrases in Passage Versions A, B. Justify choices. (*Jigsaw* task, based on review of *Philadelphia*, Ebert, 1997, pp. 593–594)	
You know my sentence is he had been fired, but your sentence is he has been fired.	
	He had been fired. He had been fired? Your sentence.
He had been fired.	
	Had been fired.
Your sentence, he has been fired.	
	I guess has been fired.
Ah. Okay.	

Task Participants noticed, compared, and evaluated forms, and showed awareness of relationships between form and meaning.	
Step 3. Choose between sentences/among phrases in Versions A and B. Justify choices.	
3. The students in his class _____ are considered were considered failures and potential dropouts. 4. Escalante believed they _____ to succeed could be able would be able in math if they paid attention and worked hard.	3. The students in his class _____ might be considered could be considered failures and potential dropouts .4. Escalante believed they _____ to succeed might be able were able in math if they paid attention and worked hard

*(*Grammar Communication *task, based on review of* Stand and Deliver*, Ebert, 1990, pp. 699-700)*	
Student A	Student B
Escalante believed that they would be able to succeed in math if they paid attention and worked hard. If they	
	Okay, but he was talking in past. He believed they were able.
No, no, no if, right? If is hypothetic	*Yes*
So maybe we need a will modal	
	He believed
He believe?	
	Believed. Past
Yeah, he believed	
	believed that they were able. He believed—in past tense. He thought they were able.
No, they will… He believed they will be able to succeed in math if they…	
	Yes, but it is not here. It is not in the options.
So do the past tense.*Will* past tense is *would*, right?	
	would be able, would be able. Okay. Okay. Some said that they would be able

Task Participants recalled choices from memory

Step 4. Recall choices from Step 3, insert in cloze version of original passage, use in discussion while reconstructing passage:

….. (7) Since Andrew believes he _____ because of his illness, he plans to fight the firm in court. (8) However, because of the firm's reputation, no lawyer in Philadelphia _____ handling his case. …

Jigsaw Task (based on Ebert, 1997, pp. 593–594).

Task Participants recalled forms, connected them to function and meaning while reconstructing passage:

	Before we used *would risk.* It's a supposing sentence. Usually we use *would…*
Now I got it. This sentence is any lawyer will not risk. Right. So it means, I don't want to take that risk so. This is the future	
	Yeah. We know the difference use. Any lawyer would not listen. Would not. It's supposing, supposing sentence, right. If you would…)

Jigsaw Task (based on Ebert, 1997, pp. 593–594).

1. Task implementation assisted attention to low salience forms:

Noticing: 85-95% All participant pairs were able to notice forms, form differences and gaps when making decisions about text versions. This was especially prominent during Step 3—the choosing step.

Awareness: All pairs were able to demonstrate awareness during one or more steps.

Recall: All pairs were able to recall phrases with the targeted forms during cloze step

2. Tasks differed in the extent to which their implementation drew attention to form, function, meaning.

Spot the Difference and Jigsaw > Grammar Communication

Study 3: Pica & Lee, 2009

Purpose: To compare the effectiveness of Incidental, Implicit, and Explicit Formats on SLA processes/outcomes,
Noticing, Oral Production, and Knowledge (based on Grammaticality Judgment test scores)

Design: 6 pairs intermediate English L2 learners carried out 3 different formats of *Spot the Difference* tasks in their classrooms. Tasks designed to draw attention to Articles, Determiners.

Noticing: All participants showed notable gains.

Production: Incidental and Explicit participants showed greatest gains.

Knowledge: Explicit participants showed notable gains. Others made no gains.

Participants: •52 volunteers – 44 participants

•6 pairs – implicit/explicit, 7 pairs – incidental, 3 pairs – control group

1.2 weeks

2.30 minutes of task treatment and 1 hour of exposure to language

3.2 treatment sessions per week (120 minutes)

•Pre and Post Tests of Noticing, Knowledge, Production Accuracy of Article Form/Function/Meaning Relationships

Comparison by SLA Processes and Outcomes: Observations and Inferences		
Noticing		
Observations:	**Further analysis:**	**Inferences:**
Explicit, Implicit, and Control: consistent pre- and post –test percentage scores. Incidental: Considerable improvement	Cloze section of task treatments: Each Cohort retained a level of similar Noticing during each task treatment. Incidental: Post test score elevated by absence of participants with low pre-test and task treatment scores Participants' oral discourse during task implementation: Noticing, Learner Involvement among all Cohorts: Searched for, forms, identified as different, compared them with partners', evaluated appropriateness, accuracy, referred to them during cloze passage.	Possible that all three approaches were effective for task implementation and completion, But their impact on Noticing required a greater number of task treatments and a longer study duration.

Knowledge		
Observations:	**Further analysis:**	**Inferences:**
Explicit and Control: Similar patterns in scores and gains Implicit: Little change Incidental: Lower pre-test scores; highest gains	Interim tests of Knowledge after Task Treatments: Implicit: Consistent with pre and post-test scores Incidental, Explicit: Progression throughout. Oral discourse during Treatment Tasks:Evidence of appropriateness judgments, Learner Involvement. All Cohorts searched for, advanced forms identified as different, compared with partners', evaluated appropriateness, accuracy.	Explicit and Incidental Approaches promoted Attention and Learner Involvement in distinct, but important ways for SLA: Explicit: Form focused correction, instruction on final step of Treatment Tasks. Incidental: Decisions and deliberations about noun and modifier appropriateness entailed repetition of same and different nouns and modifiers in phrases encoded with same, accurate articles.Implicit: Greater challenge during decisions and deliberations on noun phrase appropriateness: focused on locating low salience articles only. Likely to have performed better with Form focused correction, instruction, based on results of Explicit Approach, which was exactly like Implicit Approach in all other steps. Might require more time to impact SLA.

Production Accuracy		
Observations:	**Further analysis:**	**Inferences:**
Explicit, Implicit, Incidental: comparable pre-test percentage scores, gains. .Control Cohort lowest pre-test scores; highest gain scores. Implicit: More modest gains, possibly due to task demands on time needed to identify word, phrase differences, choose which was better; did not require L2 production.	Oral discourse during Treatment Tasks: Evidence of oral production as Cohorts searched for, advanced forms identified as different, compared with partners', evaluated appropriateness, accuracy	Explicit Approach: More opportunity for accurate articles production during Treatment Task Exercise. Incidental Approach: More opportunity for accurate articles production during Choosing step, as accurate article is used by participants in two different noun phrases/task.

Comparison by Cohort: Observations and Inferences			
Explicit	**Implicit**	**Incidental**	**Control**
Highest pre-test scores in Knowledge. Highest post scores, gains in Production Accuracy. Production Accuracy: opportunities for conversation and discussion through study participation, participants from large pool of applicants, eager to participate because research was classroom based, content focused, conversational. Declines in Knowledge and Noticing scores possibly due to Treatment Task demands: More focused attention to form differences; no opportunity for follow up instruction and corrective feedback.	Highest pre-test scores in Knowledge, Noticing; Highest gains in Production Accuracy Production Accuracy: opportunities for conversation and discussion through study participation, participants from large pool of applicants, eager to participate because research was classroom based, content focused, conversational. Knowledge: Demands of sentence comparison, instruction and correction invited learner involvement, accurate focus on form in the context of meaning	Highest pre-test percentage scores in Knowledge. Highest post-test percentage scores, gains in Production Accuracy. Considerable development of Noticing.Performed better and displayed continual development more than other Cohorts Possibly due to emphasis on locating differences in meaning, encoded in two noun phrases with same, accurate articles in each task.More noticeable differences, e.g. ‘the old clock” vs. “the old watch” allowed participants to produce more language, hear more accurate phrases, and notice their features.	Highest pre-test scores in Knowledge, Noticing Highest post-test scores, gains in Production Accuracy. Opportunities for conversation and discussion offered by participation in the study Higher pre test scores for Noticing and Knowledge, remained relatively low in post testing. Possibly due to exclusion from Treatment Task participation and accompanying opportunities to practice Noticing, build grammar knowledge through production of article form in two noun phrase contexts/task.

Discussion

1. An Incidental Approach that uses Spot the Difference Tasks with Meaning Focused Phrase Differences might be more effective for L2 Noticing, Knowledge, Production Accuracy than an Implicit Approach that uses Spot the Difference Tasks with Form Focused Morpheme Differences or an Explicit Approach that uses these same Form Focused Tasks and follows them up with Form Focused Instruction.

Discussion

2. Possible reasons for the effectiveness of an Incidental Approach. It provides opportunities for learners to do the following:

2a. Hear and read correct encodings of articles in context, as produced by themselves and each other.

2b. Hear and read correct articles in two times as many np contexts

2c. Receive modified, meaningful input and produce modified, meaningful output that extends beyond input flood or output practice.

Discussion

3. Whether an Incidental Approach would be effective without a Spot the Difference task could not be determined by results of this study.

4. When designing tasks for promoting SLA of low salience features, teachers should use **phrase** function and meaning as a unit of design. For example, they should provide phrases that cover multiple contexts:

To make articles salient to learners, teachers should make sure the articles occur in exophoric, anaphoric, unique contexts, with two different nouns or modifiers in each context.

To make verb ending differences salient, they should make sure the endings are used with each of two different verbs that introduce, background, generalize, and detail information, or that make temporal and spatial references with pronouns and adverbs.

Discussion

5. Choosing, Recalling, and Comparing *the old clock* and *the old watch* might be a more effective way for learners to notice, acquire, and produce correct forms of articles *a*, *the*, and *ø* than Choosing, Recalling, and Comparing *an old clock* and *the old clock*.

6. Overall Success of the Cohorts was consistent with Cognitive and Learner Involvement Constructs