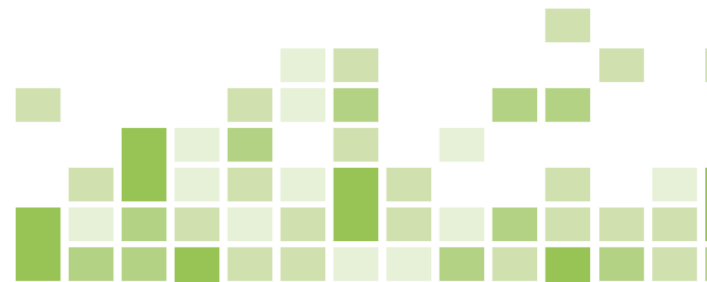




ТОМСКИЙ
ПОЛИТЕХНИЧЕСКИЙ
УНИВЕРСИТЕТ



Theory of Inventive Problem Solving

Tasks for e-learning

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2016





1. ППАЯ и e-learning environment

2. Опыт работы:

сайт BASES OF SCIENTIFIC RESEARCH

блог / курс MOODLE TRIZ

3. Основные проблемы: как быть и что делать?



Составляющие карьерного роста (современное понимание грамотности):

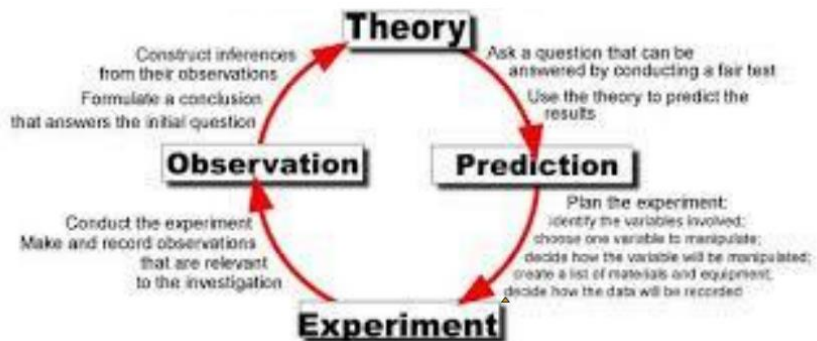
- **Профессиональная компетентность**
- **Владение компьютерными технологиями**
- **Владение родным языком**
- **Владение иностранным языком**





Scientific research

- Idea development up to task solving is plan process of scientific investigation



3

WIDE INDUSTRIAL USE OF THE CUTTING TOOL WITH WEAR-RESISTANT COATINGS CAN SOLVE A RANGE OF ISSUES:



Расписание

Нормативные документы

Учебные материалы

Контролирующие материалы

Учебное пособие

Part 1. Scientific Research: the goal and main tasks

[Foundations rules of research study](#)

[SMART Goals](#)

[Plan of Investigation](#)

Resources for Learning Technical Writing

[Effective Technical Writing Skills](#)

[General form of Research paper Writing an abstract](#)

Part 3. The presentation as a result of investigation

[Presentation skills](#)

[Planning a Presentation](#)




INVENTIVE PROBLEM SOLVING

This blog contains basic materials which can help you not only master the course but perform design tasks, to get "help of hall" evaluate the merits and drawbacks of the proposed educational materials. GOOD LUCK!

MAIN PAGE Tutorial Presentations Additionally Ask me


WEDNESDAY, 27 MARCH 2013

TRANSLATE
Выбрать язык
Технологии Google Переводчик



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Olga Shamina

TOTAL PAGEVIEWS
626



You have to overcome interesting to solve difficult tasks.
Try to see unexpected in usual thi

First of all (offhand) task:
With what speed should run...

Presentations Additionally Ask me

Presentations



- Innovations. What does it mean?
- Associative Thinking Technique
- Synecotics
- Morphological Analysis
- Key Parameters Values
- Ideal Result
- Contradiction&Su-Field Analysis
- Main Principles_briefly
- Physics, Chemistry, Geometry in TRIZ

Presentations Additionally Ask me

Ask me



Dear students! Ask me questions, please!
Only our collaboration will allow you to achieve the decent result!



THEORY OF INVENTIVE PROBLEM SOLVING



'A scientist can discover a new star
but he cannot make one.

He would have to ask an engineer to do it for him.'

Gordon L. Glegg

 about teacher

Olga SHAMINA

associated prof.

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 news forum

Psychological Inertia: How to prevent it?



It is well known about **psychological inertia**. It is necessary to break down stereotypes and to create appropriate conditions for new ideas generation. **Psychological Inertia** (PI) represents the many barriers to personal creativity and problem-solving ability, barriers that have as their roots "the way that I am used to doing it."


T. Edison asked his listeners:

"What is the place for absolute dissolvent keeping?"

Usually listeners could not solve this task. But once one of the listeners suggested to transform dissolvent to another phase condition – to keep it in solid state.

There exist analogy: water and sugar – ice cannot dissolve sugar.

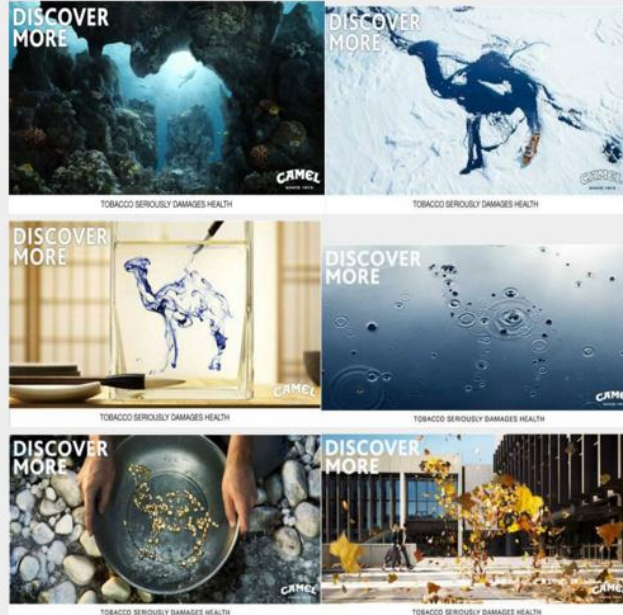


 Psychological Inertia

Brief information

Associative Thinking Technique

Specialists of BBDO developed a few images for Camel advertising.
Please, find the main approach and propose your own ideas



Criteria to evaluate task:

1.0 p. - 4-5 variants

0.5 p. - 3 variants

- associated thinking
- team working
- case-study
- “use of English”
- ...



СТУДЕНТЫ:

- уровень А0 – С1
- мотивация

проектный подход - понятные / интересные задания

ПРЕПОДАВАТЕЛИ:

- GRAMMAR!!!
- методика преподавания

работа в тандеме (НМС ТПУ, опыт 2000 – 2005 г.г.)



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**СПАСИБО
ЗА ВНИМАНИЕ!**