

Razvijanje strokovnih pismenosti v TJ

Gradiva projekta Obogateno učenje tujih jezikov

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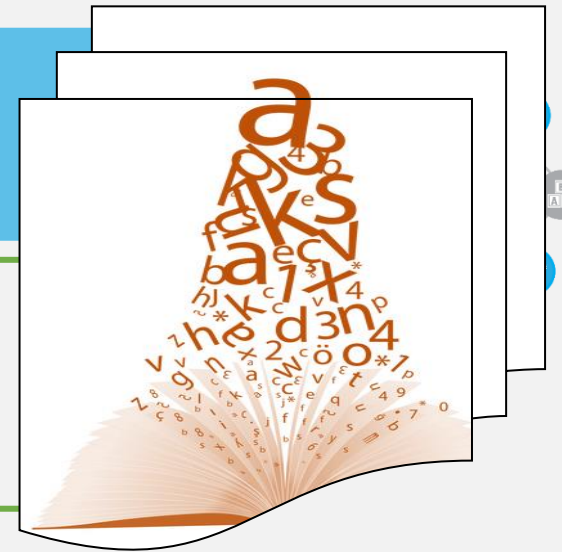


Učna / Strokovna pismenost v/pri TJ: NEKAJ UČNIH STRATEGIJ

1. Vključite razvijanje učne/strokovne pismenost v pouk TJ že na samem začetku.
2. Izhajajte iz relevantnih (*za učenca in kurikulum*) raziskovalnih vprašanj (→ *ustvarjanje učne potrebe!*) in uporabite projektni pristop.
3. Skrbno izberite besedilo (→ *v sodelovanju z učiteljem nejezikovnega/vsebinskega predmeta*) za razvijanje bralne zmožnosti.
4. Aktivirajte predhodno znanje učencev.
- 5. Razširiti besedišče, potrebno za razumevanje besedila.**
6. Navežite na materinščino in spodbudite transfer iz J1 v TJ.

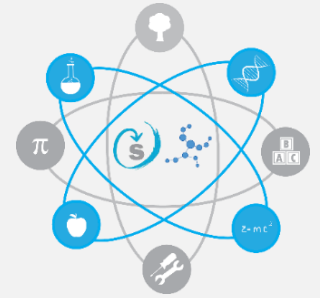
Učenje BESEDIŠČA jezika stroke

Strokovno besedišče poučujte na neposreden, ozaveščen način. V učenje besedišča vgradite ustrezen obseg urjenja.



1. Razvijajte **besedno zavedanje** (t.i. *word awareness /consciousness*).
2. V pouk vključite učenje **strategij za učenje** besedišča.
3. V pouk (T)J vpeljite **dnevne rutine**, ustne in pisne, povezane z učenjem besedišča (npr. hitra ponovitev itd.).
4. Učenje besedišča povežite z **vsebinami**, ki jih učenci obravnavajo **pri drugih predmetih**.
5. Uporabljajte **vizualno** podporo.
6. Posebno pozornost namenite učenju **večpomenskih** besed.

FRAYERJEV MODEL: Kaj je?



- Frayerjev model je **učna aktivnost, ki temelji na kategorizaciji besed**, namenjena razvijanju/poglobljanju **razumevanja pojmov**.
- Obstajata **dve različici Frayerjevega modela**:
 1. V prvi različici učenci oblikujejo definicijo, navedejo značilnosti in našteje nekaj primerov, kaj koncept JE in kaj koncept NI.
 2. V drugi različici učenci analizirajo bistvene in nebistvene lastnosti besede/koncepta in poglobijo (rafinirajo) svoje razumevanje z navajanjem primerov v kategorijah JE in NI.

<http://www.tantasqua.org/superintendent/Profdevelopment/etfrayermodel.html>

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graph TD; CU((Conceptual Understanding)) --- R1((Recognize, label, and generate examples and nonexamples of concepts)); CU --- R2((Use and interrelate models, diagrams, manipulatives, and varied representations of concepts)); CU --- R3((Identify and apply principles)); CU --- R4((Know and apply facts and definitions)); CU --- R5((Compare, contrast, and integrate related concepts and principles)); CU --- R6((Recognize, interpret, and apply the signs, symbols, and terms used to represent concepts)); CU --- R7((Ability to manipulate ideas about the understanding of a concept in a variety of ways)); CU --- R8((Ability to reason)); CU --- R9((Interpret the assumptions and relations involving concepts in mathematical settings));
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Conceptual Understanding

Recognize, label, and generate examples and nonexamples of concepts

Use and interrelate models, diagrams, manipulatives, and varied representations of concepts

Identify and apply principles

Interpret the assumptions and relations involving concepts in mathematical settings

Know and apply facts and definitions

Ability to reason

Compare, contrast, and integrate related concepts and principles

Ability to manipulate ideas about the understanding of a concept in a variety of ways

Recognize, interpret, and apply the signs, symbols, and terms used to represent concepts

The Frayer Model: HOW TO USE IT



Steps:

1. **Assign a concept** that might be confusing because of its relational qualities.
2. Explain the Frayer model diagram.
3. Model how to fill out the diagram.
4. Provide students with time to practice with assigned terms.
5. Once the diagram is complete, let students share their work with other students. Display students' diagrams as posters throughout the unit so students can refer to the words and continue to add ideas.

Frayer Model Examples

Definition (in own words)	Characteristics
(WORD)	
Examples (from own life)	Non-Examples

Frayer Model Examples

<p>Definition (in own words)</p> <p>A mathematical shape that is a closed plane figure bounded by 3 or more line segments</p>	<p>Characteristics</p> <ul style="list-style-type: none">• Closed• Plane figure• More than 2 straight sides• 2-dimensional• Made of line segments
<h1>POLYGON</h1>	
<p>Examples (from own life)</p> <ul style="list-style-type: none">• Pentagon• Hexagon• Square• Trapezoid• Rhombus	<p>Non-Examples</p> <ul style="list-style-type: none">• Circle• Cone• Arrow• Cylinder

Frayer Model Examples

Definition (in own words)	Characteristics
<p>The ideas, beliefs, and ways of doing things that a group of people who live in an area share.</p>	<ul style="list-style-type: none">• Shared ideas• Shared beliefs• Shared practices
CULTURE	
Examples (from own life)	Non-Examples
<ul style="list-style-type: none">• What my friends and I wear• Music we listen to	<ul style="list-style-type: none">• Color of my hair• Color of my eyes• Nature• Weather

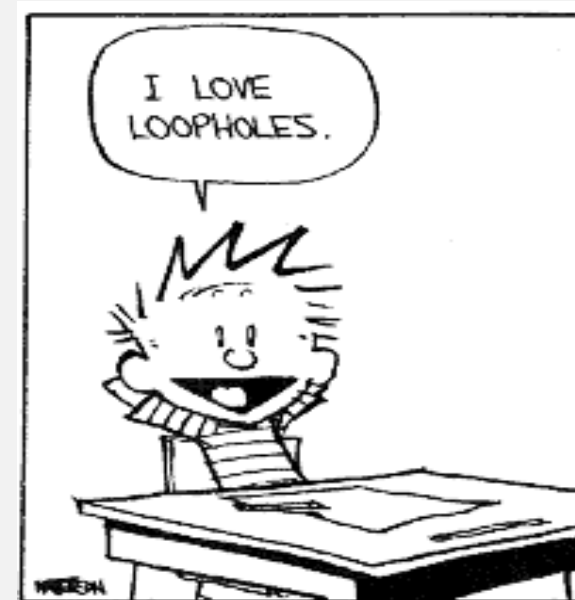
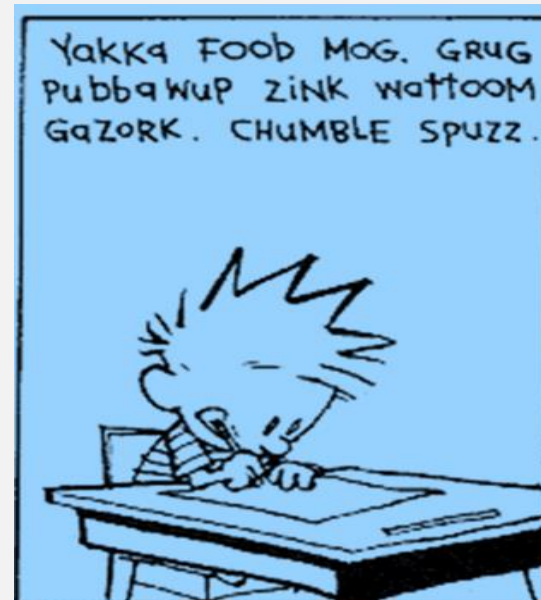
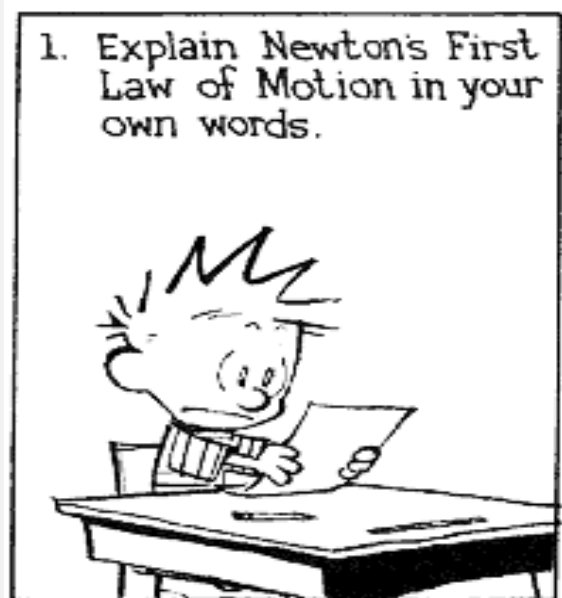
Frayer Model Examples

Essential characteristics	Non-essential characteristics
(word)	
Examples	Non-Examples

Frayer Model Examples

Essential characteristics	Non-essential characteristics
<ul style="list-style-type: none">• Feathers• Hollow bones• Warm blooded• Breathe air with lungs• Wings• Beaks	<ul style="list-style-type: none">• Ability to fly
BIRDS	
Examples	Non-Examples
<ul style="list-style-type: none">• Robins• Meadowlarks• Parrots• Eagles• Ostriches• Penguins	<ul style="list-style-type: none">• Bats• Flying reptiles• Insects• Flying squirrels

Razvijanje PREDMETNO SPECIFIČNEGA BESEDIŠČA - nevarnost poenostavljanja



Prim. Frayerjev model učenja/poučevanja strokovnega besedišča!

What RESEARCH tells us about vocabulary learning and teaching in content areas



1. Learning new words is a **cumulative task** that takes place **gradually over time**.
2. **Words with multiple meanings are common in the content areas.**
3. **Affixes and root words** need to be **taught**.
4. **Words** need to be **taught in relation to other words**.
5. Productive vocabulary instruction must **extend beyond word definitions**.

Nagy & Scott, 2000

INSTRUCTIONAL FRAMEWORK



- Effective vocabulary instruction across subject-matter disciplines incorporates both **broadly defined learning opportunities** and **explicit instruction** in word-meaning acquisition.
 - ❑ Broadly defined learning opportunities include the incorporation of wide reading in content classes as well as word consciousness.
 - ❑ **Explicit instruction**: A structured lesson format using steps which are typically found in general lesson plan formats and also provide a framework for incorporating vocabulary.
- The steps include: **(1) preparation, (2) explanation, (3) application, and (4) reinforcement (P.E.A.R.)**.

Step 1: PREPARATION

- In this step, **teachers select the words to teach.**
- These words and phrases should be those **most critical to understanding the concepts** in the passage or learning session and should be limited in number. Too many targeted words can be overwhelming to students, especially those who struggle with reading.
- This step also includes **assessment of student background knowledge** about the terms.
- One useful assessment tool is the **knowledge rating scale** (*Blachowicz & Fisher, 2006*):
- e.g. Content area: world geography

<i>Word (or term)</i>	<i>I know this word (or term). It means . . .</i>	<i>The word (or term) looks familiar.</i>	<i>I do not know this word (or term).</i>	<i>New information from the text</i>
urban				
urbanization				
urban sprawl				

Step 2: EXPLANATION

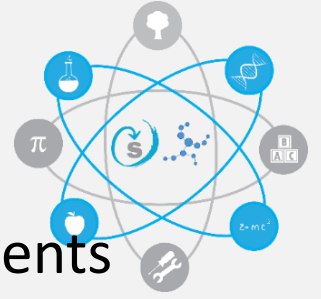
- Once teachers have selected the vocabulary, the next step is to introduce the words and terms to the students using clearly understandable definitions—what Beck and her colleagues call **student-friendly definitions** (*Beck, McKeown, & Kucan, 2002*).
- For example, for the term urban sprawl, instead of the definition
 - “the unplanned, uncontrolled spreading of urban development into areas adjoining the edge of a city,” a more easily understood definition could be
 - “a word that describes what happens when a city starts spreading farther and farther out into the area around it.”
- These student-friendly definitions also need to be accompanied by supportive instructional contexts (*Graves, 2006*).
- In this case, the teacher can show students various photographs that depict urban sprawl.

Step 3: APPLICATION



- After discussing the word meanings, **students can then apply the words and terms in meaningful activities.** These activities are designed to move students' interaction with the words beyond the definitional level to higher levels of cognitive processing.
- The following **questions and prompts** require students to have a working knowledge of the words in order to provide reasonable answers (*Beck et al., 2002*):
 1. **Meaningful-use prompts** (e.g. *Things you would expect to see in an urbanized area*)
 2. **Statement completions** (e.g. *Urbanization creates major changes in the landscape of an area because . . .*)
 3. **Word associations** (e.g. *Which word is used when talking about renovating old warehouses in inner cities?*)
 4. **Meaningful questions** (e.g. *Would you expect to find textile mills in a megalopolis?*)

Step 4: REINFORCEMENT



- In this last step, teachers review newly learned words and terms to help students internalize word meanings.
- **Writing activities** that are interesting can serve to reinforce vocabulary.
- For example, the **CUBING ACTIVITY** (*Bean, Readence, & Baldwin, 2008*) illustrated below requires students to **examine a concept from different dimensions**. Students demonstrate their understanding of a term by describing, comparing, associating, analyzing, applying, and arguing for or against it.
- E.g. *Term: Market economy*

Describe it.	Compare or contrast it.
Associate it.	Analyze it.
Apply it.	Argue for or against it.

The Cubing Activity: Market Economy

Describe it.

A market economy is one type of economic system. An economic system is the way in which a country manages its money, materials, and labor.
A market economy allows the people to freely choose what to buy and sell.

Compare or contrast it.

A market economy is similar to capitalism and free enterprise.
A market economy is different from a planned or command economy in which the government decides what to buy and sell and at what price.

Associate it.

I think a market economy allows people the opportunity to earn more money by opening their own businesses.

Analyze it.

There is competition in a market economy, and this can keep prices down.
The producers of goods and services listen to the wants and needs of the consumers.

Apply it.

Every time I go shopping for a new video game, I can be grateful for the market economy in America. If it wouldn't be for this type of economy, I think the selection of games would not be as wide as it is at the stores.

Argue for or against it.

I support a market economy. It gives me many choices when I am looking for things, and it gives me the opportunity to open my own business if I like.

The R.A.F.T Strategy



- Another example of reinforcement is the **R.A.F.T. activity** (*Santa, Haven, & Harrison, 2008*).
- **R.A.F.T. stands for *role, audience, form, and topic*.**
- Students select one of the **writing tasks**, and they **use newly learned vocabulary in the writing**.

1.Role of the Writer: *Who are you as the writer? A movie star? The President? A plant?*

2.Audience: *To whom are you writing? A senator? Yourself? A company?*

3.Format: *In what format are you writing? A diary entry? A newspaper? A love letter?*

4.Topic: *What are you writing about?*

The R.A.F.T Strategy: World geography

Role	Audience	Format	Topic
<i>Naturalist John Muir</i>	Lumber industry	Commercial	Conservation of natural resources
<i>Meteorologist</i>	People along the Texas Gulf Coast	Broadcast script for television	Approaching category 4 hurricane
<i>Salmon</i>	Grand Coulee Dam	Brochure	Difficulties caused by the dam
<i>Director of the National Park Service</i>	Outdoor enthusiasts	Page in a guidebook	3 most popular hiking trails in the United States
<i>Tour director</i>	People who like to go on tours	Internet website	7-day tour of western Canada
<i>Lewis of Lewis and Clark</i>	President Thomas Jefferson	Letter	Request for more money to continue the expedition to the south

Building Differentiated Learning Objectives With Web Tools: The DIFFERENTIATOR

- For some teachers, building differentiated learning objectives, lesson plans, and units comes naturally and is part of the fun of teaching. For others, it can be a real challenge. For either group, **writing learning objectives can require a commitment of time**. As schools increasingly emphasize the use of varied, differentiated learning objectives, a teacher's planning time can be stretched.
- For those wanting to save a bit of time or add a spark of creativity to their learning objectives, **Ian Byrd**, a creative and energetic California teacher, has developed a **clever Web application** called **[The Differentiator](http://byrdseed.com/differentiator/)** (<http://byrdseed.com/differentiator/>).
- It is a free tool that allows you to **use a Web interface to build learning objectives by choosing from a set of predefined thinking skills (1), content (2), resources (3), student products (4), and group sizes (5)**.
- For example, using Ian's site, I created the following in a matter of seconds:
 - *Students will contrast [→ thinking skill] the multiple points of view of green energy [→ content] using newspapers [→ resource] to create a press conference [→ product] in groups of three [→ group size].*
- You may need to do a little additional editing after you build an objective.

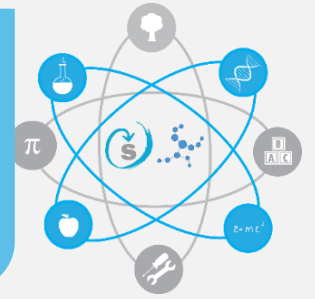
Lesson Planning (Tool): The DIFFERENTIATOR

The screenshot shows a web browser window displaying the 'The Differentiator' tool. The address bar shows the URL <http://byrdseed.com/differentiator/>. The page content includes a text editor with the sentence: "Students will judge the ethics of the [click to edit] using a textbook and create an essay in groups of three." Below this, there are five tabs: "Thinking Skill", "Content", "Resources", "Products", and "Groups", with "Groups" currently selected. Underneath the tabs, a note states: "Revised Bloom's Taxonomy adapted from 'A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives' by Anderson and Krathwohl". The main area displays a grid of six columns representing Bloom's Taxonomy levels: Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating. Each column lists specific cognitive verbs associated with that level.

Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
Remember	Classify	Choose	Appraise	Appraise	Assemble
List	Describe	Demonstrate	Compare	Argue	Construct
Define	Discuss	Dramatize	Contrast	Contrast	Create
State	Explain	Employ	Criticize	Defend	Design
Repeat	Identify	Illustrate	Differentiate	Judge	Develop
Duplicate	Locate	Interpret	Discriminate	Select	Formulate
	Recognize	Operate	Distinguish	Support	Write

How to use the Differentiator <http://www.toolboxforteachers.com/page.aspx?pageid=Differentiator>

Model SIOP (Sheltered Instruction Observation Protocol): 8 komponent



1. Lesson Preparation
2. Building Background Knowledge
3. Comprehensible Input
4. Strategies
5. Interaction
6. Practice and Application
7. Lesson Delivery
8. Review and Assessment

1. Priprava na pouk
2. Ustvarjanje in priklic predznanja
3. Razumljivi vnos
4. Strategije
5. Interakcija
6. Urjenje in uporaba
7. Izvedba učne ure
8. Ponavljanje ter preverjanje in ocenjevanje

Model SIOP: PRIPRAVA NA POUK ①



- 1. Teachers write** clearly defined **content objectives**. These objectives are **reviewed** at the beginning of a lesson and students should **reflect** at the end of the lesson whether the objectives have been met.
- 2. Teachers write** clearly defined **language objectives**. They are **introduced** to the students at the beginning of a lesson and **reviewed/reflected** by the students at the end of the lesson.
- 3. Concepts** taught should be **appropriate** for the **age** and **educational background** of students. Teachers must consider the students' L1 literacy, L2 proficiency, and the reading level of the materials.

Model SIOP: PRIPRAVA NA POUK ①



- 4. Supplementary materials** are used to promote comprehension. These include charts, graphs, pictures, illustrations, realia, math manipulatives, multimedia, and demonstrations by teacher and other students
- 5. Content** must be **adapted to ELL's needs** through use of graphic organizers, outlines, labeling of pictures, study guides, adapted text, and highlighted text.
- 6. Meaningful activities integrate lesson concepts with language practice opportunities** in listening, speaking, reading, and writing.

LANGUAGE OBJECTIVES: The Key to Effective Content Area Instruction for English Learners

(Jennifer Himmel, 2012)



3rd grade Science, States of Matter

Content Area Standard	Content Objective	Language Objective
California: Students know that matter has three forms: solid, liquid, and gas.	Students will be able to distinguish between liquids, solids, and gases and provide an example of each.	Students will be able to orally describe characteristics of liquids, solids, and gases to a partner.

Language Objectives: The Key to Effective Content Area Instruction for English Learners

(Jennifer Himmel, 2012)



4th grade Math, Two-Dimensional Figures

Content Area Standard	Content Objective	Language Objective
<i>Common Core:</i> Draw and identify lines and angles, and classify shapes by properties of their lines and angles.	Students will be able to classify triangles based on their angles.	Students will be able to read (& understand) descriptions of triangles and their angles.

Language Objectives: The Key to Effective Content Area Instruction for English Learners

(Jennifer Himmel, 2012)



7th Social Studies, Colonial Communities

Content Area Standard	Content Objective	Language Objective
<i>New York:</i> Students will use a variety of intellectual skills to demonstrate their understanding of the geography of the interdependent world in which we live.	Students will be able show how geographic features have affected colonial life by creating a map.	Students will be able to summarize in writing how geography impacted colonial life.



9th grade English Language Arts, Informative/Explanatory Texts

Content Area Standard	Content Objective	Language Objective
<i>Common Core:</i> Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. Provide a concluding statement or section that follows from and supports the argument presented.	Students will be able to draft a conclusion paragraph for their expository essay.	Students will be able to use transitional phrases (e.g., as a result) in writing .

Bralne strategije za razvijanje splošne in predmetno specifične pismenosti



Generic Reading Strategies	Discipline-Specific Reading Strategies
<ul style="list-style-type: none"> ❑ Monitor comprehension ❑ Pre-read ❑ Set goals ❑ Think about what one already knows ❑ Ask questions ❑ Make predictions ❑ Test predictions against the text ❑ Re-read ❑ Summarize <p data-bbox="188 1239 631 1276">Vir: Carnegie Report 2010</p>	<ul style="list-style-type: none"> ❑ Build prior knowledge ❑ Build specialized vocabulary ❑ Learn to deconstruct complex sentences ❑ Use knowledge of text structures and genres to predict main and subordinate ideas ❑ Map graphic (and mathematical) representations against explanations in the text ❑ Pose discipline relevant questions ❑ Compare claims and propositions across texts ❑ Use norms for reasoning within the discipline (i.e. what counts as evidence) to evaluate claims

Model SIOP: PREDZNANJE ② in VNOS ③



Building and Reviewing Background Knowledge

- 1. Concepts** should be directly **linked to students' background experience**. This experience can be personal, cultural or academic.
- 2. Links** should be explicitly made **between past learning and new concepts**.
- 3. Key vocabulary** is emphasized. New vocabulary is presented in context. The number of vocabulary items is limited.

Comprehensible Input

1. Use **speech** that is appropriate for students' language proficiency.
2. Make the **explanation of the task** clear using step-by-step manner with visuals.
3. Use of a **variety of techniques** to make content concepts clear. Teachers need to focus attention selectively on the most important information. Introduce new learning in context. Help students learn strategies such as predicting, summarizing.

Model SIOP: STRATEGIJE 4



1. Provide **ample opportunities** for students **to use learning strategies**. Learning strategies should be taught through explicit instruction. You want students to develop independence in self-monitoring.
2. Consistent use of **scaffolding techniques** throughout the lesson. Introduce a new concept using a lot of scaffolding and decrease support as time goes on. Restate a student's response or use think-alouds.
3. Use of **a variety of question types**, including those that promote higher level thinking skills.

Model SIOP: INTERAKCIJA 5



Provide the following for the students:

- 1. frequent opportunities for interactions** about lesson **concepts** which encourage **higher level thinking skills**;
- 2. grouping** which supports language and content objectives: cooperative groups, buddies, pairs, large and small groups;
- 3. ample wait time** for responses;
- 4. opportunities for clarification in mother tongue.**

Model SIOP: URJENJE/UTRJEVANJE IN UPORABA ⑥ ter IZVEDBA URE ⑦



Practice and Application

Lessons should include:

1. **hands-on materials** or **manipulatives** for student practice;
2. activities for students **to apply content and language knowledge** in the classroom;
3. activities that **integrate all language skills**: listening, speaking, reading and writing.

Lesson Delivery

1. **Content objectives** supported by lesson delivery.
2. **Language objectives** supported by lesson delivery.
3. **Students engaged** 90% to 100% of the period.
4. **Pacing of the lesson** appropriate to students' ability level.

Model SIOP: PONAVALJANJE TER PREVERJANJE IN OCENJEVANJE 8



The **Review and Assessment** component of the SIOP Model has the following elements:

- Comprehensive **review of key vocabulary**;
- Comprehensive **review of key content concepts**;
- Regular **feedback to students** on their output;
- **Assessment** of student comprehension and learning of **all lesson objectives** (e.g., spot checking, group response) **throughout the lesson**.