New language can be introduced in different ways, and there has been a long standing debate on how to do it best. Most approaches fall within the deductive / inductive classification. Guided Discovery takes the best from both in a way that makes it work for a variety of settings and contexts, and as a tool to introduce different aspects of language at all levels. The purpose of this article is to provide theoretical background and a practical 4-step framework for implementation of Guided Discovery.
Clarifying concepts: Deductive vs. Inductive

Deductive and inductive approaches derive from deductive and inductive reasoning. Deductive reasoning applies a general rule to particular instances as opposed to inductive reasoning, which involves inference from the particular to the general. Thus, language learning is deductive when teachers explicitly present the rule, which is later applied by students in practice tasks. In inductive language learning, however, the rules are worked out from exposure to the language in use. In other words, deductive indicates explicit presentation of rules, while inductive relates to implicit learning of rules. Both approaches have advantages and disadvantages and stand as opposing extremes in a language instruction continuum. Here are a few concepts associated with these.

Deductive
- General to particular
- Explicit
- Rules first
- Rule-driven learning
- Cognitive
- Conscious
- Application of rules
- Teacher-centered
- Dependent on the teacher
- Passive reception

Inductive
- Particular to general
- Implicit
- Exposure to language first
- Rule-discovery learning
- Associative
- Subconscious
- Problem-solving
- Learner-centered
- Autonomous
- Active participation

Some of the disadvantages of a deductive approach are that it can be too controlled and is associated with a teacher-fronted, transmission-style classroom. It may also put off analytical learners who enjoy being involved in the process.

Some drawbacks of an inductive approach are that it is time-consuming and energy-consuming, and it may lead to misunderstanding of the rule or reaching a wrong conclusion. It demands more lesson planning as well as carefully and systematically designed data and materials. It may also be frustrating for learners with a less analytical learning style.

Guided Discovery

In between these two approaches lies “Guided Discovery”, which combines the best from each. Guided Discovery is a modified inductive approach in which there is exposure to language first, followed by the use of inference, and finally an explicit focus on rules and practice. There are cognitive, linguistic, and social benefits to this approach. Here are some of them:

Cognitive benefits
- It encourages analytic learning.
- It exploits learners’ cognitive skills.
- It improves critical thinking skills.
- It involves students in problem-solving tasks.
- It helps learners become aware of and articulate their mental processes.
- Learners participate actively in the learning process.
- Learners understand and remember better what they have worked out for themselves.

Linguistic benefits
- It resembles natural language learning/ language acquisition.
- If done in groups, it provides extra language practice.

Social benefits
- It increases student participation and fosters collaboration.
- It empowers learners thus enhancing autonomy and self-reliance.
- It is motivating for learners who enjoy the hands-on approach.

Guided Discovery addresses some of the drawbacks associated with both deductive and inductive instruction as it is essentially learner-centered. The teacher becomes a facilitator, who guides learners in the right direction so as to avoid misunderstandings of the rules. It makes learning memorable since learners are actively involved in the process. It is meaningful because it involves the learners’ own reasoning.

“People are generally better persuaded by the reasons which they have themselves discovered than by those which have come in to the mind of others.” Blaise Pascal
What can be taught with Guided Discovery techniques?

Although guided discovery is generally associated with grammatical rules, it really lends itself to a variety of concepts and aspects of language ranging from grammatical form and usage to pronunciation, spelling and lexis. It is, however, important to make sure that the rules we present fulfill the following guidelines, as outlined by Michael Swan (cited in Thornbury, 1999, p. 32)

1. The rules should be true;
2. The rules should show clearly what limits are on the use of a given form;
3. The rules need to be clear;
4. The rules ought to be simple;
5. The rules need to make use of concepts already familiar to the learners; and
6. The rules ought to be relevant.

An easy step by step methodological framework

Guided Discovery can be easily implemented with any class, at any level, by following these four steps.

Step 1: Exposure to language through examples or illustrations

The teacher exposes students to the language through illustrations, examples or a combination of both. The examples can be in the form of isolated sentences, although it is always more effective if the language is presented in context. Contextualization of the language makes grammar relevant and alive and can be done through a reading or listening text, illustrations or photos, or real life situations and topics. Context also helps to facilitate understanding.

Step 2: Observation and analysis of the language through guided questions

The teacher guides the observation and analysis of the language by drawing attention to the significant points he or she wants to present. This can be done through questions, by completing gaps in sentences or rules or by matching examples and rules. Learners' cognitive potential is put into play as they cooperate, analyze, hypothesize, compare, and construct and generate knowledge. Taking part in the learning process empowers them. This scaffolding step is essential to avoid learners reaching a wrong conclusion or misunderstanding the rule.

In the example mentioned above, the teacher might ask beginning students to think about what is different about the occupations following a from those following an. Learners could be invited to rewrite the words in two separate lists under one column for a and another column for an. A further step could be to ask learners to circle the first letter of each occupation and to think about what the occupation words have in common within each column.

“Guided discovery really lends itself to a variety of concepts and aspects of language ranging from grammatical form and usage to pronunciation, spelling and lexis.”
Step 3: Statement of the rule

The teacher uses the information from step 2 to state, or gets the learners to state, the rule in order to make sure that all learners understand it. Learners construct their new knowledge based on their own insights from their observations in the previous step.

For example, after having analyzed the occupations using a and an, learners can be asked to complete the rules as follows:

Look at the jobs in Ex 1. Complete the rules with a or an.

1. Use _______ before vowel sounds, such as /a/, /e/, and /i/.
   She’s _______ artist.

2. Use _______ before consonant sounds, such as /b/, /d/, and /f/.
   She’s _______ lawyer.

Step 4: Application of the rule in practice tasks graded by difficulty or complexity

This step aims at putting the language in practice. The teacher assigns tasks from more controlled (matching, filling the blanks, close-ended questions) to more communicative and meaningful (open-ended questions for discussion, role-playing, writing tasks, etc). The difficulty and complexity of the tasks is usually graded from receptive to productive skills, that is, from identifying or understanding to producing.

For example, learners who have just come up with the rules governing the use of a and an could then apply the rules in a controlled practice activity such as this one.

To apply the newly learned rules in free practice, learners could engage in natural communication activities like this one.

Group work: Guess other students’ jobs. Use a dictionary.
Ex: Are you a taxi driver?
   No, I’m not a taxi driver.

Applying Guided Discovery in higher levels

Different learning styles can also be activated by applying Guided Discovery to a variety of language texts ranging from captioned illustrations to reading texts to listening activities. In addition, as learners advance in level, they might be asked to observe language in more substantial contexts. At the intermediate level, a lesson on the uses of future tenses might engage learners in the following listening activity. Learners first observe the structures in context, but focus on what they are hearing.

Listen to the Miller and Costa families talk about their plans for a home exchange. Circle the correct alternatives.

1. We’ll / ‘re going to see the old churches and historic buildings.

2. David and I love Brazilian food, so we will / are going to try all the local dishes like churrasco and feijoada.

3. I really hope this’ll be / is being the vacation of a lifetime for us.

4. We will spend / are spending more than a month in Toronto. We’ve never been there before.

5. I’m sure you’ll love / ‘re loving it.

6. And I’m going to / ‘m going to do lots of shopping.

7. Oh, there are some wonderful shopping areas in Toronto. I’ll give / am giving you the address of a great outlet mall.
For Steps 2 and 3, learners then analyze the correct answers for the activity and try to construct the rules. This could be achieved through an activity like this one.

**Summary**

Guided Discovery is aligned with more modern language learning theories that advocate student participation and the development of critical thinking skills and autonomy. It relates to analytic learning and problem solving. It helps learners engage in the learning process and thus make personal connections that anchor their learning. It is a learner-centered approach that increases participation and fosters collaboration. It empowers learners towards assuming responsibility for their own learning and becoming more autonomous. It is therefore a valid and useful way of approaching language instruction at all levels of language ability.

**References**


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