![SDP logo — Society of Decision Professionals]

SOCIETY OF DECISION PROFESSIONALS

Extending Good Decision-Making

Beyond the Workplace

Covering Today

Decision Professionals share about **how they brought Decision Education to their community.**

Get support from our panel on **strategies for making a positive impact** in your sphere of influence.

We offer **ways you can get involved** in SDP's Decision Education Interest Group (DEIG)

Extending Good Decision-Making Beyond the Workplace

Steve Begg

Stefanie McLaney

Kuno Huisman

Terrance Karner

Amy Matheson Day

Speaker Panel

SDP Annual Conference Apr 24

Extending decision-making beyond the workplace panel

Steve Begg, DecisionsDecisions

& Emeritus Professor, University of Adelaide

Teaching 11-12 year olds in Adelaide

Teaching school children in Adelaide

- Underlying motivation/background. Retirement" (from uni), basic ideas are really quite simple, so why not high schools

> "Better decisions, better lives" (DEF) &
>
> The only control you have over how your life/future turns out, is through your decisions. The rest depends upon things you can't control ….
> decisions of others, "nature", chance, …

- The "entre": eventually, several minor engagements serendipitously paid off …..
- Twenty students – 5 from each of 4 schools - ~~years 11s &12s~~ 11 & 12 year olds!
- 2 x half-day (3.5hr) workshops, 3 days in between
- Post-workshop anonymous feedback survey from students

Teaching decision-making at schools

Content & Design

- Content focus
  - first inclination – beliefs, uncertainty and bias – engaging content, but perhaps not as useful
  - relevant to typical decision for this age group – useful and doable
  - landed on: integration of DQ principles with multi-objective implementation
- Guiding design principles
  - comprehensive coverage of the key ideas/concepts & implementation steps
  - compromise on the level of rigor/tools on "how to" – focus on understanding and ability to apply
  - make structure flexible enough to "drop in" more-rigorous uncertainty/probability at a later date
  - engagement: relevant examples/illustration, lots of short activities/discussions, fast pace

How to get more of what you want - despite your parents and teachers !

- Developed in conjunction with teachers from each school (4 x 3hr mtgs)
  - needed to teach them the key ideas so that they could help (opportunity!)
  - based on what I have been teaching (uni/industry) for 20+ years – but simplified "tools" and language – plus relevant examples or illustrations

Structure of 1ˢᵗ workshop

- 5 groups of 4, one student from each school
  - a teacher sat be behind each group, only intervening if they needed help, or focus ☺
- Lots of short, table discussions around questions designed to have them come up with key issues, principles and conceptual ideas themselves
  - students more comfortable discussing amongst their peers at their table, then have a more confident one report their findings to the class
- Ideas/Concepts covered
  - reasons for learning about decision making; Systems 1 & 2; Perils of intuition, pros&cons and naive "rules of thumb"
  - what is a decision. Six component model (Frame, Objectives, Alternatives, Information, Predicted pay-offs, Decision Rule);
  - better decisions in minutes by use of structured thinking/discussion around the Decision Basis
  - what is a good decision?: Decisions vs outcomes; Illusion of control; Decision Quality chain
  - what makes decisions hard (as a prelude to the tools/techniques to deal with these factors)

Structure of 2ⁿᵈ workshop

- At start: online quiz (developed by teachers) to test if they retained key ideas
- Students chose a decision of their own to work through a 6-step prescriptive, methodology of how to make good decisions
- Each step had the following structure
  1) Description of step/tools & pragmatic implementation tips
  2) Illustrative example – decision to "Buy a dog as a pet"
  3) Apply to their decision
- Tools/topics (to achieve high DQ) covered were
  - decision Hierarchy; objective hierarchy (including priorities); generating alternatives
  - Information collection (focusing on what matters); Pay-off table, including constructed scales; Risk attitudes – CE "hack"; Conversion of pay-offs to common value scale; Using actual and "practical" dominance to reduce pay-off matrix
  - Decision (not importance!) weighting. Calculation of total weighted value of each alternative. Visual representation of the relative value-components for each alternative. Sensitivities.
  - Iteration. Stopping rule (within step or iterations) – when best option is clear

Post-workshops anonymous survey

	Min	Ave	Max
How <u>easy</u> was it to			
Understand the ideas in the slides	5	5.5	7
Understand Steve's verbal explanations	4	6.2	7
Understand and take part in the <u>discussion activities</u> - 1st day	3	5.9	7
Understand the <u>exercise activities</u> on your decision - 2nd day	4	5.8	7
In helping you understand decision-making, how useful were:			
The examples in the Powerpoint slides	5	6.5	7
The discussion questions (1st day)	4	5.5	7
The exercises (2nd day)	5	6.3	7
How <u>useful in your life</u> do you think the following will be:			
The main decision concepts / ideas (1st day)	4	6.2	7
The 6-step method, or shortened components of it (2nd Day)	5	6.1	7
How was the pace/speed of the workshop (4=just right)	3	4.4	6
How interesting was the workshop	5	6.2	7
Would you recommend the workshop to other students	6	6.8	7

- Scored on 1-7 scale
- Responses are consistent with informal feedback from the teachers
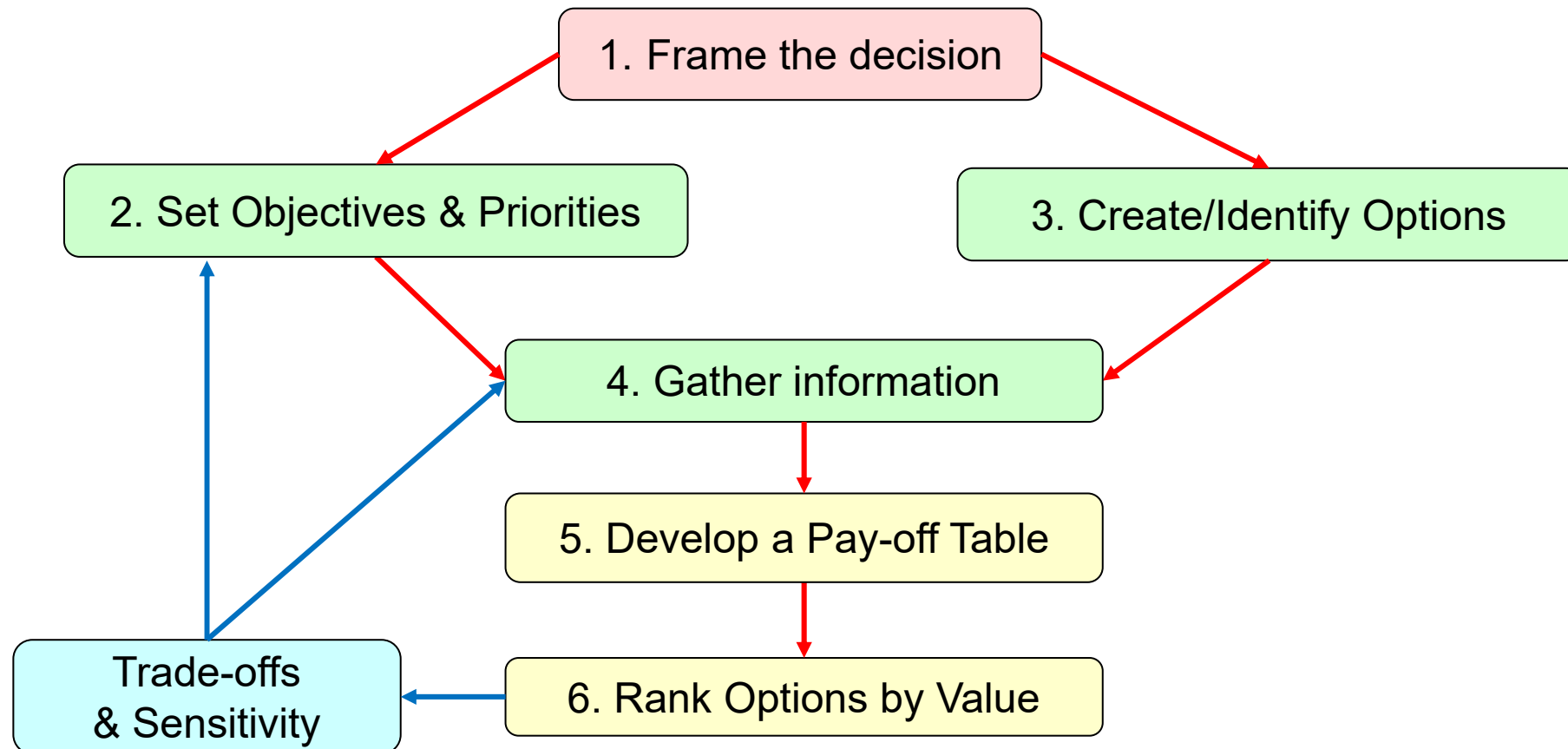
Learnings/surprises and ongoing challenges

- Going in, I grossly under-estimated the students' capacity
  - to concentrate for extended periods !!
  - to learn (understand & apply) – no baggage to be disposed of (that hampers adult decision-makers).   But with that comes…..
  - … ethical responsibility – need to be careful not to imprint your values/preferences/perspectives on these "blank sheets"
- Challenges
  - getting in to the "system" - packed curricula, no obvious place for it, compounded by ….
  - teacher's lack of understanding of what DA/DQ is and its benefits, so not a quick "sell"
  - dependence on key teachers – changes to their roles – hard to get a regular engagement
  - maybe other youth organizations would be easier?
- All materials (PPTs, Excel sheet, handouts) are freely available for non-profit use
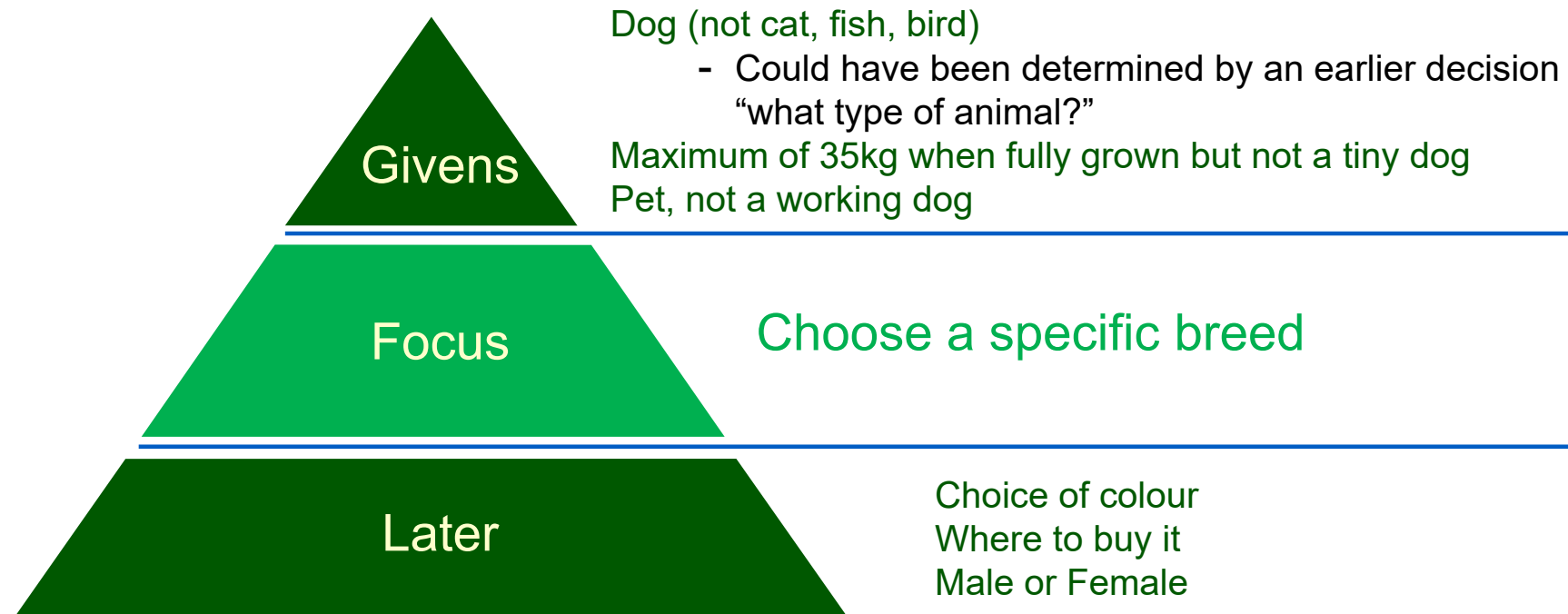 - acknowledgement for them, or derivatives, appreciated
  - steve@sbegg.com

A few examples for questions/discussion
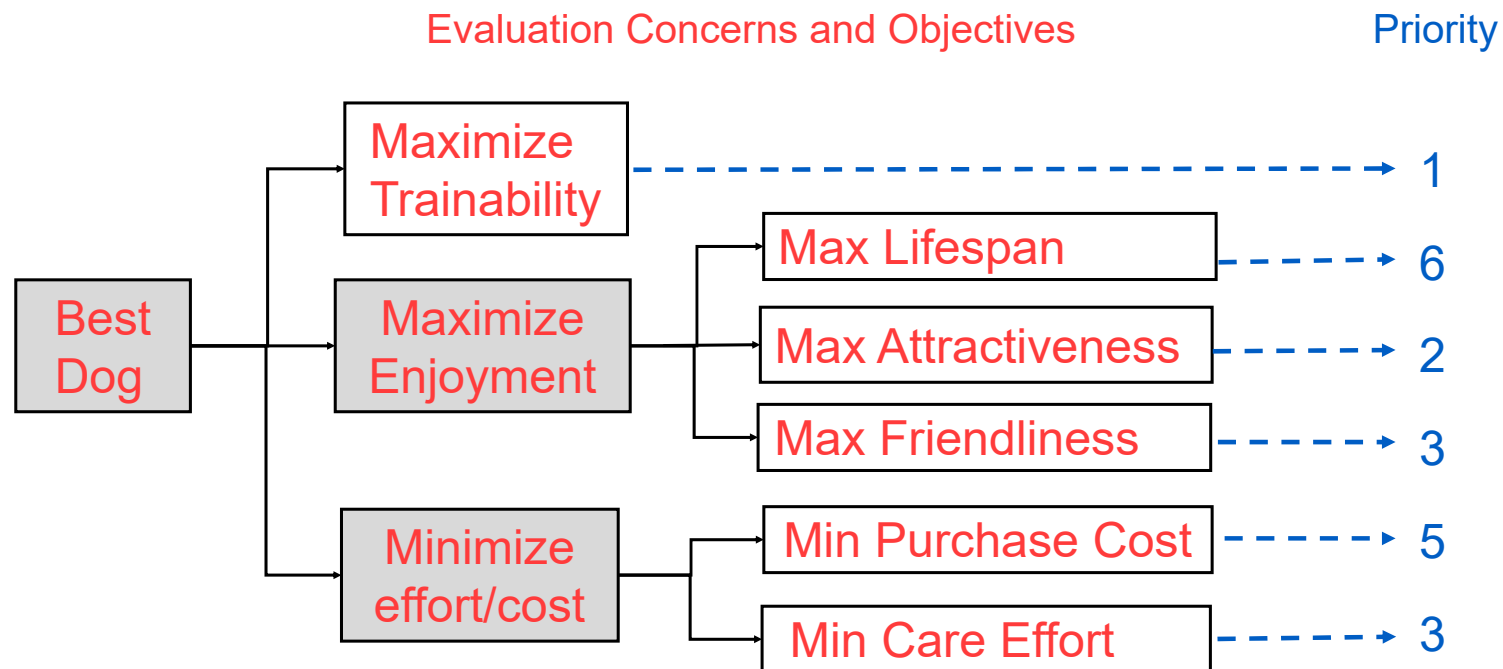
6 Step method (or process) for making GOOD decisions

1. Frame the decision

2. Set Objectives & Priorities

3. Create/Identify Options

4. Gather information

5. Develop a Pay-off Table

6. Rank Options by Value

Trade-offs & Sensitivity

1. Decision Hierarchy : Breed of dog as a pet

Givens

Dog (not cat, fish, bird)
- Could have been determined by an earlier decision "what type of animal?"

Maximum of 35kg when fully grown but not a tiny dog
Pet, not a working dog

Focus

Choose a specific breed

Later

Choice of colour
Where to buy it
Male or Female

2. Evaluation Concerns and Objectives: Breed of dog

Value Tree

Evaluation Concerns and Objectives   Priority

			Priority
Best Dog	Maximize Trainability		1
	Maximize Enjoyment	Max Lifespan	6
		Max Attractiveness	2
		Max Friendliness	3
	Minimize effort/cost	Min Purchase Cost	5
		Min Care Effort	3

3. Some possible Alternatives: Breed of dog

Labrador

Pomeranian

Basset Hound

Cocker Spaniel

Poodle

Sheep Dog

British Bulldog

Bernese Mountain

Boston Terrier

Corgi

5. Clarity of scales: "Friendliness" of breed of dog

- Remember: the purpose of the description is to <u>guide</u> you as to where each alternative (option, choice) lies on the scale
  - Be sufficiently clear about what the numbers mean so that (based on the same information about an alternative) anyone would come to the same conclusion about where it falls on the scale

Worst 1   2   3   4   5   6   7 Best

Easily provoked. Will bite strangers and sometimes even its owner. Barks loudly and aggressively. Easily gets into vicious fights with other dogs. Will attack other pets if possible.

Occasionally bites strangers, but not owner. Prone to barking at, or chasing, strangers and other pets – but doesn't fight. Tolerates a bit of physical petting but doesn't seek it.

Very placid. Will only snarl to protect itself if cornered. Barks only to show pleasure or "notice me". Loves the company of strangers, owner and other pets. Loves to cuddle up.

- Note: if you were choosing the best breed as a guard dog, not a pet, then the scale would probably be reversed! There is no absolute to value, it depends on the decision-maker and context!

5. Record the Pay-offs (value judgements) in the grid: Breed of dog

1. Context: You are going to buy a dog as a pet
   Decision: Choose a specific breed

Objectives			Values (1-7) of Alternatives					
Name	*Priority	Decision	Labrador	Corgi	Poodle	Basset Hound	Boston Terrier	Cocker Spaniel
		Rank	Weight						
Max Trainabilty	1			7	5	6	3	4	6
Max Lifespan	6			6	7	7	6	7	7
Max Attractiveness	2			6	5	2	4	3	7
Max Friendliness	3			6	6	5	6	6	6
Min Purchase Cost	5			5	5	2	3	6	3
Min Care Effort	3			4	5	2	5	5	3
Total Value									

* I have "greyed-out" the Priority column because it's job is done

5.Visualizing the Pay-offs to see where value comes from for each Alternative: Breed of dog
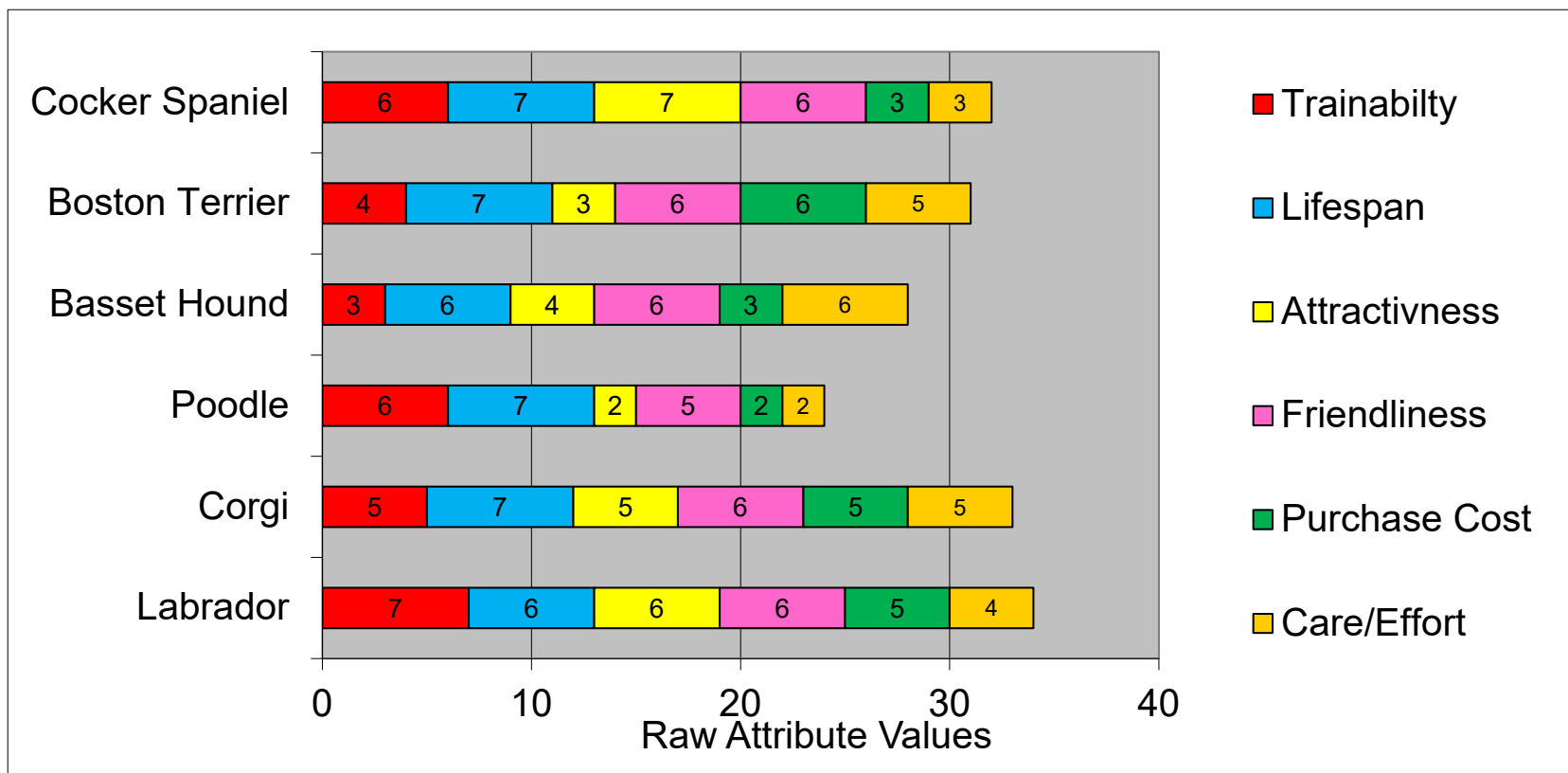
6. Inspect the pay-off values for dominance: Breed of dog

Objectives				Alternatives					
Name	Priority	Decision		Labrador	Corgi	Poodle	Basset Hound	Boston Terrier	Cocker Spaniel
		Rank	Weight						
Max Trainabilty	1			7	5	6	3	4	6
Max Lifespan	6			6	7	7	6	7	7
Max Attractiveness	2			6	5		4	3	7
Max Friendliness	3			6	6		6	6	6
Min Purchase Cost	5			5	5	2	3	6	3
Min Care Effort	3			4	5	2	5	5	3
		Total Value							

The Cocker Spaniel "dominates" the Poodle

6. Look for near-dominance using trade-offs: Breed of dog

Objectives				Alternatives					
Name	Priority	Decision		Labrador	Corgi		Basset Hound	Boston Terrier	Cocker Spaniel
		Rank	Weight						
Max Trainabilty	1			7	5		3	4	6
Max Lifespan	6			6	7		6	7	7
Max Attractiveness	2			6	5		4	3	7
Max Friendliness	3			6	6		6	6	6
Min Purchase Cost	5			5	5		3	6	3
Min Care Effort	3			4	5		5	5	3
		Total Value							

The Boston Terrier almost dominates the Basset Hound - your call, is the trade-off enough to rule out the Basset Hound?

6. Check for identical values on an objective: Breed of dog

(I have left the Basset Hound in the grid for illustration purposes
– I think most people would have removed it)

Objectives				Alternatives					
Name	Priority	Decision		Labrador	Corgi			Boston Terrier	Cocker Spaniel
		Rank	Weight						
Max Trainabilty	1			7	5			4	6
Max Lifespan	6			6	7			7	7
Max Attractiveness	2			6	5			3	7
Max Friendliness	3			6	6			6	6
Min Purchase Cost	5			5	5			6	3
Min Care Effort	3			4	5			5	3
Total Value									

6: Total value for each alternative: Breed of dog

Objectives				Alternatives			
Name	Priority	Decision		Labrador	Corgi	Boston Terrier	Cocker Spaniel
		Rank	Weight				
Max Trainabilty	1	2	80	7	5	4	6
Max Lifespan	6	4	30	6	7	7	7
Max Attractiveness	2	1	100	6	5	3	7
Min Purchase Cost	5	3	70	5	5	6	3
Min Care Effort	3	3	70	4	5	5	3
		Total Value		1970	1810	1600	1810
		Rank		1	2	3	2

⬆ Best Choice

DEF Supports Decision Professionals Teaching Decision Skills

Materials & Curriculum
Experience
Credibility
Coaching
Tailored

A Variety of Models:
- *Intel / Lilly* – *Led by DEF*
- *Illinois Tech* *Terry Karner - DEF supported*
- *ASML* *Kuno Huisman – used DEF materials & experience*
- *Administration and Student Application* *Springfield/Eugene OR*
- *YOURS!*

intel
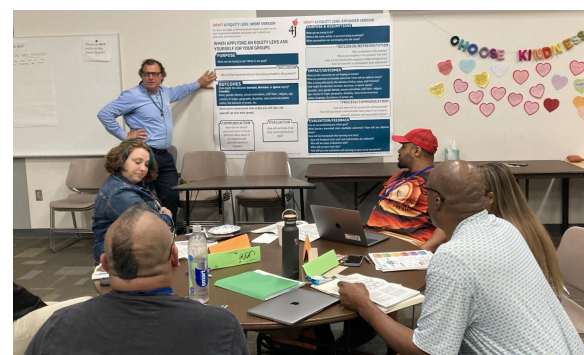
HIGH PROBABILITY OF HIGH VALUE

We Can Help YOU Develop YOUR Vision with Confidence and Credibility!

DECISION POWER

Curated Content Available

Decision Tools
- Decision Island
- Decision Workspace
- Conversation for Clarity

Free Content Online
- Decision Focus – YouTube
  - 12 videos
- Decision Skills 101
  - Self paced class

Student Workbooks and Teacher Guides
- Strong Start – 1 week
- Steps to Success
- Healthy Lifestyle Choices
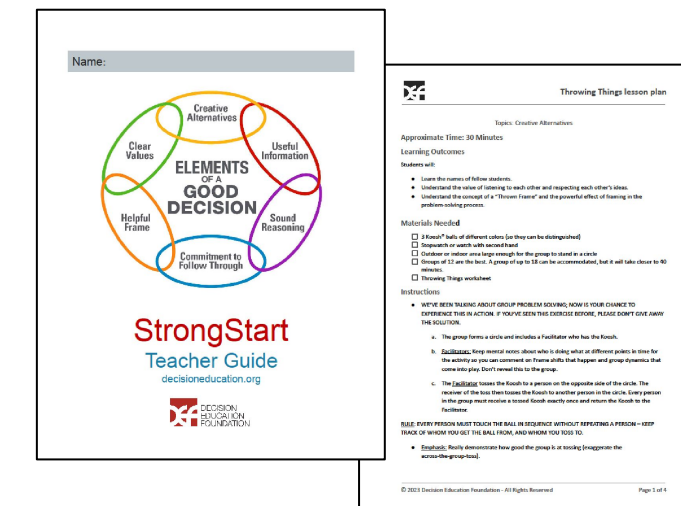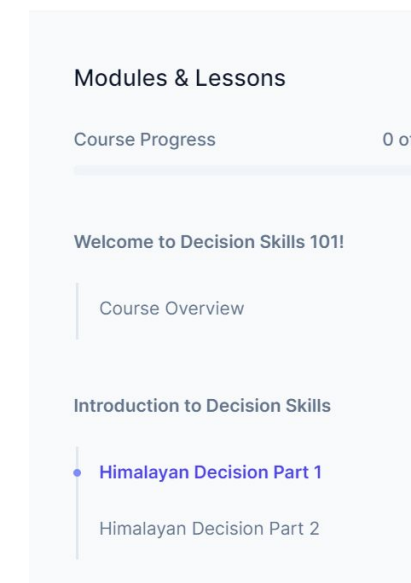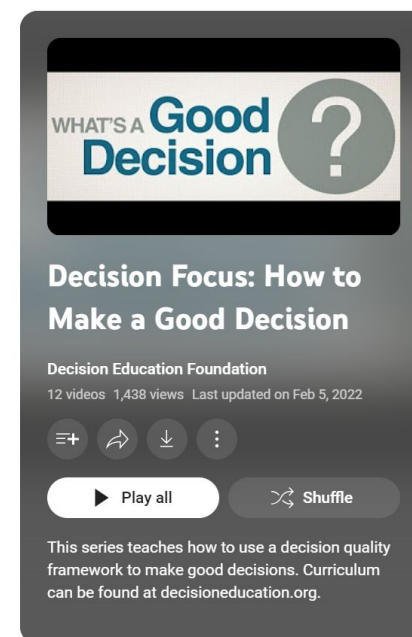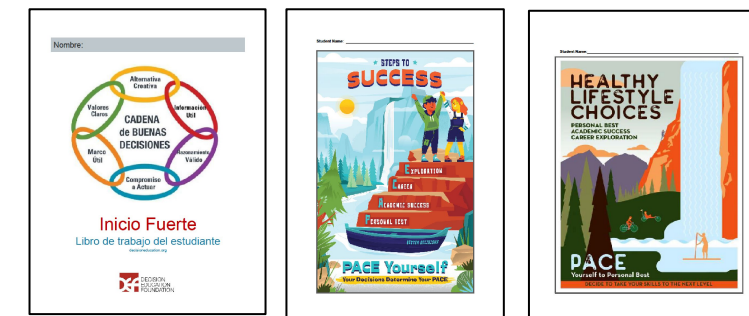
Some content available in Spanish and Portuguese

Great for the superintendent, administration, principal, parent, or student in your life!

Please help us get more connected in the community, contact *Stefanie@decisioneducation.org* for inquiries or referrals.

My decision education journey

Prof. dr. Kuno Huisman (k.j.m.huisman@uvt.nl)

Head of Strategic Capacity Decision Quality at ASML

Professor of Decision Making under Uncertainty at Tilburg University

March 2024

My journey in decision education started in Copenhagen …

1 EDPN Conference 2016 Copenhagen

Presentation Chris Spetzler on DEF

2 Inauguration 2017 Tilburg University

3 International School Eindhoven

March 2018

4 International School Eindhoven

February 2019

5 Class of Entrepreneurship

May 2021

6 Class of Entrepreneurship

March 2022

7 International School Eindhoven

June 2022

8 DQ for secondary schools

June 2022

9 Class of Entrepreneurship

May 2023

… and lead to a teaching package for secondary schools in the Netherlands

Presentation

Workbook

Instruction videos

ASML

Decision Making and Leadership

Terrence Karner
Director, Portfolio & Decision Analysis
Astellas Pharma

4/18/2024
Presented to:
SDP 2024 Annual Conference
Chair's Choice

Decision Making and Leadership

Terrence Karner
Director, Portfolio & Decision Analysis
Astellas Pharma

1/26/2024
Presented to:
IIT DevUp Program

[ORIGINAL TITLE SLIDE]

Group Activity

- Activity starts in foyer, concludes in classroom

- Debrief activity – observations and lessons learned

Blind Leadership Activity

What was it like to be led?

What was it like to lead?

What was surprising?

What role did communication play?

Agenda

Introduction / Group Activity 3:10 – 3:30

Dinner Break 3:30 - 3:45p

A Journey Through Decisions 3:45 –4:30

Reflections on Personal Decisions 4:30 – 4:45

Questions / Close 4:45 – 5p

Introduction

- Decisions are the most important engine of leadership. Without decisions, and without action, you have nothing.

- But first, you have to learn HOW to make good decisions

- Quick Introductions around the room

If a bat and a ball cost $1.10, and the bat costs $1.00 more than the ball…
How much does the ball cost?

If a bat and a ball cost $1.10, and the bat costs
$1.00 more than the ball...
How much does the ball cost?

$$X + Y = \$1.10$$
$$X - Y = \$1.00$$

$$X = \$1.00 + Y$$

$$(\$1.00 + Y) + Y = \$1.10$$

$$\$1.00 + 2Y = \$1.10$$
$$2Y = \$ .10$$
$$Y = \$ .05$$
$$X = \$1.05$$

Dinner Break

- Decisions are the most important engine of leadership. Without decisions, and without action, you have nothing.

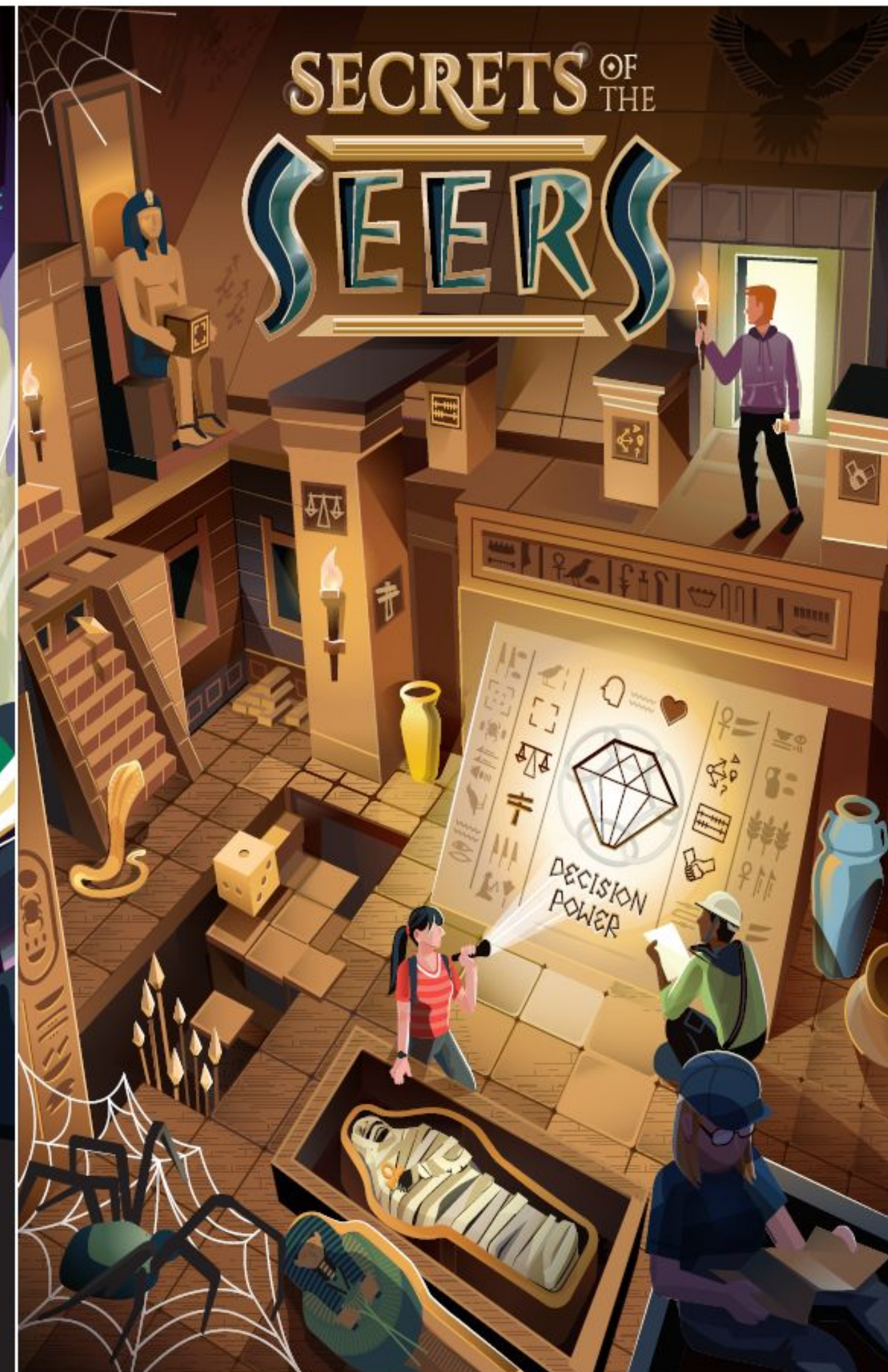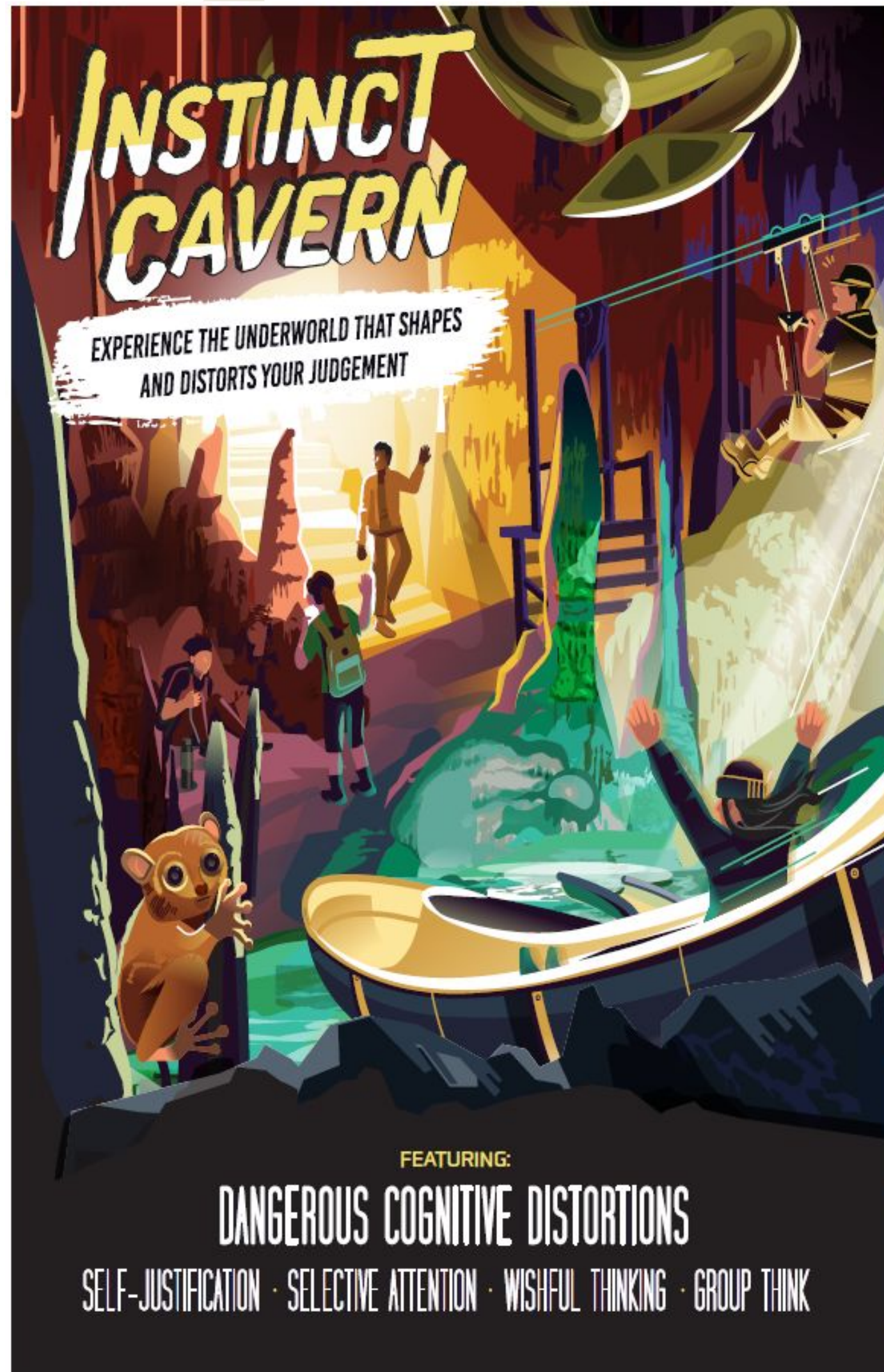- But first, you have to learn HOW to make good decisions

A Journey Through Decision-Making

- We will start with our booklets – but do not open them yet – until we decide where we are going

- Now we will vote – which side do you want to start with first?

- Open your packets

- Draw two lines to divide blank page into 3 sections

- In section 1, write down 5 big observations about big map

- Work with a partner

DECISION ISLAND

SEA OF POSSIBILITIES

BIG
SIGNIFICANT
IN THE MOMENT
Priority

Passion
BALANCE

HEAD &
HEART
MEMORIAL

COMMITMENT
BUTTE

Your Future

PACE
MESA

Decision
Tree

Not Knowing Desert

Whirlpool of Doubt

Swamp of Uncertainty

Easy Landing

Know Thyself

DANGER:
DECISION
TRAP

MT. EMOTION

DECISION POWER

INSTINCT CAVERN

Limbic Labyrinth

HALT
SPRINGS

Map Not To Scale

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Instinct Cavern

Over 200 known human biases hinder good decision making

COGNITIVE BIAS CODEX

What Should We Remember?

We store memories differently based on how they were experienced

We reduce events and lists to their key elements

We discard specifics to form generalities

We edit and reinforce some memories after the fact

We favor simple-looking options and complete information over complex, ambiguous options

To avoid mistakes, we aim to preserve autonomy and group status, and avoid irreversible decisions

To get things done, we tend to complete things we've invested time & energy in

Need To Act Fast

To stay focused, we favor the immediate, relatable thing in front of us

To act, we must be confident we can make an impact and feel what we do is important

We project our current mindset and assumptions onto the past and future

We think we know what other people are thinking

We simplify probabilities and numbers to make them easier to think about

We imagine things and people we're familiar with or fond of as better

Not Enough Meaning

We fill in characteristics from stereotypes, generalities, and prior histories

We tend to find stories and patterns even when looking at sparse data

We notice flaws in others more easily than than we notice flaws in ourselves

We are drawn to details that confirm our own existing beliefs

We notice when something has changed

Bizarre, funny, visually-striking, or anthropomorphic things stick out more than non-bizarre/unfunny things

We notice things already primed in memory or repeated often

Too Much Information

Here we focus on a few of those biases

1. Anchoring bias.

People are **over-reliant** on the first piece of information they hear. In a salary negotiation, whoever makes the first offer establishes a range of reasonable possibilities in each person's mind.

2. Availability heuristic.

People **overestimate the importance** of information that is available to them. A person might argue that smoking is not unhealthy because they know someone who lived to 100 and smoked three packs a day.

3. Bandwagon effect.

The probability of one person adopting a belief increases based on the number of people who hold that belief. This is a powerful form of **groupthink** and is reason why meetings are often unproductive.

4. Blind-spot bias.

Failing to recognize your own cognitive biases is a bias in itself. People notice cognitive and motivational biases much more in others than in themselves.

5. Choice-supportive bias.

When you choose something, you tend to feel positive about it, even if that **choice has flaws**. Like how you think your dog is awesome — even if it bites people every once in a while.

6. Clustering illusion.

This is the tendency to **see patterns in random events**. It is key to various gambling fallacies, like the idea that red is more or less likely to turn up on a roulette table after a string of reds.

7. Confirmation bias.

We tend to listen only to information that confirms our **preconceptions** — one of the many reasons it's so hard to have an intelligent conversation about climate change.

8. Conservatism bias.

Where people favor prior evidence over new evidence or information that has emerged. People were **slow to accept** that the Earth was round because they maintained their earlier understanding that the planet was flat.

9. Information bias.

The tendency to **seek information when it does not affect action**. More information is not always better. With less information, people can often make more accurate predictions.

10. Ostrich effect.

The decision to **ignore dangerous or negative information** by "burying" one's head in the sand, like an ostrich. Research suggests that investors check the value of their holdings significantly less often during bad markets.

11. Outcome bias.

Judging a decision based on the **outcome** — rather than how exactly the decision was made in the moment. Just because you won a lot in Vegas doesn't mean gambling your money was a smart decision.
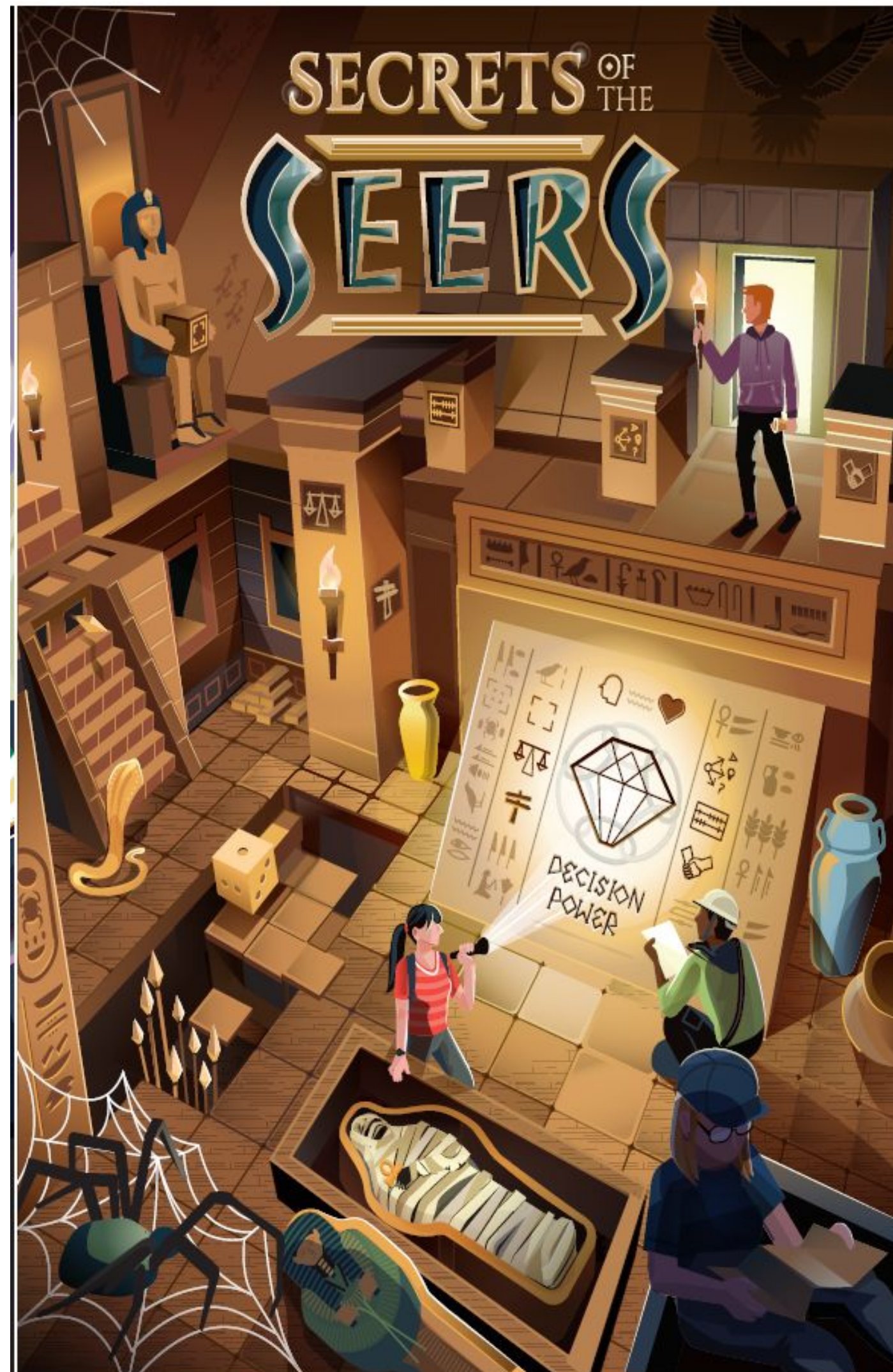
12. Overconfidence.

Some of us are **too confident about our abilities**, and this causes us to take greater risks in our daily lives. Experts are more prone to this bias than laypeople, since they are more convinced that they are right.
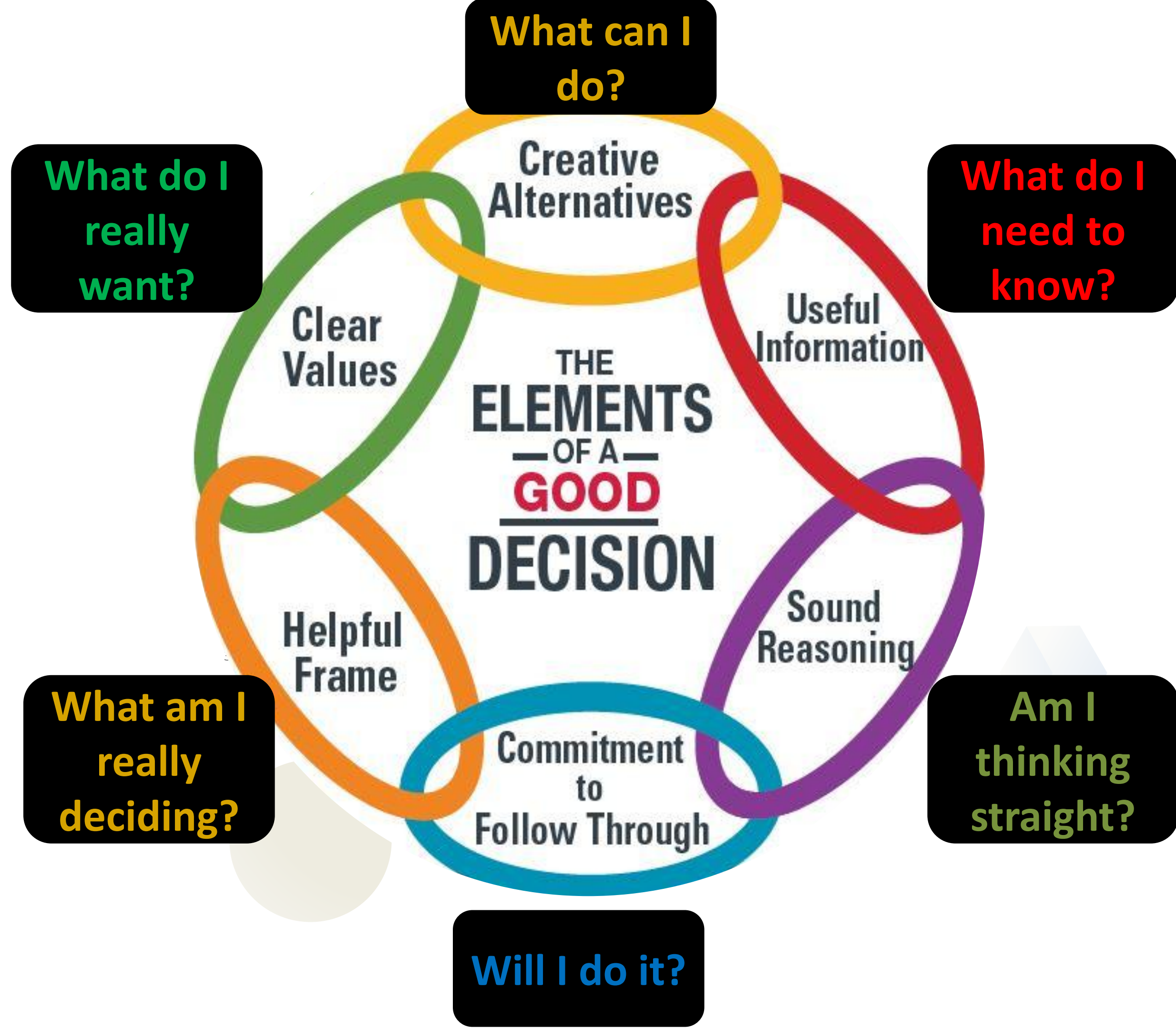
Secret of the Seers

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There are six elements to a good decision

Consider this your new superpower for making good decisions

What can I do?

What do I really want?

What do I need to know?

Creative Alternatives

Clear Values

THE ELEMENTS OF A GOOD DECISION

Useful Information

What am I really deciding?

Helpful Frame

Commitment to Follow Through

Sound Reasoning

Am I thinking straight?

Will I do it?

Personal Reflections on Decision-making

- What I learned in a lifetime: using decision skills for my career as a strategist and decision analyst

- Recently someone asked me: "Why do you really feel a connection to this work?"

Questions / Closing

- What questions do you have about decision-making?

- What interests you the most about this kind of thinking? How might you apply it to your own decisions?

Thank You

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www.decisioneducation.org
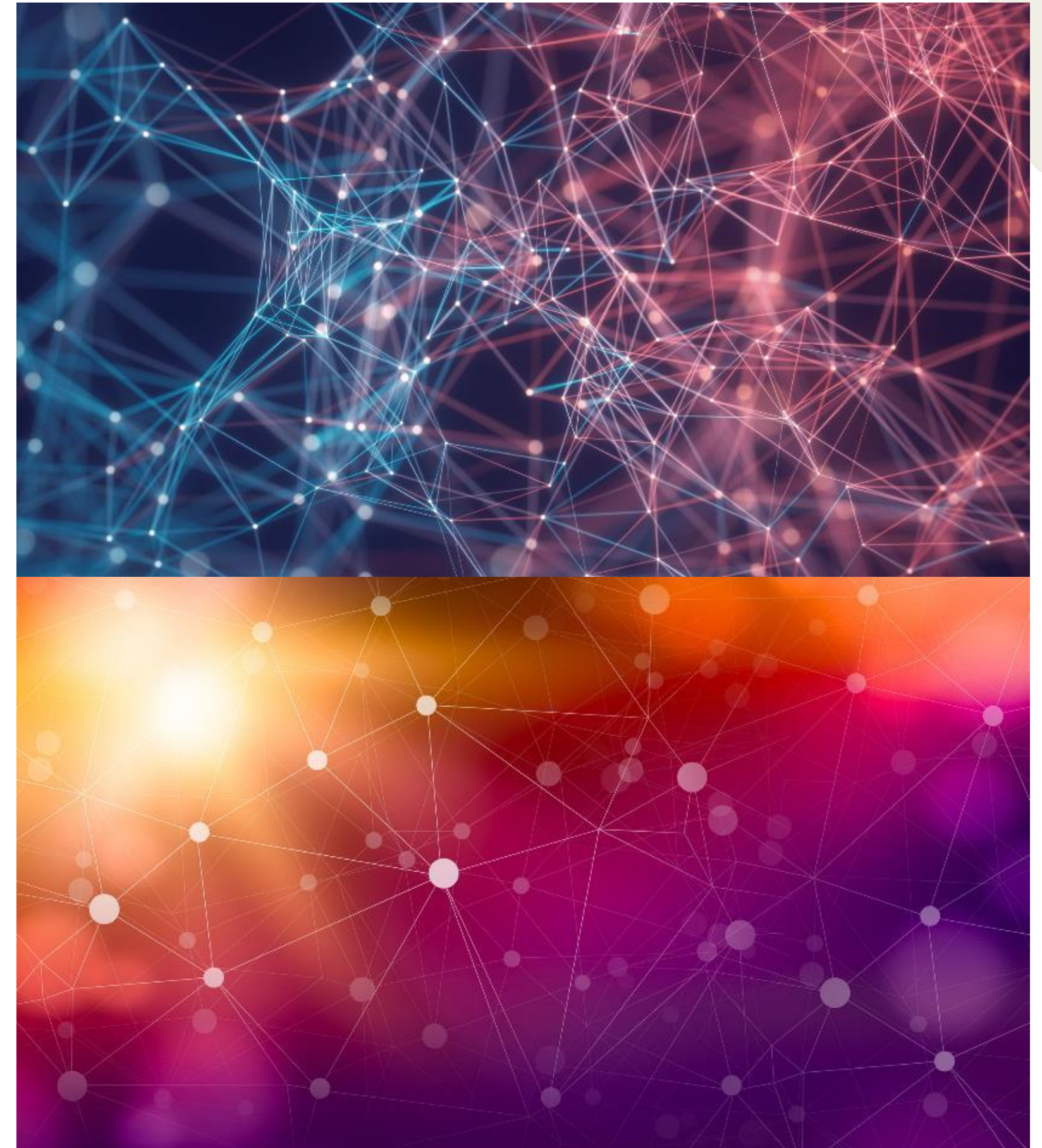
Who We Are

Our integrated approach applies to decisions related to life readiness.

Clarity4Action

Empowering Decisions

- **Powerful Partnerships:** Collaborating for impactful decision education

- **Decision Mastery:** Tailored programs for parents, teens, young adults, and adults – 1 hour, day-long, or multi-week

- **Business Model:** Effective partnership strategies for organizations and Clarity4Action hosted courses

- **Interactive Learning for All Ages:** What's the Bias game, etc.

BOEING DECISION QUALITY TEAM

Steve Glickman

Eric Basalik

Greg Chandra

Classes & Events

1. **Raising Confident Decision Makers** –
   One-Hour Free Masterclass for Boeing Parents
2. **Decision Parenting** – an 8-week course live online
3. **Teen Decision Mastery** – a one-day in-person intensive

ONE-DAY INTENSIVE

Indecision is Costing You

Teen Decision Mastery

With Decision Coaches: Kristen Jawad & Amy Day

Sponsors: Boeing DQ Group, Boeing Leadership Network, SPEEA, Ed Wells Partnership

Clarity4Action

Decision Wheel Guide
SIX STEPS TO CLARITY

Often decisions can be difficult because no single option meets all of our needs. The Decision Wheel offers a framework to get more of what you want out of your decision. *Start at the top, work clockwise, and go through at least twice. Give equal attention to each section for your best decision. It's OK to bounce around.*
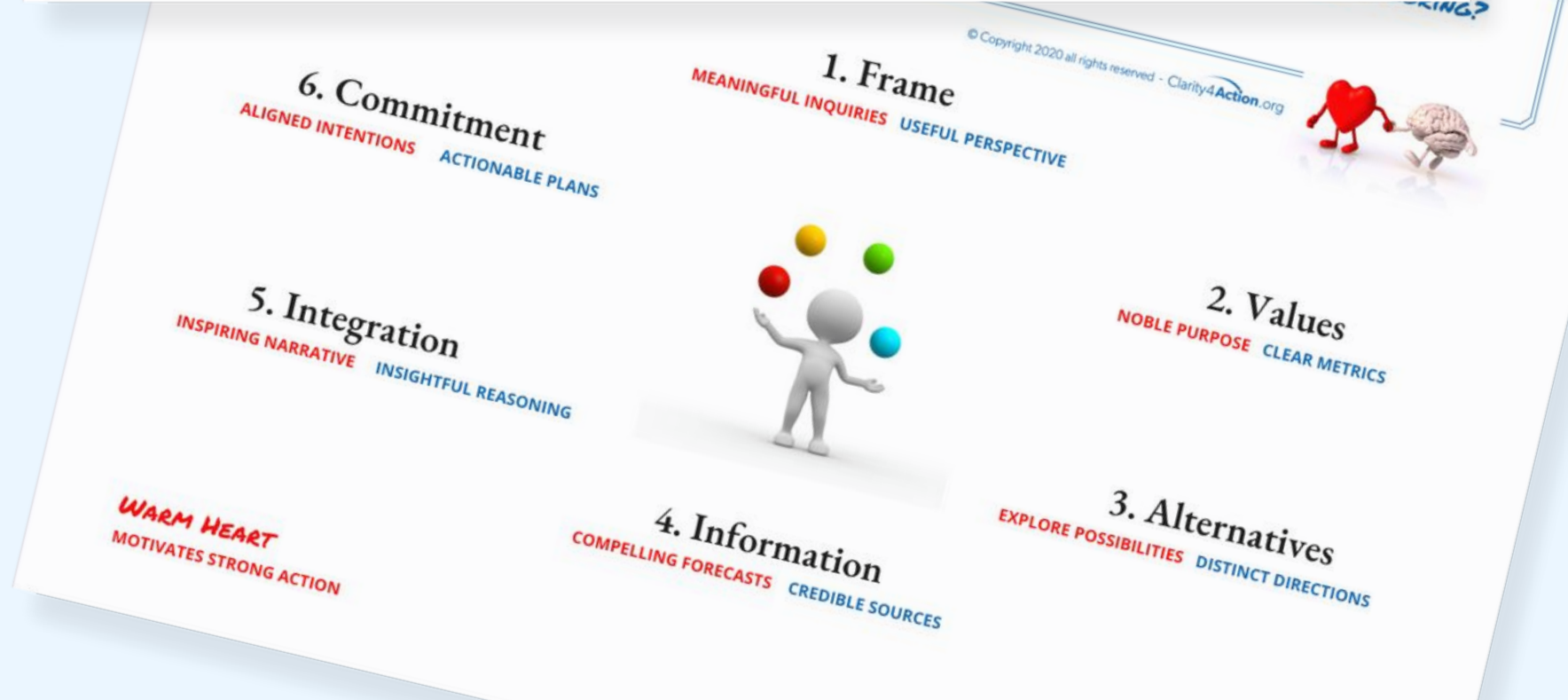
GENERALLY, WHAT AM I DECIDING OR EXPLORING?
This is your first decision frame and likely to shift as you explore it. What question am I pondering? Is there a time constraint?

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1. Frame
MEANINGFUL INQUIRIES   USEFUL PERSPECTIVE
Frame answers *'What am I deciding?'* and has three important aspects. *Purpose* orients you to what you want. *Perspective* focuses on how you or others could tackle the issue. *Realm* defines what's in and what's out.

2. Values
NOBLE PURPOSE   CLEAR METRICS
Values look at *'What do I care about or want?'* and reveal your personal values and concrete option measurements. Evaluate and rank your values and preferences. Identify how well each need is met for each alternative.

3. Alternatives
EXPLORE POSSIBILITIES   DISTINCT DIRECTIONS
Apply creative problem solving, expansively thinking, *'What could I...?'* Brainstorm possible ways to combine options to get more of what you want. Ask yourself, *'What is possible? What would someone else do?'* .

4. Information
COMPELLING FORECASTS   CREDIBLE SOURCES
Trusted information helps you better understand the possible consequences of your choices. Ask yourself, *'What uncertainties am I facing? Can I reduce uncertainty? What information would clarify my alternatives?'*

5. Integration
INSPIRING NARRATIVE   INSIGHTFUL REASONING
Bring your values, alternatives, and information together to fully understand the consequences of each possible choice. Consider trade-offs and pick the best choice. Declare your decision stating, *'I have decided to...'* If you're not ready to act, revisit each section for clarity.

6. Commitment
ALIGNED INTENTIONS   ACTIONABLE PLANS
What actions or resources do you need to carry out your decision? Ask yourself, *'What could get in the way or keep me from following through? How can my strengths or having a buddy support powerful action? What is my first step? What implementation decisions do I need to make?'*

WARM HEART
MOTIVATES STRONG ACTION

COOL HEAD
FINDS GODD ANSWERS

Q&A
Panel Discussion

Questions for you:

- What inspires you?

- Who are you hoping to serve?

- How can we help you?

- What's the first step?

- What do you need?

Get Involved

Decision Education Interest Group

- Advancing personal decision-making skills
- Targeting all age groups: K-12 to adults
- Teaching decision-making in formal & informal settings
- Transforming decision-making approaches
- Enhancing life choices with confidence & clarity