During my talk about Problem Solving, educators will **hear** what I say, and will **see**...
   • a **Talk-Power Point** with Just Enough Information to make it useful **during** a talk,
and I will tell them about (and will "link to" in the Talk-PPt) **two other info-sources:**
   • a **Details-Power Point** with Plenty of Information; many slides have so much info
that they won't be optimal **during** a talk (it's TMI) but these slides will be useful for
deep studying **after** a talk, to help attendees construct deeper understandings, and
   • sections in the **HomePage** of my website about **Education for Problem Solving.**

This is **a different kind of PowerPoint.** It's a collection of "samples" from the
Details-PowerPoint. These are intended to help you understand some
of the main ideas in my talk, including the two themes in its title,
Integrate Design Thinking with Science Thinking,
Build Transfer-Bridges (between School and Life) to Motivate Students
so when you're evaluating my talk-proposal you will recognize the careful thought
I've invested in developing a coherent system of innovative ideas that I'm confident
will help us improve our Education for Problem Solving, so I want to share the ideas.

The "sample-slides" are imported from a **Details-PowerPoint** and most have TMI, therefore...

iou – **During March I'll build a stronger foundation** with the core-ideas and logical structure in my website-**HomePage** & **Overview-PowerPoint. In April, I will make a Talk-PowerPoint** so I'll have time to revise-and-improve it before June, to make it more useful for sharing my innovative ideas in ways that will effectively communicate with fellow educators.

My bio says "I'm an enthusiastic educator (with a PhD in C&I) who wants to find co-enthusiasts." Therefore I want to begin my talk so participants are thinking "this will be exciting-and-fun." I want them to become more enthusiastic, more excited about *learning* — including what they will be learning in my talk — and *teaching.* In our talk-proposal, you asked us to "describe the journey participants will take during your session. What will they do, what will they learn, and how will you ensure they are active contributors rather than passive observers?" I said...

We'll "begin before the beginning" with an on-screen slide showing **two key features** of my model for Design Process, and **a Mystery Question,** and **a tip for Discovery Learning** (study the diagram!) while I'm [walking among them and] asking "have you solved The Mystery?" and "what are the key features?" to establish a feeling that "**this will be exciting and fun.**" At the starting time, I will ask everyone the questions, and will supplement Their Discoveries with My Explanations, to show how **The Mystery Answer** is **a third key feature.** I'll continue explaining the model, along with a claim that it accurately describes the process used for "most of what people do in life." In a Friendly Challenge, I'll ask them to Evaluate (is it more justifiable to claim "most" or just many, some, or none?) and to Generate examples for why it isn't "all". They will discuss in small groups, then in the whole room. I'll explain WHY, because The Wide Scope lets us build motivational Transfer-Bridges. And the adventurous journey will continue.

Their Journey will "begin before the beginning" with an on-screen First Slide (choosing this is my focus in the next 4 slides) followed by explaining how "The Mystery Answer is a third key feature."

The next three slides are options I'm considering for the first slide of my talk. All are variations on the same theme, differing in their descriptions of Discovery Learning & Recognition Learning and (more important) because the 2nd & 3rd slides add a **hint** that will make The Mystery easier to solve, thus tending to reduce the satisfaction of solving it. But the hint will make it solve-able by more people, so more will experience the satisfaction of solving it. My decision about how to weigh these factors (that are in-conflict) will affect the "Journey" if I do a talk for STEM Innovation Summit.

Producing an "optimal balance" (between challenge and probable success) is one of the important goal-criteria when writing a mystery story, or designing an instructional activity. In the HomePage of my website – Education for Problem Solving – and in my Talk-PowerPoint, I briefly describe two aspects of designing an activity that is fun for students. An activity can be...

FUN intrinsically when a student **enjoys the experience** because they think the Problem-Topic is interesting, and their own Problem-Solving Actions are interesting. This will stimulate their curiosity, can inspire a love of learning.

FUN due to personal satisfaction when a student **anticipates success,** and **does succeed.** We want to help students develop confidence with a growth mindset. For achieving this goal, one useful teaching strategy is to design activities with a "just right" **level of optimal challenge** as in a good mystery story, so students won't be bored (if it's too easy) or discouraged (if it's too difficult), so they will be challenged but **they will succeed** and **they will enjoy the satisfactions of success.**
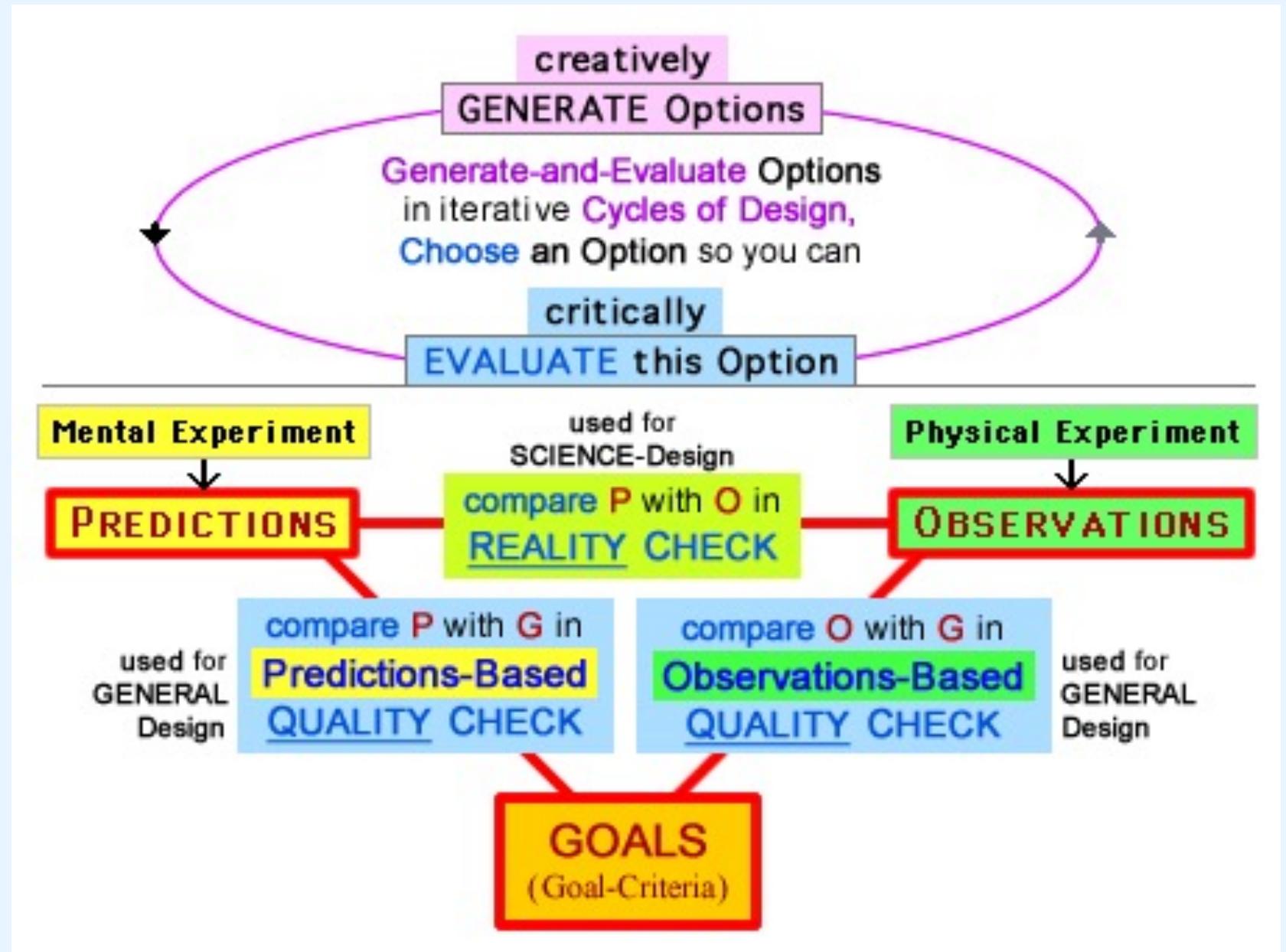
If you want to Learn by Discovering: **study only the first slide,** and try to solve the Mystery; if necessary, **after awhile study the second & third slides,** and use the hints to stimulate your thinking.

To understand my model for **Problem-Solving Process,**

• do **Discovery Learning** by studying **words** & **colors,** and **spatial relationships** (in the **Top** and **Bottom,** find the Problem-Solving Actions),

• **Reflect-and-Recognize** by reflecting on **Your Actions** when you "**make something better**" to **solve a problem,** and you will recognize that **The Diagram-Actions** are **Your Actions,**

• and **solve a mystery:** Why does the Cycle have a right-side arrow, pointing from Evaluate to Generate?

creatively
GENERATE Options

Generate-and-Evaluate Options
in iterative Cycles of Design,
Choose an Option so you can

critically
EVALUATE this Option

used for
SCIENCE-Design

Mental Experiment

PREDICTIONS

compare P with O in
REALITY CHECK

Physical Experiment

OBSERVATIONS

used for
GENERAL
Design

compare P with G in
Predictions-Based
QUALITY CHECK

compare O with G in
Observations-Based
QUALITY CHECK

used for
GENERAL
Design

GOALS
(Goal-Criteria)

To understand my model for **Problem-Solving Process,**

• do **Discovery Learning** by studying **words** & **colors,** and **spatial relationships,**

• do **Reflect-and-Recognize:** reflect on your experiences, and you will recognize that **The Diagram-Actions** are **Your Actions,**

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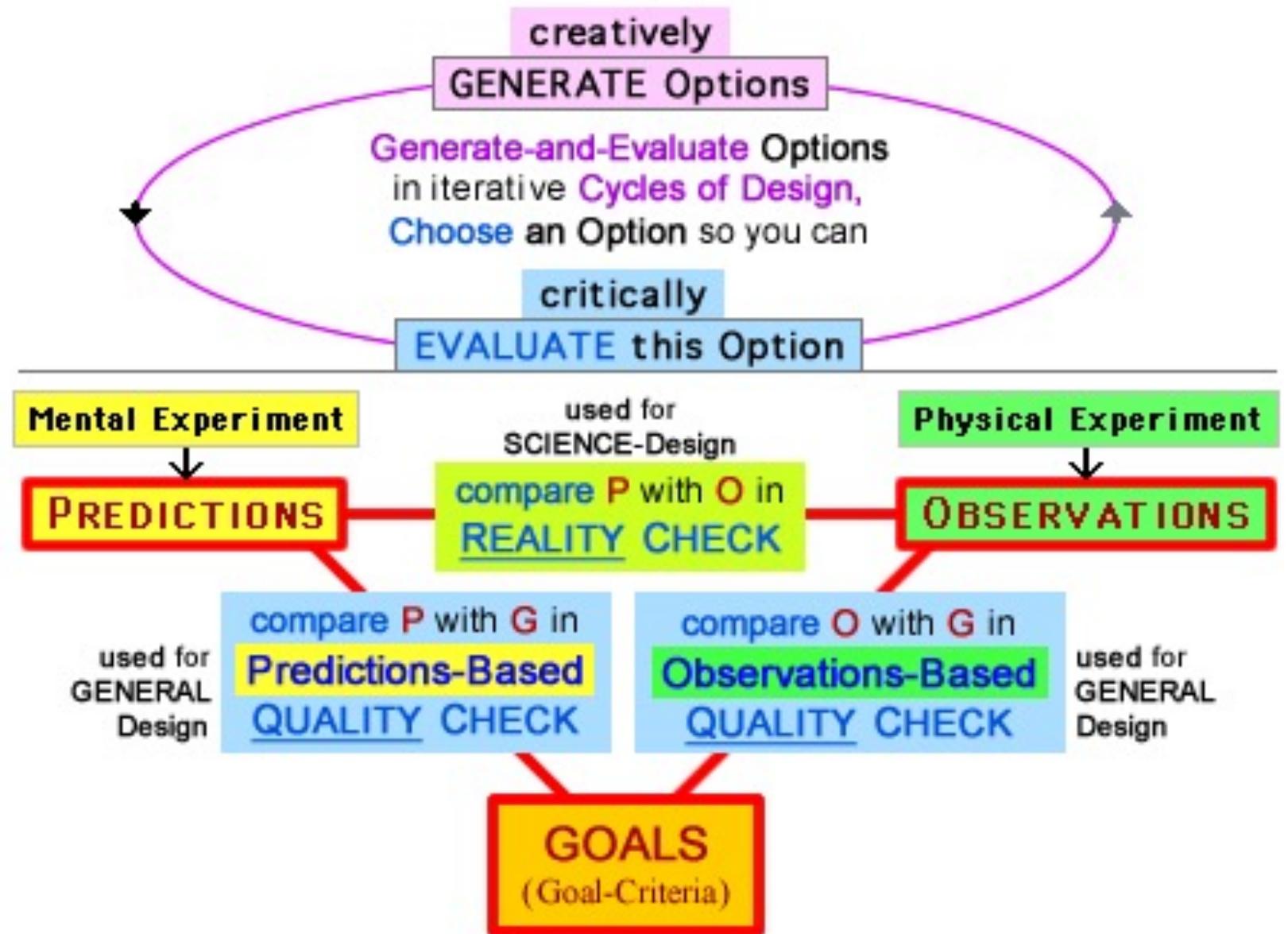
hint: What action is essential (and why) in the Top & Bottom? How does it connect these Parts?

creatively
GENERATE Options

Generate-and-Evaluate Options
in iterative Cycles of Design,
Choose an Option so you can

critically
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compare P with O in
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used for
GENERAL
Design

used for
GENERAL
Design

GOALS
(Goal-Criteria)

I considered making a slide with the same info as above but with a stronger hint (it's below) but I soon decided that this would make it too easy to solve the mystery.

I could choose a First Slide by using only Predictions (now I would choose the 2nd Slide) but I also will use Observations — by asking people to study the 1st Slide and try to solve the mystery, then (if it's necessary) the 2nd & 3rd Slides — and this info will help me choose wisely.

hint: How do you respond if there is not a close match between Predictions & Goals?
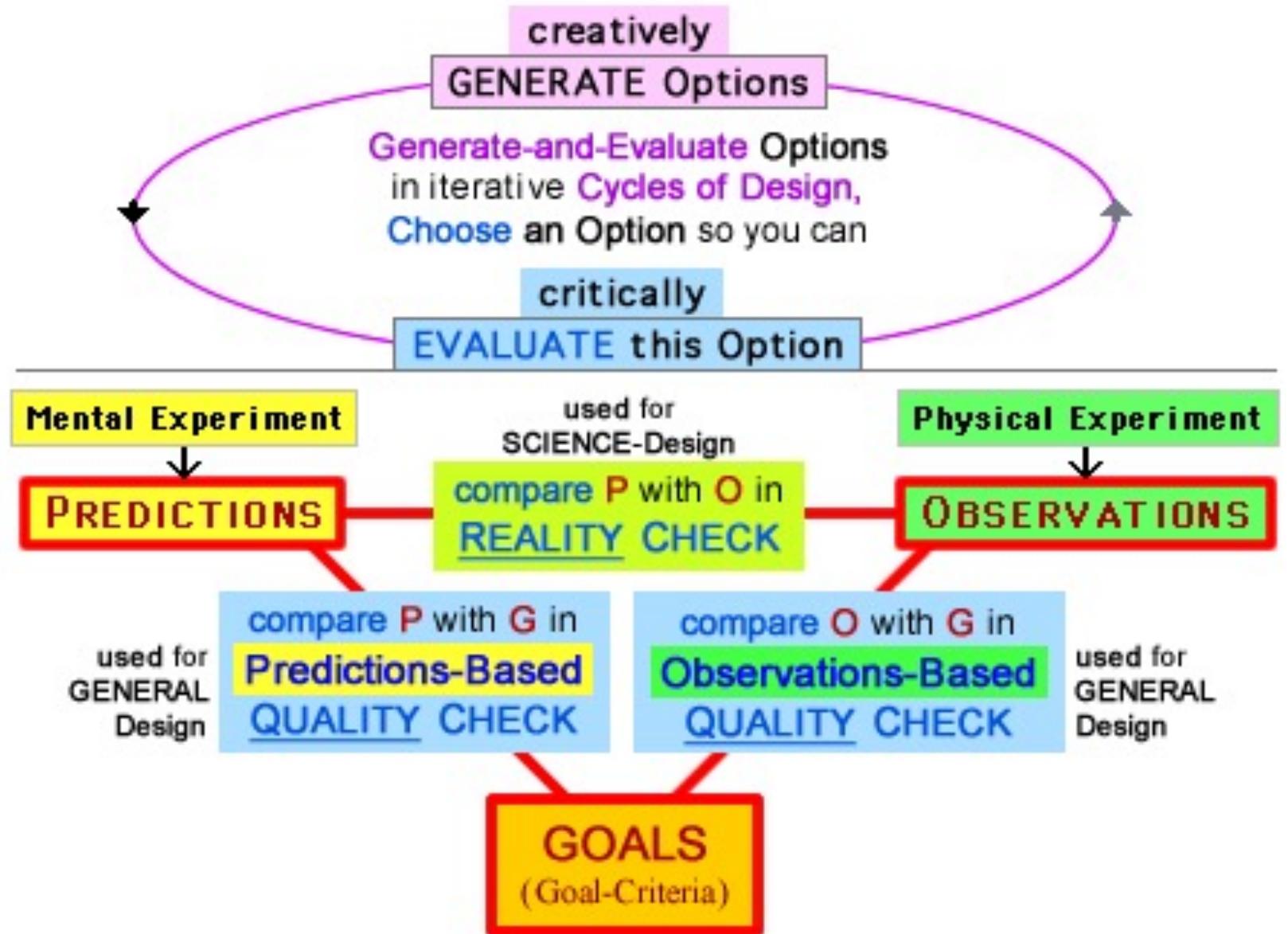
Solving the Mystery: There is a right-side arrow (from Evaluate to Generate) **because**

in a **Quality Check, IF** there **is** a **close match**
between **Predictions and Goals,**
This Option has **high Quality**
(with **Quality defined by your Goals**)
so **This Option** might be a good **Solution.**

But what can you do if there **is not** a **close match**?

IF there **is not a close match** between Predictions and Goals, ask
"What are **the mis-matches?**   what are **the causes** of **mis-matching**?"
and "**How can I revise This Option** to **get a closer evaluative-match**?"
and in this way your creative Generation of a New Option
is guided by your critical Evaluation of the Old Option, and it also
is motivated by Evaluation that shows a need to Generate a better New Option.

In a typical **Cycle of Design**
first you **Generate** and **then** **Evaluate**
(shown by left-side arrow); and (shown by right-side arrow)
later you **Evaluate** and **then** **Generate,**
to continue an **iterative Cycle** of Generate-Evaluate-Generate-Evaluate-...
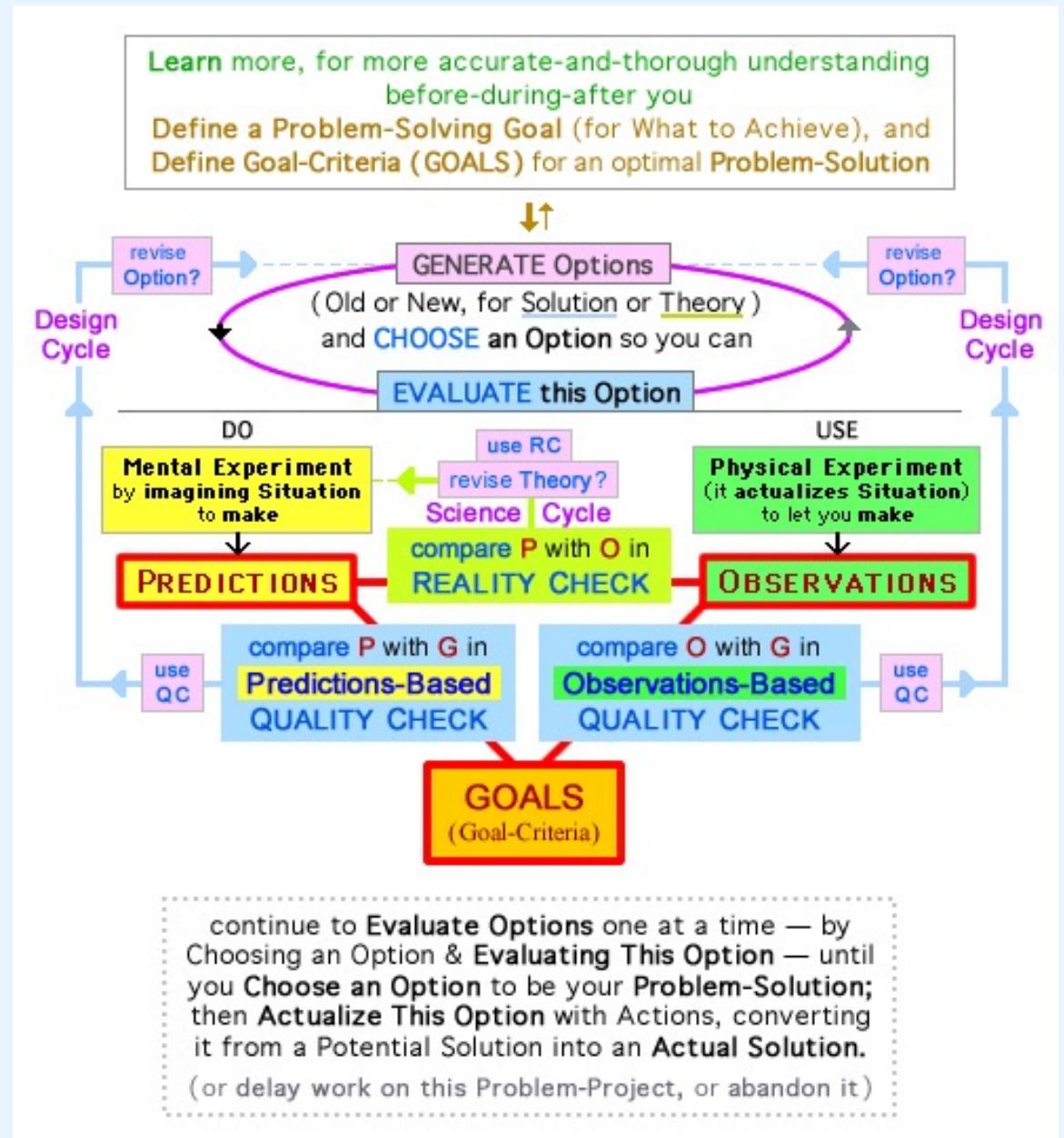
My **full diagram for Design Process** shows…

three major **Problem-Solving Actions:**
1) Generate-and-Evaluate in **Design Cycles,**
2) Evaluate an Option with **3 Comparisons,**
3) use QC, ask "revise?" to **Guide Generating.**

• the **Top Box** shows **PS-Preparations:**
Learn, Define Goal & Define Goal-Criteria.
• the **Bottom Box** is **Solving the Problem:**
Choose an Option to be a **Problem-Solution**
and **Actualize it** so it's an **Actual Solution.**

Well-designed **Teaching Strategies** can
help students **Cope with the Complexity,**
by **learning in steps** (so simple → complex)
and "**Experience + Reflections → Principles**"
plus **Discovery Learning** so **Inquiry-Principles**
are learned by using an **Inquiry-Process.**

Learn more, for more accurate-and-thorough understanding
before-during-after you
Define a Problem-Solving Goal (for What to Achieve), and
Define Goal-Criteria (GOALS) for an optimal Problem-Solution

↓↑

revise Option?

GENERATE Options
(Old or New, for Solution or Theory)
and CHOOSE an Option so you can

Design Cycle

revise Option?

Design Cycle

EVALUATE this Option

DO

use RC

USE

Mental Experiment
by imagining Situation
to make

revise Theory?
Science Cycle

Physical Experiment
(it actualizes Situation)
to let you make

PREDICTIONS

compare P with O in
REALITY CHECK

OBSERVATIONS

use QC

compare P with G in
Predictions-Based
QUALITY CHECK

compare O with G in
Observations-Based
QUALITY CHECK

use QC

GOALS
(Goal-Criteria)

continue to Evaluate Options one at a time — by
Choosing an Option & Evaluating This Option — until
you Choose an Option to be your Problem-Solution;
then Actualize This Option with Actions, converting
it from a Potential Solution into an Actual Solution.

(or delay work on this Problem-Project, or abandon it)

Above, the focus is on the First Slide in the **Talk-PowerPoint** for my talk.
Below, the focus shifts to its **two-part Title** that summarizes **two themes** of my talk,
Integrate Science-Thinking into Design Thinking,
Build Transfer-Bridges (between School and Life) to Motivate Students

I'll briefly outline each part in the slides below. But explanations that are
wider & deeper are in the Details-PowerPoint and in web-page sections
about Integrating Design with Science and **Building Transfer-Bridges.**

iou – during mid-March I will revise my Overview-PowerPoint, and
then I'll link to it instead of the section below in Slides 10-16.

Here is a "big picture overview" of 3 main topic-areas in my talk:

<u>**why**</u> Design Process has **two wide scopes** (for **Activities** & **Process**);
<u>**why**</u> the wide scopes **promote transfers Across Areas** & **Thru Time;**
<u>**how**</u> these transfers **are educationally beneficial** if we use them to
build bridges [from School into Life] **that increase motivation**
(I want to do) **and confidence** (I can do) with **growth mindset.**

learning my model for **Design Process** (for **Problem-Solving Process**);
metacognition (**what** it is & **why** it's useful, **how** Design Process can
help students develop-and-use **metacognitive Thinking Strategies**).

general principles of education & **strategies for effective teaching;**
designing C&I that can produce optimal Whole-Person Education.

The **background colors** of slides (**yellow, white, blue**) tell you the
topic-area, and **you can study the topics in any order you want.**

This slide summarizes most main ideas from the "yellow slides" topic-area:

my verbal-and-visual model for **Design Process** (for **Problem-Solving Process**) **accurately-and-usefully describes the creative-and-critical Process that most people use** for **most of the Activities we do** in most areas of life.

evidence-based logic (from *How People Learn,* NRC 2001) supports my claims that **these wide scopes** (for Process & Activities) **increase Transfers-of-Learning,** both **Across Areas** (between School-Areas, and **between School-Life & Whole-Life**) and **Through Time** (from Past to Present, and **from Present into the Future of students**);

these Transfers (for Learning & Performing) **are educationally beneficial** by producing **Direct Benefits with Transfers-of-Learning** (Across Areas & Through Time) and also **Indirect Benefits with Transitions-of-Attitudes** (better **Motivations** & **Confidences**).

A student increases their Motivations when we help them build Transfer-Bridges from School into **their Life,** and from Now into **their Future,** so **they are predicting that** "if I improve my School-Life Now, **it will** (due to Transfers) **improve my Whole-Life Later,** and I want a better Life." This helps them **develop a Growth Mindset,** so they **expect to improve their Learning** (Now) **and Performing** (Now & Later). They **WANT to improve** (with **Motivation**) and they **EXPECT to improve** (with **growth-mindset Confidence**).

results of **expectations:** When students **think** they will get
TRANSFERS of Knowledge-and-Skills
THROUGH TIME and **ACROSS AREAS,**
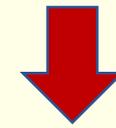**this can produce TRANSITIONS in Attitudes:**

Past   **PRESENT** ➡ **FUTURE**

SCHOOL ➡ **my LIFE**

⬇

MOTIVATIONS:
IF I improve PRESENT PS-Skills in SCHOOL,
these will be FUTURE PS-Skills in LIFE.

student expectations for two other kinds of <u>Transfer</u>
(for Past-to-Present, and Life-into-School)
can produce a <u>Transition</u> in an ATTITUDE,

Past → **PRESENT**   **FUTURE**

LIFE   **SCHOOL**

CONFIDENCE

I've done PS-Process <u>BEFORE</u> in <u>LIFE</u>,
so I can do it <u>NOW</u> in <u>SCHOOL</u>.

Performing **Goal =** want **best performing** NOW.
Learning **Goal =** want **best learning** NOW
so you can improve **best performing** LATER.

Past   **Present**   **Future**

Learning ➡ **Performing**

NOW   **LATER**

For example, a basketball team has a
LEARNING Goal in early-season practice,
PERFORMING Goal in late-season tournament game.

Why do I claim that **my model for problem-solving <u>Design Process</u>** has **two wide scopes?**

First, I broadly define a **Problem** as any opportunity to make things better in any area of life,
so people do **Problem Solving** (verb) whenever **we are trying to** make something better,
and we are **Problem Solvers** (noun) whenever **we actually do** make something better,
so most of our Activities (in most areas of life) are **Problem-Solving <u>Activities</u>.**

Second, I'm confident that we **use a similar Problem-Solving <u>Process</u> for most things we do,**
AND that **Design Process <u>accurately describes this similar</u>** (but not identical) **Process**
AND **<u>its description is useful</u>** for helping students improve their Problem-Solving Skills.

These two wide scopes (for PS-Activities & PS-Process) let teachers design instruction that
increases two kinds of Transfers (Across Areas, Through Time) and **helps us motivate students
by building Transfer Bridges** (between School & Life, and from Past to Present into the Future),
to produce **direct benefits** (with increased **Transfers: School ↔ Life** and **Past→Present→Future**)
plus **indirect benefits** (with improved **Attitudes** in **Motivations & growth-mindset Confidences**).

Reflection & Recognition: Think about **your <u>PS-Actions</u>.** Do you typically **use Design Cycles of
Generation-and-Evaluation?** (it's #1 in Slide 8)   Do you (#2) **Evaluate an Option by comparing
your Predictions** (of its Actual Characteristics) **with your Goal-Criteria** (for Desired Characteristics)?
Is your **Option-Revising** (#3) sometimes **guided by mismatches between Predictions & Goal-Criteria?**
{ but sometimes these **Basic PS-Actions** should be supplemented {**<u>why & how?</u>**} by **Extra PS-Actions** }

It can be useful to think about your **Problem-Solving Goal**
(it's **the thing you want to make better**, it's **what you want to achieve**)
in categories with "kinds of things" — for example, you can decide to *design* a better

product or **activity** or **relationship** or **STRATEGY** (in **General Design**)
or
a **theory** (in **Science-Design**).

With overlaps, your Goal(s) can be **activity**-**and**-**relationship**-**and**-**STRATEGY**, or
other combinations; many combos include a **STRATEGY**, for reasons explained in the next slide.

other ways to categorize: **You may want to define another set of categories,**
customized by you **so it's a better fit for the students in your educational situation.**
You want the PS-Goals to closely match the life-experiences of your students, so **they**
will recognize the personal relevance of school activities, and **will be motivated** by thinking
that "**my learning in School-Life will improve my Whole-Life** (= School-Life + NonSchool-Life)
and I want a better Whole-Life, so I want to proactively pursue my own Personal Education."

The diagram below is an important
part of my model for Design Process;
it shows **3 Comparisons of 3 Elements;**
this is the **WHAT** of the 3 Comparisons.

The right side explains two **WHY**'s.
For a Quality Check, the Goal-Purpose
(with answers for "why am I doing this?
how does it help? what does it achieve?")
is "to ask **The Design Question**".
For a Reality Check, the Goal-Purpose
is "to ask **The Science Question**".
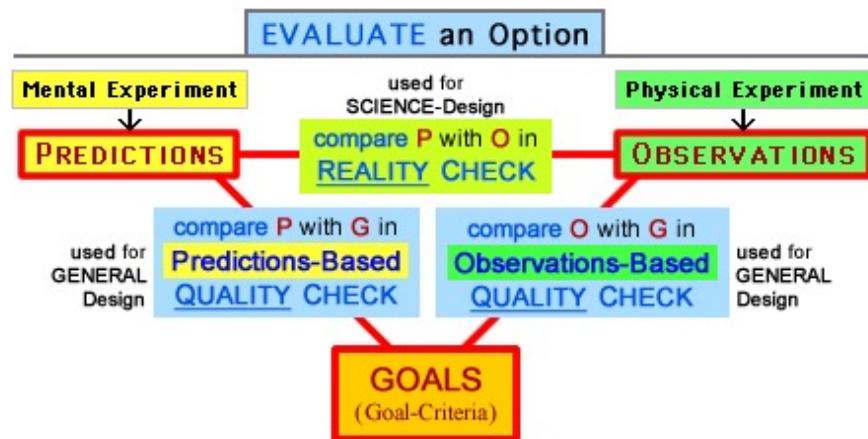
use **Quality Check** to ask **Design Question,**
use **Reality Check** to ask **Science Question:**

With a **Quality Check** you are asking **The Design Question,**
"**how close is the match?**"
when you compare
This Option's **Actual Characteristics** (Predicted or Observed) with
the **Desired Characteristics** that you have defined as your GOALS.

It's a **Quality Check** because in this comparison you also are asking
"**how high is the Quality?**"
with **Quality** defined by your **GOALS** (i.e. by your **Goal-Criteria).**

With a **Reality Check** you are asking **The Science Question,**
"**am I surprised?**"
and you're answering "**yes**" if there is a mis-match
when you compare **Predictions** with **Observations**
but you answer "**no**" if there is a close match.

It's a **Reality Check** because it shows you how closely
Your Theory about "how the world works" matches
The Reality of "how the world really works."

These diagrams show how we "Evaluate an Option" for
1a) Design-Only when we use two kinds of Quality Check,
1b) Science-Only by using a Reality Check,
2) Design-and-Science using Quality Checks + Reality Checks.

Most **other models-for-process** describe **either Design** (as in 1a) **or Science** (1b) but **my model for Design Process** has a logical integrating of Design-AND-Science, because the core of its evaluation-logic (**using 3 Elements in 3 Comparisons**) leads naturally to it being used for both General Design and for Science-Design. This is beneficial because when students understand the logical integrating of design-with-science in **my model** (and they internalize it) this helps them develop a logical integrating of design-with-science in **their thinking** while they're solving problems.

1a & 1b are "public domain" but 2 is (afaik) my invention.

Teachers can design *activity progressions* (with 1a-and-1b, then 2) moving from easy-and-familiar to difficult-and-novel, to help more students – with wider diversity – do STEM.
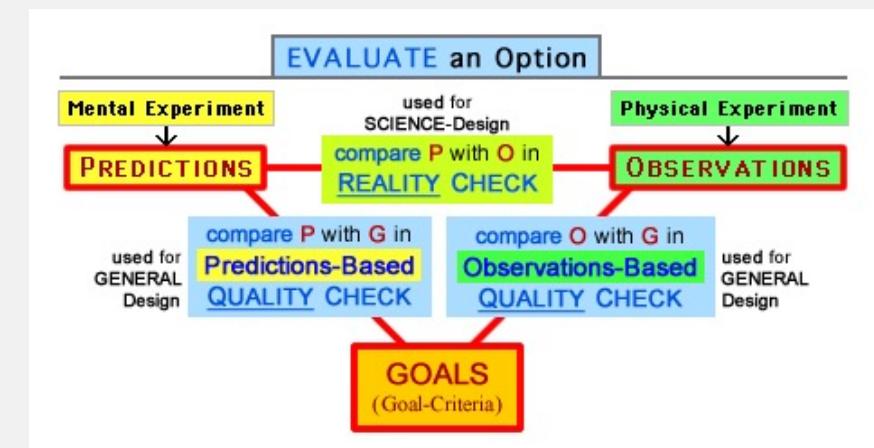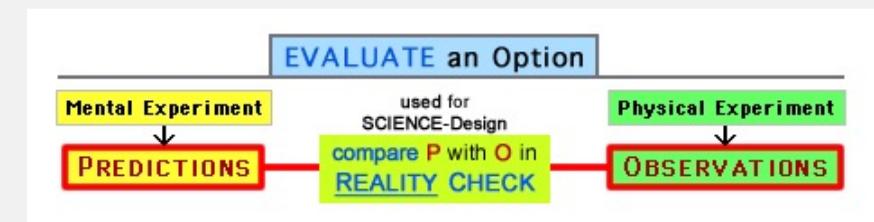
The bottom diagram shows "3 Comparisons of 3 Elements" that people use while we Design Solutions for a Problem. Students can **see** the two comparisons that use Predictions, for a Quality Check (it's the focus of their Design Thinking) AND for a Reality Check (in their Science Thinking). When a teacher often reminds them to "use BOTH" this helps them develop a disciplined habit of **integrating Science-Thinking into their Design Thinking** with Science-during-Design that improves the effectiveness of the Design Process they can use to do most things in life. {we use Science Thinking in Science-during-Design, Everyday Science, Research Science}

    This habit – of regularly testing their Theories with logical Reality Checks – is a practical benefit, helping students *make accurate Predictions* (so their Quality Checks can be accurate indicators of Quality) and *Design better Problem-Solutions.*

    Research shows the effectiveness of activities when students make Predictions and get Feedback on their predictive accuracy; it also shows the instinctive pleasure (with increase of attention) we get when we make predictions and anticipate being correct.
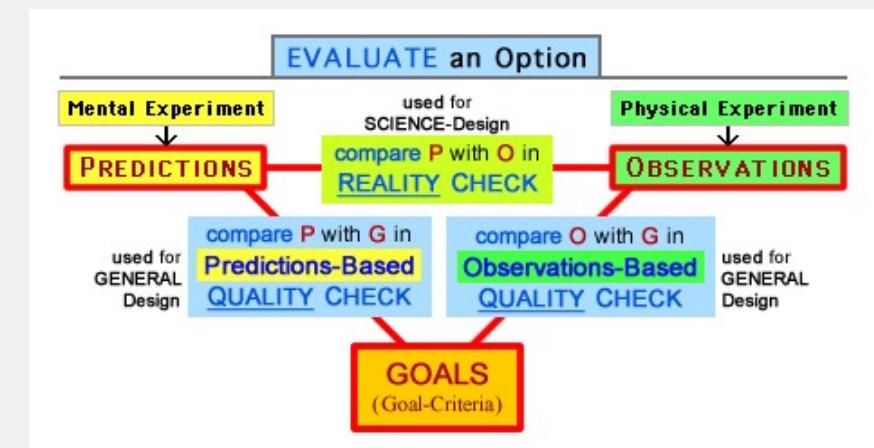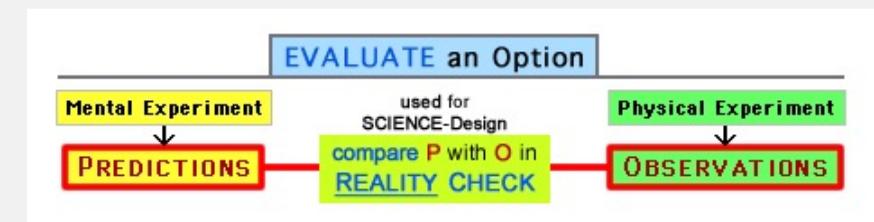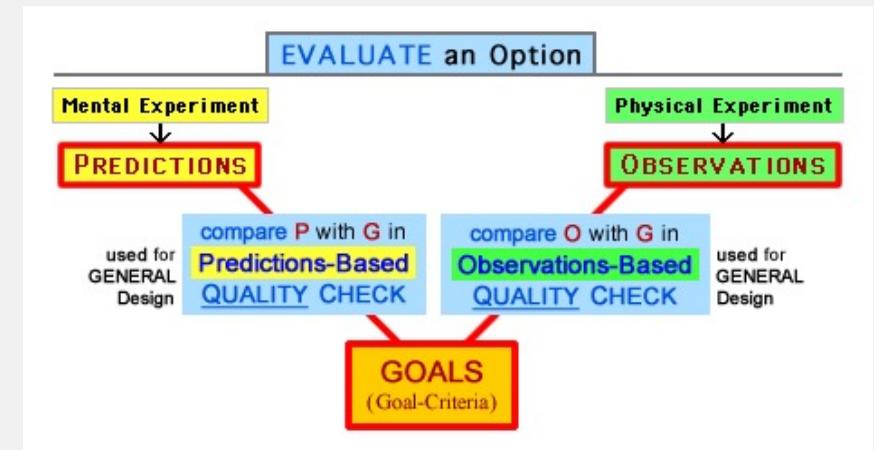
It's useful to persuade students that "active high-quality **thinking**" will produce INDIRECT Benefits that will happen when students **are motivated with** "active **thinking**" **by imagining** that **what they are learning in School will Transfer Across Areas** (from **School-Life** into **their Whole-Life**) and it **will Transfer Through Time** (from **their Present** into **their Future**), so **their present School-Learning will improve the overall quality of their future Life-Living in ways they want.**

These **expectations** can **motivate a student** to pursue **Personal Education** that is **Problem-Solving Education** because its goal is "making things better" in Their Life. They see Their Education as a Problem-Solving Project (with a PS-Goal of "making things better" **later**) so they will proactively invest extra effort in Their Education **now** because **they are motivated by expecting** that **improving Their School-Life** will **improve Their Whole-Life** in **Their Future.**

This is an "extra section" that isn't part of the Proposal-PowerPoint.

My talk (and its **Talk-PowerPoint**) will begin with one slide for "**Discovery + Mystery**"
but my **Details-PowerPoint** will have — near its beginning, after an introduction that
provides a "big picture" overview — **the longer set of slides (23-29)** you see below,
to guide your longer journey with Discovery Learning, and **it will link to sections**
(later in the Details-PowerPoint, and in my web-pages) **with my Explanations,**
for people who want to learn more time-efficiently, to understand ASAP.

Discovery Learning:
observe (and think about)
the **words** & **colors**, and
spatial relationships.

Recognition Learning:
think about **Your Actions**
when you "**make something
better**" to **solve a problem,**
and you will recognize that
The Diagram-Actions
are **Your Actions**.

a mystery: In this model for
Problem-Solving Process,
**why does the Cycle have
a right-side arrow,** pointing
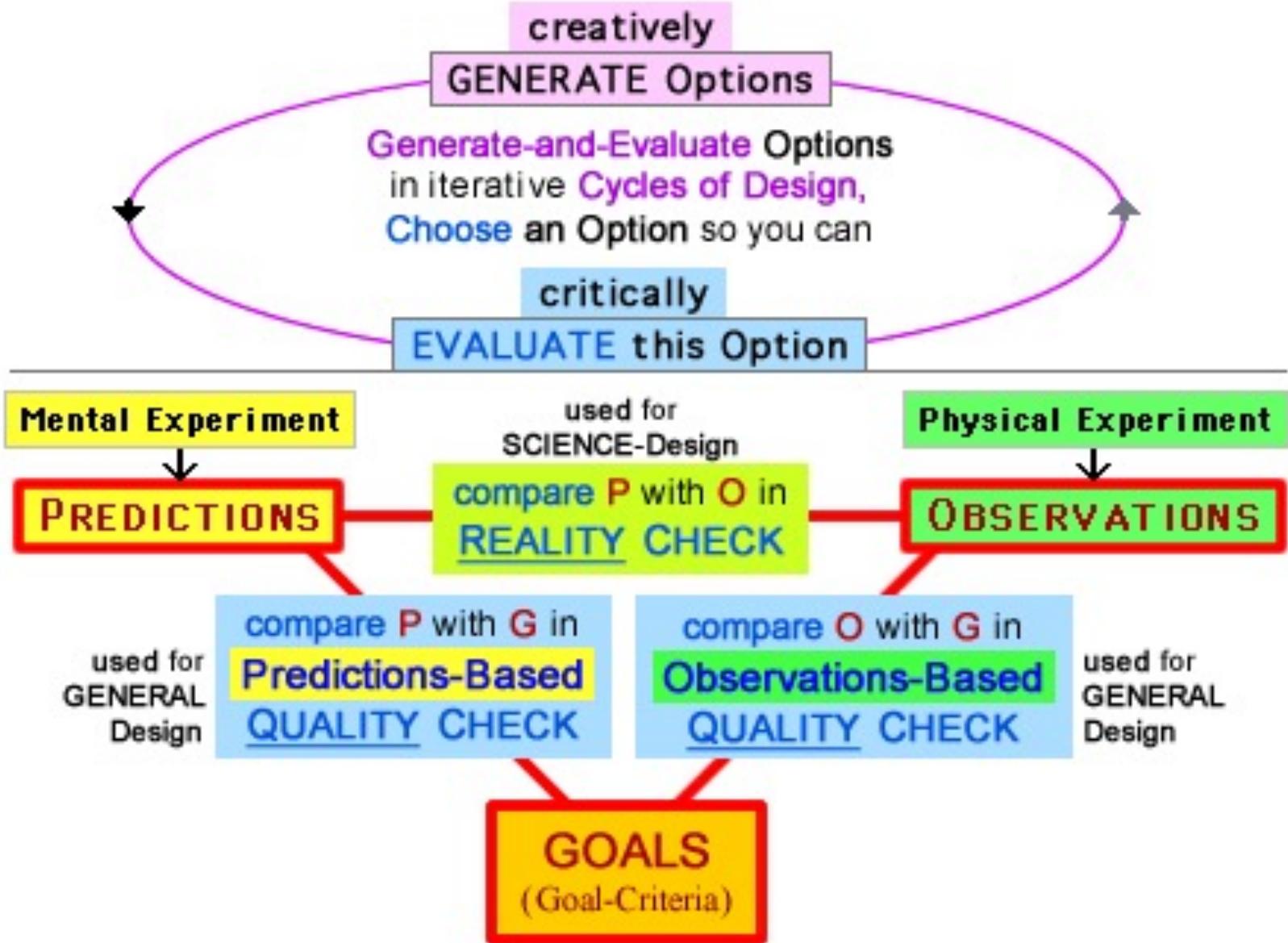from Evaluate to Generate?
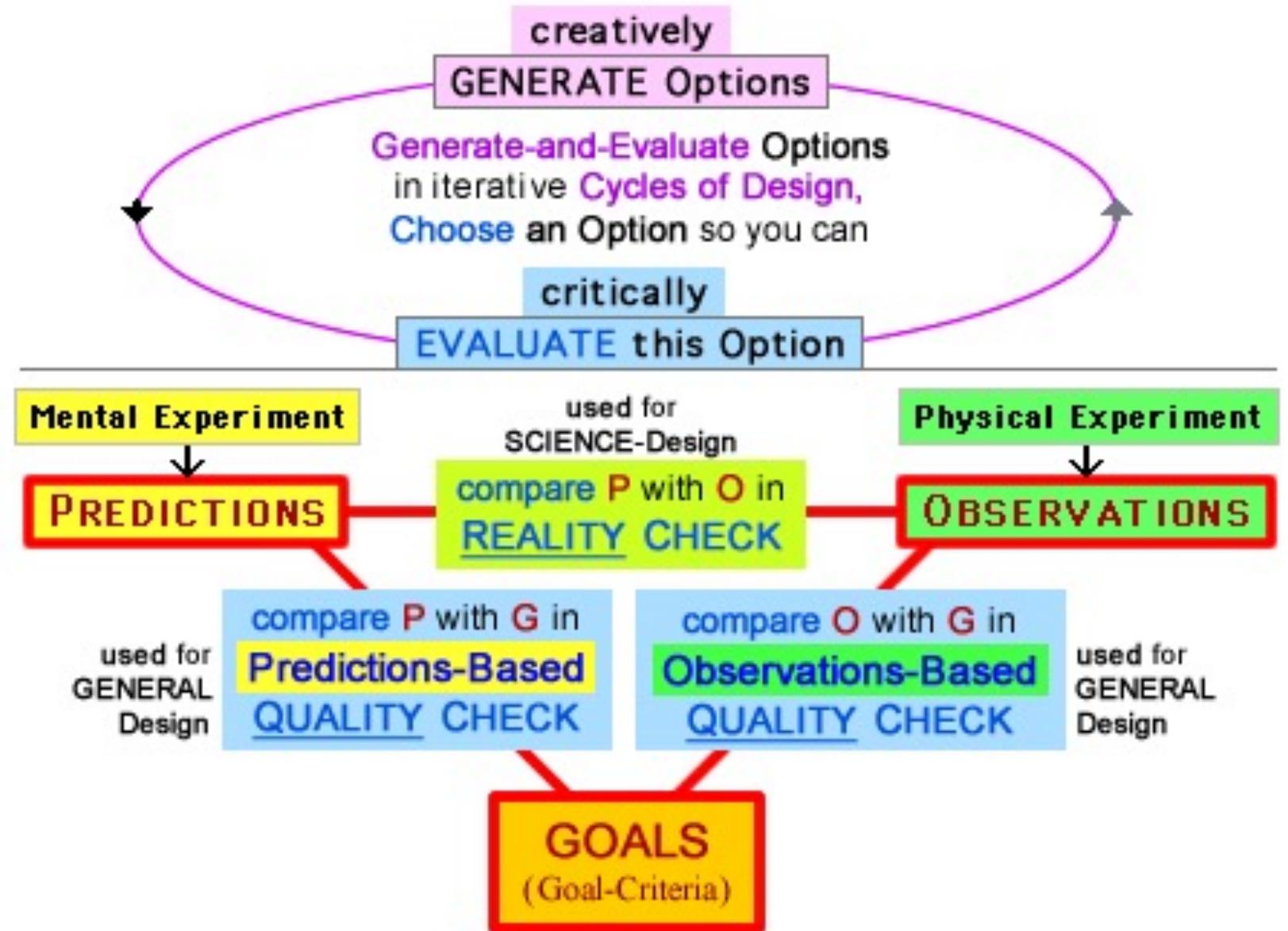
In **TOP Part** of diagram, what is the strategy for problem solving? In the **BOTTOM Part**, what is the goal-purpose for each comparison?

What action has an essential function (and what/why is it?) in Top Part & Bottom Part?

Why does the Cycle have an arrow on its right side, from Evaluate to Generate? hint: What is the functional connecting-of-actions between Top and Bottom? How does it explain what happens in **the arrow-action** on the right side?
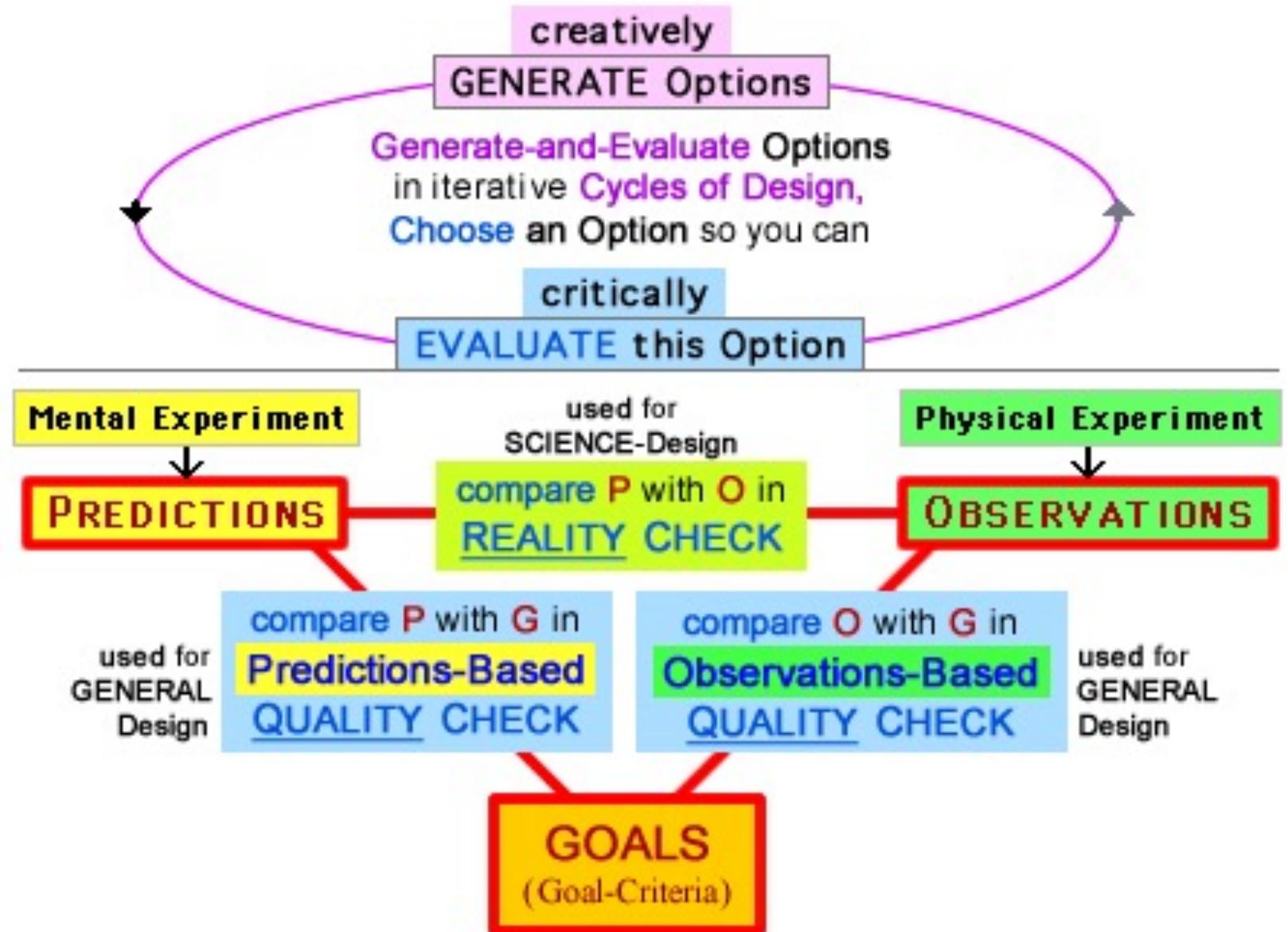

creatively
GENERATE Options
Generate-and-Evaluate Options in iterative Cycles of Design, Choose an Option so you can
critically
EVALUATE this Option

Mental Experiment

used for SCIENCE-Design

Physical Experiment

PREDICTIONS

compare P with O in
REALITY CHECK

OBSERVATIONS

used for GENERAL Design

compare P with G in
Predictions-Based
QUALITY CHECK

compare O with G in
Observations-Based
QUALITY CHECK

used for GENERAL Design

GOALS
(Goal-Criteria)

In **TOP Part,** main strategy is Generate-and-Evaluate Cycles.

In **BOTTOM Part,** goal-purpose for Quality Checks (in General Design) your purpose is to **EVALUATE the Quality** of an Option, with Quality defined by Goal-Criteria.

"**EVALUATE this Option**" is essential in TOP & BOTTOM, connecting the two Parts.

Why does **Design Cycle** have an arrow on its right side?

spoiler alert – This is a strong hint: After a comparative Quality Check, how do you respond if there is not a close match between Predictions and Goals?

creatively
GENERATE Options

Generate-and-Evaluate Options
in iterative Cycles of Design,
Choose an Option so you can

critically
EVALUATE this Option

Mental Experiment

used for
SCIENCE-Design

Physical Experiment

PREDICTIONS

compare P with O in
REALITY CHECK

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used for
GENERAL
Design

compare P with G in
Predictions-Based
QUALITY CHECK

compare O with G in
Observations-Based
QUALITY CHECK

used for
GENERAL
Design

GOALS
(Goal-Criteria)

The right-side arrow shows the Action of **Guided Generating** that completes a **Design Cycle.**

In the Problem-Solving Action of **Guided Generating** your Generation of A New Option is Motivated-and-Guided by the mismatch between Goals (for Desired Characteristics) and Predictions (of Actual Characteristics), by asking "how can I get a closer match so The New Option will have higher Quality?" In this way **your creative Generating** (by revising The Old Option) **is Motivated** (because you want higher Quality) **and is Guided** (in designing a better match) **by your critical Evaluating.**
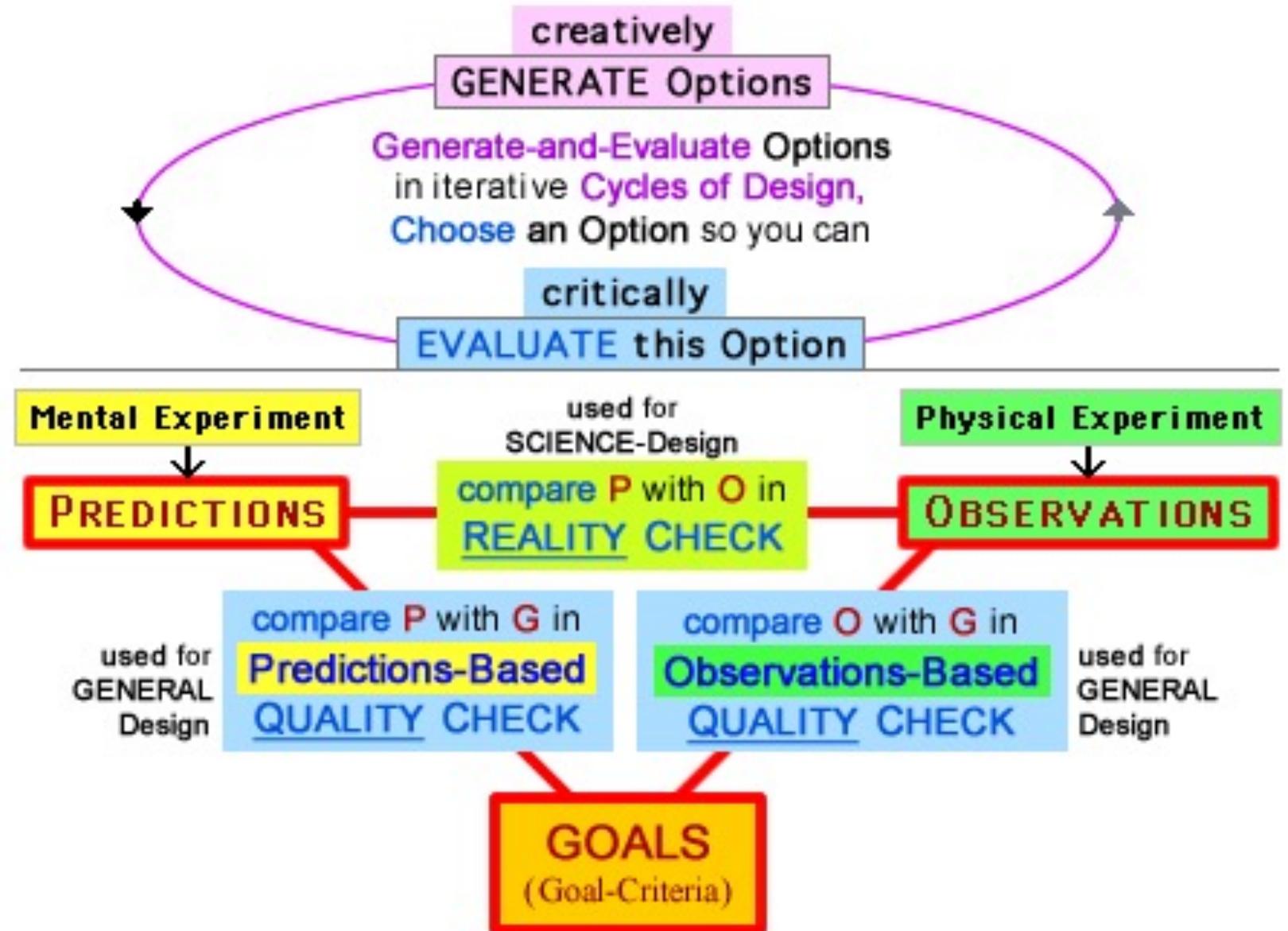
Do you see (in 2 slides above) how "Guided Generating that completes a Design Cycle" is The Mystery Answer?

To stimulate your Discovery Learning, **compare the diagrams** (Left & Right) **and ask questions,** including these:
- on the Right, what is added? or subtracted? [is each trivial (like changing a term to a synonym) or major?]
- what Problem-Solving Strategies – major and minor – are represented at the Left (Top & Bottom) and Right?
- what is the meaning and functional importance for each term-pair in "Old or New, for Solution or Theory"?
- on Right, how/why do my descriptions of Mental Experiments & Physical Experiments differ in three ways?
{ My responses – with answers & comments – are in the next slide. }
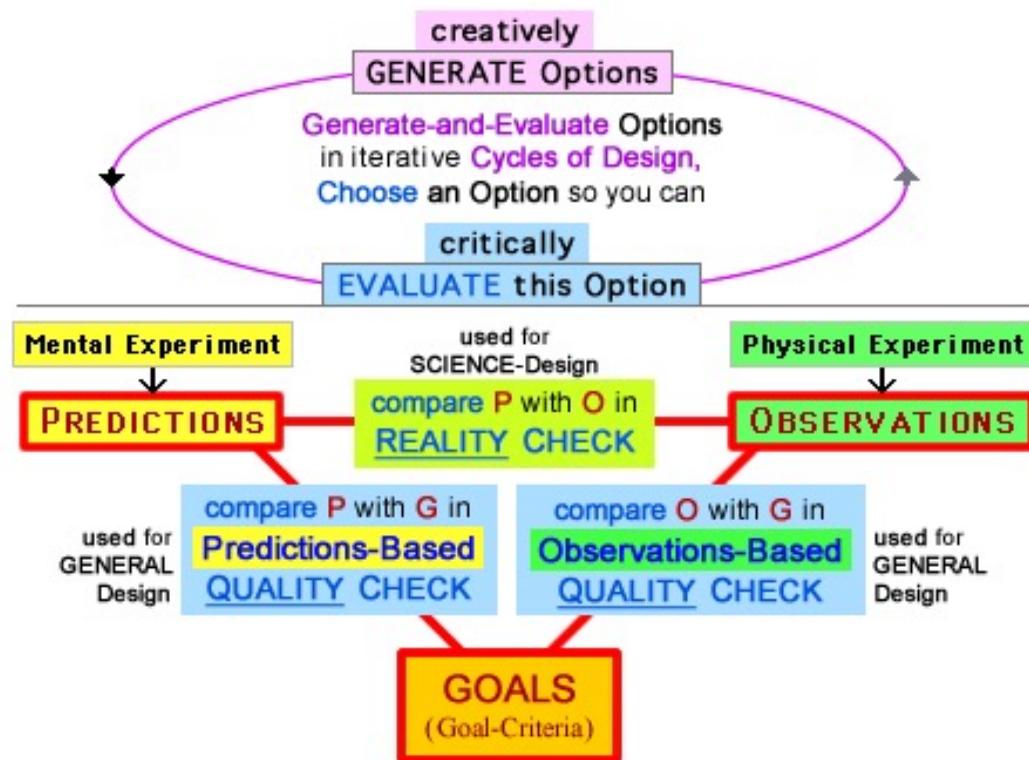
my terms: In the Left-Side Diagram, I call the Top Part "**Diagram 1**" and the Bottom Part "**Diagram 2**". On the Left Side these are combined to form "**Diagram 1+2**"; and on the Right Side is "**Diagram 3**".

When we **compare Diagram 1+2 with Diagram 3,** here are the main similarities and differences: Basically, **1+2 ≈ 3** (they're approximately equal with many similarities) but there are differences.

• no major Action (or concept) is "subtracted" **in Diagram 3,** but there are some **minor removals** {gone are "Generate-and-Evaluate Options in iterative Design Cycles", "creatively" & "critically", "used for GENERAL Design" & "used for SCIENCE-Design"} because I think you already know these (from studying Diagram 1+2) and you will "assume their continuing existence" in the new Diagram 3.

• a **semi-major addition** is "**Old or New**" because instead of "re-inventing the wheel" sometimes a good Solution-Option is just "using a wheel [as-is or modified]" that's an Old Option you remember, or you can invent a New Option; both Actions (use Old, invent New) are "creative" ways to Generate.

• a **semi-major addition** is "**Solution or Theory**" because we can Generate Options for **a Solution** (in General Design) and/or (in Science-Design) Generate Options for **a Theory** about "how things work."

• a **MAJOR addition** (it's the third major PS-Strategy in Design Process, the Guided Generating that is described in Slide 11) is the "Design Cycle" (on Left Side & Right Side) that occur when you "use QC" to ask "revise Option?" so Evaluation motivates-and-guides you to Generate a New Option.

more: You can learn from **Your Discoveries** and **My Explanations.** This set of slides (22-29) uses both, and if you want **Less Discoveries** & **More Explanations** so you will understand more in less time, ASAP, you can use sections (later in the Details-PowerPoint and in my web-pages) that help you learn quickly.