IPA: A Framework for Language Teaching Based on Bloom's Taxonomy

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Abstract

The IPA framework is a new lesson planning structure related to the six levels of Bloom's Taxonomy. The aim is to translate Bloom's Taxonomy into a framework that is applicable to the TESOL context, taking into account language factors and language learners. Each of the three stages of IPA relates to two levels of Bloom's Taxonomy. It is a flexible framework that can be applied for different language skills and different approaches to teaching vocabulary and grammar. Furthermore, it is not meant to replace existing lesson planning frameworks. Instead, it is another tool for planning and organizing lessons into a coherent whole.

Keywords: TESOL, Bloom's Taxonomy, lesson planning, teaching frameworks

Introduction

In my experience as a TESOL teacher trainer, I have often found Bloom's Taxonomy to be a useful reference for giving feedback and suggesting further development of lesson plans and activities. The levels of the taxonomy provide a gradient of difficulty and a clear path to pushing students towards more advanced levels of thinking and engagement, with the higher levels often missing from lesson plans I have seen. However, the taxonomy has not been designed specifically with language learning in mind, and so I have developed a framework that attempts to recontextualize and repackage Bloom's Taxonomy with a greater focus on language education and a clearer link to lesson planning for language teaching.

This paper starts with a summary of Bloom's Taxonomy and then a description of the IPA frame work and the stages involved. Then, it is compared with other lesson planning frameworks and finally some examples of IPA in classroom practice are included.

Bloom's Taxonomy

Bloom's Taxonomy is a classification system developed in the middle of the 20th century by an educational committee lead by Benjamin Bloom. The overall framework describes three domains: cognitive, affective and sensory. However, it is the cognitive domain which has endured as the main focus in the field of education. The taxonomy of the cognitive domain is a classification that describes hierarchical levels of thinking and cognitive complexity (Bloom, 1994), from lower-order thinking, often depicted at the base of a pyramid, to higher-order thinking at the top of a pyramid. Overall, each level builds upon previous steps and is necessary to reach higher levels. The levels of the taxonomy provide a route for teachers to start with less taxing tasks and questions, and push students towards more advanced mental processing.

Bloom's Taxonomy has persisted over the years as a relevant and highly-referenced educational concept. So much so that it was updated by Anderson and Krathwohl (2001) with new titles and a slightly modified sequence in order to place more focus on creativity. The updated taxonomy is described below.

1. Remember: Learners are able to retrieve information.
2. Understand: Learners are able to construct meaning from information.
3. Apply: Learners are able to follow a procedure.
4. Analyze: Learners are able to select relevant information and/or deconstruct it.
5. Evaluate: Learners are able to make judgements based on criteria and standards.
6. Create: Learners are able to develop new patterns of information.

Although it has remained popular, it is not without detractors. Critics have noted that thinking is more complex and nonlinear than the taxonomy would suggest (Lee, Kim, Jin, Yoon, & Matsubara, 2017) and that the taxonomy has little empirical evidence (Holliday & Cain, 2012). It is also worth noting that Bloom's Taxonomy was not developed in relation to a specific field of education, such as language teaching. Despite this, I have found it a relevant concept in TESOL teacher training, for example in giving feedback on the development of activities and lesson plans, although it does need to be translated and deciphered for the TESOL context. This paper is an attempt to work the taxonomy into a framework that is directly related to EFL and ESL education. The next section will describe the IPA framework and how it relates to Bloom's Taxonomy.

IPA Framework

The IPA framework is based on the six levels of Bloom's Taxonomy, with each stage of the framework encompassing two of the levels from the taxonomy. The IPA framework is a realization of Bloom's Taxonomy for the context of TESOL. The IPA framework consists of three consecutive stages: Input, Process, Action. The framework accounts for language input at the Input stage in the form of listening or reading content. This stage focuses on the first two stages of Bloom's Taxonomy: (1) Remember and (2) Understand. The next stage is Process, which can mean a number of things depending on the context, such as discussion, drafting and revising, or working on aspects of grammar. The Process stage relates to Bloom's Taxonomy stages (3) Analyze and (4) Apply. The final stage is Action. Here, the students act upon the original input and processing, perhaps with a language output task, such as a presentation or a writing assignment. This stage relates to Bloom's Taxonomy (5) Evaluate and (6) Create.

The three stages of the IPA framework align it with other frameworks that consist of three stages, such as PDP (Pre, During, Post), PPP (Present, Practice, Produce), and the TBLT (Task-Based Language Teaching) framework, to name a few. It shares other similarities and overlapping features with other existing frameworks, which will be discussed in later sections. The IPA framework is meant to supplement these existing frameworks rather than supersede them. Rather than upending existing planning frameworks, it provides another lens for educators to plan and organize activities, lessons, and materials.

Another flexible aspect of the IPA framework is that it is not skill specific. The balance of macro language skills can be set depending on the context and the overall objectives of the class or curriculum. In a situation where oral communication is the focus, the three stages of IPA can be mainly composed of discussion activities with some listening materials at the beginning. Similarly, in a writing course, the content can be mainly reading and writing related. Furthermore, the framework is agnostic to the approaches of teaching vocabulary and grammar. These can be taught directly and deductively or indirectly and inductively. The framework is flexible enough for the context and the needs of the learners to dictate these decisions.

The three stages of the IPA framework are described in the following section. Then, in a later section it is compared with other similar frameworks. Finally, there are practical examples of the IPA framework in classroom use.

Input (Remember and Understand)

The first stage of the IPA framework is the Input stage. This stage relates to the first two levels of Bloom's Taxonomy: (1) Remember and (2) Understand. These are the lower-order thinking levels of the taxonomy, which are a necessary basis for the higher levels. One aspect of the Input stage is to provide language input or topic/context input in the form of a listening or reading text. The activities should be limited to a simple understanding of the content, for example recall questions or comprehension checking.

The language input aspect of this stage has the aim of beginning the process of language intake, where learners integrate language input into their internal grammars. Chaudron (1985) calls this 'preliminary intake' and this relates closely to the input hypothesis put forward by Krashen (1985). The language input could be in the form of a text, for example a written text such as a newspaper article, or a listening text such as a recording of a conversation. The text can be chosen to challenge the learner's ability with some familiar language forms and some that is likely to be beyond the learner's current comprehension. Sun (2008), for example, highlights the need for both comprehensible and incomprehensible input. This relates to Krashen's concept of $i+1$, where i is the level of the learner and $+1$ is above the learner's current level. Krashen has received criticism for not defining the value of +1 (for example Gass & Selinker, 2008), however there is an amount of flexibility available here in terms of planning, scaffolding, cognitive abilities of the learners, chosen forms to focus on, and the focus of later processing and output tasks. Texts can be at varying levels above the learner's current level, depending on these factors.

In situations where the aim is to activate existing language, such as fluency and automaticity of known forms rather than expanding towards new language ability, the Input stage can be used for setting the context of a new topic with relevant materials or topic-related warm up questions.

As mentioned above, the activities and questions at this point should be limited to remembering and understanding the content. Here, there can be a surface level understanding of the content with deeper analysis coming later in the framework. Learners can be asked to recall information from the input and comprehension questions can be asked to check general understanding. This gives the opportunity to check all learners are ready for the later stages, which may be difficult to complete without remembering and understanding the language or topic-related content.

Key words in developing activities and questions here could include:

- choose
- define
- find
- how
- label
- list
- match
- name
- recall
- relate
- select
- show

- spell
- tell
- what
- when
- where
- which
- who
- why
- classify
- demonstrate
- explain
- extend
- illustrate
- infer
- interpret
- outline
- relate
- rephrase
- show
- summarize
- translate

(Adapted from Barton, 1997)

In the introduction to the framework, I made it clear that language teaching can be approached here deductively or inductively. I believe that the approach used can depend on many factors such as the language point(s) being taught, the overall aim of the lesson, and the age of the students (and therefore their cognitive abilities), and so on. Activities and questions here can be explicitly related to the language forms of the content or not at all. This aspect is open to the judgment of the teacher and the specific context.

Process (Analyze and Apply)

The second stage of the IPA framework is the Process stage. This stage relates to the middle two stages of Bloom's Taxonomy: (3) Analyze and (4) Apply. The aim of this stage is to provide time to process and apply the new information or topic that has been introduced in the previous stage. Activities should not be solely about listening comprehension or production. Here, the activities might be group work or quiet tasks where students are working with aspects of language or topic, and/or preparing for the final stage of the framework. This gives students an opportunity to process the information and start to transform it into actionable, personalized content.

In the previous stage, students have had some topic and language input. The activities in that stage check that they have a surface level understanding of the content. Moving into the Process stage, students can now start analyzing and apply the content. This could be in terms of language, such as form-focused activities where students find and analyze examples of a form, or it could be in terms of another aspect such as reading strategies with inferring or predicting activities. Students could

take what they have learned from the original input and apply it to a new text or context, perhaps comparing forms or content in another related text. Students may take the examples from the Input stage and apply them to their own life, preparing answers or information to present in the following Action stage. The type of activities here could be individual work to give silent processing time, or they could be group work where students work together in a supportive team. The activities and objectives of this stage are influenced by both the previous and the next stages. There are many options here depending on the focus of the lesson, but this is time for students to process the original input content and transform it into actionable language and communication.

Key words in developing activities and questions here could include:

- apply
- build
- choose
- construct
- develop
- experiment with
- identify
- interview
- make use of
- model
- organize
- plan
- select
- solve
- utilize
- analyze
- assume
- categorize
- classify
- compare
- conclusion
- contrast
- discover
- dissect
- distinguish
- divide
- examine
- function
- inference
- inspect
- list
- motive

- relationships
- simplify
- survey
- take part in
- test for

(Adapted from Barton, 1997)

Action (Evaluate and Create)

The final stage of the IPA framework is the Action stage. This stage relates to the final two levels of Bloom's Taxonomy: (5) Evaluate and (6) Create. These levels relate to higher-order thinking and are meant to be the most complex and challenging levels. As the final stage of the framework, this stage would be the objective and builds upon the Input and Process stages. The activities here might be focused on language output, for example an oral presentation or writing task, or the focus could be more on using the analysis from the Process stage to come to new conclusions or decisions.

The final two levels of Bloom's Taxonomy are very useful for providing a goal for a lesson or unit of study. Evaluating content is a cognitively complex task that, if done correctly and with reasoning, shows some mastery of the topic and content. It shows comprehension and the ability to analyze parts in order to come to an outcome. The outcome can be negotiable with many paths leading to many possible answers. Activities related to evaluating might involve decision-making or critiquing. This could be with a language focus, for example transforming and correcting forms, or it could be topic-based, for example making final decisions on a scenario in a debate or role play. Students can also create new content based on the previous Input and Process stages. This might mean extending, completing, or responding to a text in speaking or writing activities. Often, evaluating and creating can be combined into one task. There are many options here, and the final levels of Bloom's Taxonomy provides a great deal of flexibility in terms of the options available.

Key words in developing activities and questions here could include:

- agree
- appraise
- assess
- award
- choose
- compare
- conclude
- criteria
- criticize
- decide
- deduct
- defend
- determine
- disprove
- dispute

- estimate
- evaluate
- explain importance
- influence
- interpret
- judge
- justify
- measure
- opinion
- perceive
- prioritize
- prove
- rate
- recommend
- select
- support
- value
- adapt
- build
- change
- choose
- combine
- compile
- compose
- construct
- create
- design
- develop
- discuss
- elaborate
- estimate
- formulate
- imagine
- improve
- invent
- make up
- modify original
- propose
- solution
- solve

- suppose
- test theory

(Adapted from Barton, 1997)

Comparison with existing language teaching frameworks

As stated earlier in this paper, the IPA framework is not meant as a replacement for existing language lesson planning frameworks. It does not challenge or contradict existing teaching practices. On the contrary, it is meant to expand and provide new insights into lesson planning and sequencing with elements of Bloom's Taxonomy and past theory such as Krashen's input hypothesis taken into consideration. To illustrate how it coheres with other frameworks, this section will outline a few common frameworks and discuss how IPA is similar and distinct from each.

TBLT Framework

Task-based language teaching (TBLT) has been part of the larger shift towards inductive meaning-focused teaching, rather than deductive form-focused teaching and goal-oriented activities in the last few decades (Willis, 1996). Developed in part by Willis (1996), Gatbanton and Gu (1994) and Estaire and Zanon (1994), the TBLT framework provides a structure for planning and carrying out tasks in the language classroom. The task cycle consists of three stages: pre-task, task cycle, and post-task. The TBLT framework shares some similarities with the IPA framework, although in the strong form of communicative language teaching (CLT), which focuses mainly on communication with little scaffolding, the action stage would come sooner in the lesson with language processing coming later. In the weaker version of CLT, some scaffolding and language support is provided before the main communication task.

The pre-task stage introduces the topic and the task. This can include activating schema with topic-related content. Teachers may highlight words or phrases that could be useful in the coming task. Students may brainstorm content-related ideas. There may also be a model of the task provided by the teacher or in audio or text, as long as it does not give away the task solution. These steps act as pre-task preparation time for students. In many ways this stage may be similar to the Input stage of IPA with language examples, models, and context setting.

The task cycle itself also contains three stages within the broader TBLT framework. These are: task, planning, report. The task step involves students carrying out the task, possibly in groups with the teacher monitoring but not intervening. According to TBLT, focus here should be on expressing meaning rather than attention being paid to language form (beyond the expression of meaning). The next step of the task cycle is planning. In this step, students prepare to report to the class the outcome of their task. Here the teacher can intervene with suggestions and support where needed. Finally in the task cycle, the students report their findings or outcome to the whole class. This stage of TBLT bears more resemblance to the level Apply in Bloom's Taxonomy and the Action stage in IPA.

The final stage of the TBLT framework is the focus on form or language focus, which would have appeared in the first stage according to more deductive lesson such as PPP (Present, Practice, Produce). Here, specific features of the language from the task can be highlighted with activities or analyzed together. There may be structured practice at this stage, perhaps with a text from the task or separately using forms that have appeared in the task cycle. This stage of TBLT may align more closely with the level of Analyze in Bloom's Taxonomy and the Process stage in IPA.

Although there are some similarities between the TBLT framework and IPA, the stages may appear in a different order. IPA, with its processing before language activation, may bear closer resemblance to a framework that uses a weaker form of CLT and involves scaffolding before the main activation task. In the next section, I will compare IPA with ECRIF, which is a framework aligned more closely with the weaker form of CLT.

ECRIF Framework

The ECRIF framework is a lesson planning framework for scaffolding student speaking skills proposed by Kurzweil and School (2007). The framework has five steps: Encounter, Clarify, Remember, Internalize, and Fluency. In some ways the framework is similar to the classic PPP framework (Present, Practice, Produce), however a key difference is that ECRIF is inductive and focuses on meaning and context of use first, whereas PPP is deductive and introduces the language point, rather than the context of use, at the beginning. ECRIF is also more closely aligned with the weak form of CLT where meaning and implicit learning remains the focus and scaffolding is introduced before the main task, rather than language focus or form focus afterwards in the strong form of CLT. On the other hand, PPP has more in common with past approaches such as audiolingualism where the language is presented and students attention is drawn explicitly the forms they are practicing.

ECRIF has many similarities with the IPA framework, especially if IPA is being used to scaffold speaking. However, IPA can be used for other objectives such as grammar practice or other macro skills such as teaching reading strategies or writing, so the stages may not be similar in every context. When the the objective is scaffolding speaking, the ECRIF steps Encounter, Clarify and Remember align with the Input stage. The Input stage of IPA matches with Bloom's Taxonomy's Remember and Understand. At this point learners should recall parts of the text and their comprehension is checked through activities and concept or comprehension checking questions. The Internalize stage of ECRIF may align with the Process stage of IPA. Here, learners are given the chance to process and internalize the language with small group activities. The Fluency stage of ECRIF aligns with the Action stage of IPA as learners must activate what they have practiced in the previous stages with an activity such as role play, debate or information gap. Therefore, IPA and ECRIF share a similar structure when the focus is speaking, but perhaps not in lessons with other language skills and objectives.

PDP Framework

The PDP framework is specifically for practicing and scaffolding receptive listening and reading skills. The framework has three stages: Pre, During and Post. The Pre stage is for setting up successful listening or reading. In this stage, activities and questions may involve setting up the context of the text, activating background knowledge, vocabulary work, and setting up expectations or prediction before using the text. This stage may be very similar to the Input stage of IPA, especially with the vocabulary building exercises. However, PDP introduces the text in the next stage and IPA may use the main text in the Input stage if the objective is to move students more quickly towards production or form-focused work.

The main objective of the PDP framework is the During stage. Here, the learners are listening or reading the text and doing comprehension activities focused on various aspects such as gist, details, inferences or main idea. The progress of this stage may encompass all stages of IPA, from simple comprehension questions all the way through to analyzing and evaluating aspects of the text. Indeed, I have found Bloom's Taxonomy to be a useful analytical tool when assessing and giving feedback on PDP lesson plans in teacher training courses, as it provides an overall structure and blueprint for learner progress in the During stage.

The final stage of PDP is the Post stage. The objective related to receptive skills may have already been completed in the previous During stage, and so this stage can be seen as an extension of the topic or language with personalization or productive skills tasks. This stage may align closely with the Action stage of IPA, especially in terms of the final level of Bloom's Taxonomy, which is Create. The end of both framework may involve productive skills tasks, such as speaking activities or writing tasks.

The PDP framework and IPA framework share some similarities, although there is some overlap in the final stages During/Post and Process/Action depending on the types of activities included. IPA can act as a framework within a framework as it gives more structure to the During stage of PDP.

IPA in action

This section will give some examples of IPA being used in activity and lesson planning.

IPA lesson for young learners

This lesson is for elementary-aged students and the language focus is the grammar point possessive pronouns my, his and her. The Input stage is for providing examples of classroom objects and the target grammar form. The Process stage is small group activities with some writing to reinforce acquisition of the grammar. The final Action stage is language output of the target forms with a whole-class game with realia.

In the warm up, the teacher can review objects in the classroom such as bag, pencil case, pen, textbook, and so on. The teacher can make an action like wearing binoculars and ask "What can you see?" After suggesting a few examples, students are encouraged to name as many objects they can see in the classroom. Once enough objects have been named, the teacher can move on to modeling the grammar examples. This is a guessing game a little similar to the common kid's game "Eye Spy." The teacher chooses an object, for example a student's bag, and says "It's his bag." Students need to guess which object the teacher has chosen. The teacher can give further hits such as "It's his red bag" if needed. The point of this activity is to implicitly and inductively introduce the possessive pronoun target forms. Once students have heard the target forms several times and are getting better at guessing quickly, the lesson can move on to the next stage.

The Process stage of this lesson may be lengthened or shortened depending on whether this is new language, and therefore needs more scaffolding, or if it is more a review of language that students are somewhat familiar with. An exercise can be included such as matching sentences with pictures. "It's his pencil" matches with a boy holding a pencil. "It's her pencil" matches with a girl holding a pencil. This can be done with a worksheet, flashcards and word cards, or a PPT. If students are familiar with the sentences, the lesson can move on to a group activity. The teacher provides 3-5 Post-it notes to every student. The students should choose items of their partner(s) and write sentences such as "It's his textbook" or "It's her eraser" and stick the Post-it note on the item. The teacher can model to check sentences are correct while the students are busy with this task. Once everybody is ready, students introduce their partners items holding them up and reading the sentences. I like this activity because it is interactive and the process of sticking notes on belongings expresses the meaning of the target forms. It also gives students time to think about the new language, write sentences to reinforce acquisition, and support for when they need to introduce the objects to the class (in the form of the prepared sentences). These activities provide scaffolding for the final Action stage.

In the Action stage the teacher holds up a bag, such as a paper shopping bag or a tote bag. In the bag are 1-2 items from the teacher. The teacher pulls out an item and models "Whose is it?" encouraging students to repeat. The teacher can then answer "It's my [item]." Then, the students are encouraged to drop an item into the bag for the game. Once the bag is full, the teacher goes around the class letting each student randomly pull out an item and ask "Whose is it?" The owner of the item should shout "It's my [item]." and the class can then say "It's his/her [item]." Again, this activity reinforces the notion of ownership when we use possessive pronouns. This activity can be modified with more language such as "It's mine" or less language by doing it without the question form, all depending on the age and level of the students. It could also become a guessing game with students guessing the owner of the item before the owner reveals that it is theirs, perhaps in teams if the class is particularly large or competitive. For further form focus, there could be an added activity where students evaluate example sentences on a worksheet and correct mistakes such as word order or wrong possessive pronoun. This would follow the framework of an inductive lesson whereby models are provided first and form is the focus at the end.

This lesson is a fun and interactive example of inductive grammar teaching mostly using objects in the classroom. Students are given models and scaffolding, as well as time to process the new language, before doing a whole-class speaking activity.

IPA lesson for adults

The IPA framework has been particularly useful in a general English course that I teach with a group of low-level adults. It became clear from early interactions with the group that most of them were not able to sustain conversation in English and quickly react to a range of topics using various language forms. This is in contrast to many of the TESOL adult classes that I teach where participants are high-level learners and able to discuss many topics with very little preparation time. The participants of the low-level course required model examples and lots of time to process the language and plan utterances before interacting.

This example lesson is for teaching and practicing irregular past tense verbs. At the beginning, the teacher shows a series of photos from a vacation. In my case I used photos from a trip to Thailand where I met with my family. The teacher explains what is happening in the photos using as many past tense verbs are possible. For example: "I went to Thailand. I swam in the sea. I saw the palace. I ate Thai food. I met my parents. We rode an elephant. We drank gin. We made some new friends." and so on. After showing the photos, the teacher asks students to recall what they did on vacation and students should repeat as many sentences as possible.

Again, the Process stage can be adapted to meet the needs of the students. Due to these being adult students, there could be more explicit focus on forms such as asking students to categorize present tense verbs into regular and irregular past tense verbs. A model text can be provided and students then have to find examples of irregular verbs in the text. If speaking is a preferred focus, students could role play interviewing the teacher about their vacation asking and answering questions. Question forms can be provided on the PPT where necessary. The amount of scaffolding here would depend on the students.

To prepare for the final activity, students should go through their smartphone (if available) and select a series of photos to share in groups and eventually with the class. The photos can be from a vacation or just a nice day out. Students can be given time to think about what they are going to say and share about the photos. The teacher can provide questions that could be answered such as "Where did you go?" and "What did you eat?" This would help to target irregular verbs. Practice time can be given in small groups until students are confident they can share with the class. Finally, the students present their travel photos to the class and share what they did using provided irregular

verb forms and any others needed for their specific needs. This provides a meaningful output activity where students create a short presentation about their experiences.

Conclusion

Bloom's Taxonomy has been useful in my work as a TESOL teacher trainer, and the development of the IPA framework aims to help make it more applicable for the TESOL context. It is hoped that the IPA framework provides a clearer and more practical application for Bloom's Taxonomy that will help language teachers in lesson planning, activity design, and materials selection.

References

Anderson, L. W., & Krathwohl, D. R. (2001). A Taxonomy for Learning, Teaching and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives: Complete Edition. New York: Longman.

Bloom, B. S. (1994). Reflections of the development and use of the Taxonomy. In L. W. Anderson, & L. S. Sosniak (Eds.), Bloom's taxonomy: A forty-year retrospective. Ninety-third yearbook of the National Society for the Study of Education. Part II, 1–8.

Barton, L. G. (1997). Quick flip questions for critical thinking. San Clemente, CA: Edupress.

Estaire, S. & Zanon, J. (1994). Planning class work: A task-based approach. Oxford: Heinemann.

Gass, S. M. & Selinker, L. (2008). Second language acquisition: An introductory course (3rd ed.). New York: Routledge.

Gatbanton, E. & GU, G. (1994). Preparing and implementing a task-based ESL curriculum in an EFL setting: implications for theory and practice. TESL Canada Journal, 11(2), 9-12.

Holliday, W. G., & Cain, S. D. (2012). Teaching science reading comprehension: A realistic, research-based approach. In B. Fraser, K. Tobin, & C. McRobbie (Eds.), Second international handbook of science education, 1405–1417. Dordrecht: Springer.

Krashen, S. D. (1982). Principles and practice in second language acquisition. Oxford: Pergamon.

Krashen, S. D. (1985). The Input Hypothesis. Harlow: Longman.

Kurzweil, J. & Scholl, M. (2007). School for International Training frameworks for language teaching: Understanding teaching through learning. New York: McGraw-Hill.

Lee, Y. J., Kim, M., Jin, Q., Yoon, H. G., and Matsubara, K. (2016). East-Asian primary science curricula: An overview using revised Bloom's taxonomy. Dordrecht, Netherlands: Springer.

Sun, Y. A. (2008). Input processing in second language acquisition: A discussion of four input processing models. Columbia University Working Papers in TESOL & Applied Linguistics, 8(1), 1-10.

Swain, M. (1993). The output hypothesis: Just speaking and writing aren't enough. *The Canadian Modern Language Review* 50(1). 158-164.

Willis, J. (1996). A flexible framework for task-based learning in Willis J. & D. (ed) Challenge and Change in Language Teaching Macmillan Heinemann.