

# **STRATEGY CARDS FOR PRIMING**

DESIGN  
INCUBATION  
CENTRE

## ● INSTRUCTIONS

**Strategy:** The priming strategies on the cards are actionable statements and suggest ways to arrive at a design direction.

**Colour code:** The codes provide a reference category for the type of priming mechanism.

Cognitive	●
Physiological	●
Environmental	●

**Ask Yourself:** These questions are designed to probe a larger scope or encourage looking at the strategy from a different angle, to promote lateral thinking.

**Example:** Examples provide an illustration of how the strategy could be put into practical use.

● STRATEGY 1

**ENCOURAGE THE  
ADOPTION OF  
EMPOWERING  
POSTURES AND  
GESTURES.**

# TIPS •

## **(ask yourself)**

- > How might the time of day affect the postures of users?
- > What activities are associated with positive experiences, and how does body posture relate to them?

## **(example)**

*Sitting in a collapsed, helpless position makes it easier for negative thoughts and memories to appear while sitting in an upright, powerful position makes it easier to have empowering thoughts and memories.*

● **STRATEGY 2**

**TRANSLATE  
EVERYDAY  
PHYSIOLOGICAL  
ACTIONS INTO  
VEHICLES FOR  
EMBODIED  
EXPERIENCES.**

# TIPS •

## **(ask yourself)**

- > Instead of implementing big conspicuous changes, apply subliminal tweaks that can subconsciously influence perceptions or mood in a meaningful way.
- > How might we make use of micro opportunities that exist even in the most unassuming or trivial situations?

## **(example)**

*Carrying a heavy clipboard results in an increased sense of importance.*

● STRATEGY 3

**PAY ATTENTION  
TO WHAT PEOPLE  
WEAR AND HOW IT  
MAY AFFECT THEIR  
ACTIONS AND  
BEHAVIOURS.**

# TIPS •

## **(ask yourself)**

- > How might clothing comfort contribute to the behaviour of a user?
- > How might iconic elements of specific types of clothing make users assume new roles?

## **(example)**

*Wearing a white coat that is believed to belong to a doctor sharply increases the ability to pay attention, whereas wearing the same white coat while believing it belongs to a painter will not.*



● **STRATEGY 4**

**EMBRACE  
NATURAL  
BEHAVIOURAL  
QUIRKS.**

# TIPS ●

## **(ask yourself)**

- > How would a quirk be triggered, and could they be time or activity-specific?
- > How might we design affordances for behavioural quirks?

## **(example)**

*Studies in the Perspectives Charter School in Chicago show that the more adjustable the furniture was, the more frequently students varies their postural behaviours, triggering far-above-average levels of concentration during test taking.*

● **STRATEGY 5**

**ENCOURAGE  
POSITIVE FACIAL  
EXPRESSIONS.**

# TIPS •

## **(ask yourself)**

- > How might we incept the idea of positive facial expression through other sensory stimuli?
- > How might we ensure that negative facial expressions are not being portrayed?

## **(example)**

*Changing one's facial expressions, in particular, inhibiting one's facial expressions, can influence one's emotional experience.*

How does facial feedback modulate emotional experience?  
- Joshua Ian Davis, Ann Senghas, Kevin N. Ochsner

● STRATEGY 6

**ENCOURAGE  
MEDITATIVE  
ACTIONS WHEN  
NEEDING TO DEAL  
WITH STRESSFUL  
SITUATIONS.**

# TIPS ●

## **(ask yourself)**

- > Can meditative techniques be primed using personal, intimate objects?
- > How might we quantify the effects of meditation?

## **(example)**

*Some specialized military and law enforcement personnel are taught techniques in which specific patterns of breathing are used to enhance mental readiness for critical activities.*

● **STRATEGY 7**

**CREATE OUTLETS  
FOR PEOPLE TO  
CONFRONT THEIR  
BOREDOM.**

# TIPS •

## **(ask yourself)**

- > How might we convert boredom into a useful resource?
- > How might we have classes that can never be boring?

## **(example)**

*Doodling may offer a mechanism to effectively confront boredom and allow the brain to remain engaged in external activities.*



● STRATEGY 8

**REGULATE  
ACTIVITIES SO  
THAT PEOPLE ARE  
NOT  
INCREASINGLY  
FATIGUED  
TOWARDS THE END  
OF THE DAY.**

# TIPS ●

## **(ask yourself)**

- > How might we introduce strategic breaks to improve productivity?
- > How might we combine both physical and mental breaks?

## **(example)**

*The likelihood of being awarded parole was driven primarily by placement within the order of hearings within a given session, with a higher chance at the start of the day and immediately after a scheduled break in court proceedings such as lunch.*

Judges are more lenient after taking a break, study finds  
- Ben Bryant

● **STRATEGY 9**

**ENHANCE CERTAIN  
EXPECTED  
AUDITORY  
SENSATIONS TO  
MAKE THE  
ACTIVITY MORE  
ENJOYABLE.**

# TIPS ●

## **(ask yourself)**

- > How can we use sound to bolster and amplify the classroom experience?
- > Does silence necessarily result in a more productive and focus-friendly environment?

## **(example)**

*When background noise overshadowed the auditory crunch of eating chips, the overall experience including flavour of chips was found to be less satisfying.*

● STRATEGY 10

**COMBINE  
COGNITIVE TASKS  
WITH PHYSICAL  
EXERCISE.**

# TIPS ●

## (ask yourself)

- > How might we introduce brand new learning combinations to stimulate the mind and body?
- > How might users teach or be taught with an additional physical/tactile approach?

## (example)

*Students at an academically low-scoring elementary school showed improved test scores after taking part in an experiment that involved combining physical activity with classroom lessons. For example, a rock wall was outfitted with numbers to challenge students' math skills while they climbed.*

Combining Physical Activity with Classroom Lessons Results in Improved Test Scores  
- William S. Randazzo and James T. McElligott

● **STRATEGY 11**

**INSTILL  
POSITIVE HABITS  
THROUGH  
REPEATED  
PRACTICE.**

# TIPS •

## **(ask yourself)**

- > Timing is key - to minimize disruption, habits are best practiced in strategic moments of common daily rituals.
- > How might we reinforce habits in a natural way that does not go against instinctive preferences or the usual flow of things?

## **(example)**

*It is easier to take medication alongside an existing routine, for example after meals, versus at arbitrary times in a day.*



● STRATEGY 12

**SUBTLY  
INFLUENCE  
PEOPLE BY  
UNOBTRUSIVELY  
EXPOSING THEM  
TO **SPECIFIC**  
**VISUAL CUES.****

# TIPS •

## **(ask yourself)**

- > Apart from pictorial and verbal images, are there other forms of visual cues? What about shapes or symbols?
- > Can visual cues be made implicit through other means?

## **(example)**

*Children exposed to overweight cartoon characters tend to perpetuate the stereotype; they tend to gain weight versus those exposed to normal sized or healthy looking characters.*

● STRATEGY 13

**REINFORCE  
THE SENSE OF  
ACHIEVEMENT BY  
BREAKING TASKS  
DOWN INTO  
BITE-SIZED  
MILESTONES.**

# TIPS •

## **(ask yourself)**

- > How might we make small accomplishments seem significant?
- > How else might we interpret to-do lists to better reinforce goal-driven behaviours?

## **(example)**

*Checking off to-do lists triggers a short burst of dopamine release (hormone responsible for pleasure).*

● STRATEGY 14

**HELP TO INSTILL  
IN PEOPLE A  
SENSE OF  
INDIVIDUAL  
PURPOSE AND  
AGENCY  
BEHIND THEIR  
DAILY TASKS.**

# TIPS •

## **(ask yourself)**

- > How might users better understand their roles and relevance in the broader picture?
- > Is autonomy the only way to give room for purpose to grow?

## **(example)**

*Students were found to produce more creative paintings when their motivation was autonomous as compared to students under controlled motivation.*

Setting limits on children's behavior: The differential effects of controlling vs. informational styles on intrinsic motivation and creativity  
- Richard Koestner, Richard M. Ryan, Frank Bernieri and Kathleen Holt.

● STRATEGY 15

**CAPITALIZE ON  
THE NATURAL  
HUMAN SENSE OF  
RESPONSIBILITY  
TOWARDS THE  
GREATER  
COMMUNITY.**

# TIPS •

## **(ask yourself)**

- > How can a sense of importance be established for members within a community?
- > What other types of sub communities exist within a school, what about communities beyond the school?

## **(example)**

*When learning activities were framed in terms of the intrinsic goal of helping the community, students learned the material more fully, performed better when using it, and persisted longer in learning about the topic, than when it was said to be useful for making money for themselves.*



● STRATEGY 16

**ADOPT  
ROLE-PLAY AS A  
MEANS TO  
INFLUENCE  
BEHAVIOUR AND  
ATTITUDES.**

# TIPS •

## **(ask yourself)**

- > How can empathy be used as a tool for learning?
- > How might we introduce different perspectives in a fun and engaging way?

## **(example)**

*RealCare baby, an electronic doll that students are given to take care of, which realistically simulates the experience of parenting an infant, has proven effective in changing students' attitudes toward parenthood.*

"Baby" Helps Teens Think It Over!  
- Sharon Cromwell

● STRATEGY 17

**USE APPROPRIATE  
PRIMING OF  
IDENTITY AS A  
MEANS OF  
POSITIVE  
REINFORCEMENT.**

# TIPS •

## **(ask yourself)**

- > How might identity be primed so as to spur intrinsic motivation?
- > Conversely, in what ways would identity priming result in negative attitudes, and how might we remove or alter it to be value-adding instead?

## **(example)**

*Asian womens' performance on quantitative tasks was found to be higher, when their Asian identity was primed instead of their female identity.*

● STRATEGY 18

**INDUCE POSITIVE  
EXPECTATIONS AS  
A MEANS OF  
MOTIVATION.**

# TIPS •

## **(ask yourself)**

- > How might users get used to thinking in a positive frame of mind by default?
- > Under what circumstances would extrinsic motivation work more effectively than intrinsic motivation, or vice versa?

## **(example)**

*College students were primed with words such as smart, intelligent and clever just before performing a test. The students performed better after being primed with an affirmative message to induce expectations of success.*

● STRATEGY 19

**CREATE THE  
IMPRESSION OF  
BEING  
SURVEYED ON.**

# TIPS •

## **(ask yourself)**

- > In what scenarios would the idea of an 'omnipresent authority' be useful?
- > What would positive surveillance be like?

## **(example)**

*An image of a pair of eyes was attached to a box used to collect money for drinks in a university coffee room. People paid nearly three times as much for their drinks when eyes were displayed rather than a control image.*

Cues of being watched enhance cooperation in a real-world setting  
- Melissa Bateson, Daniel Nettle and Gilbert Roberts



● STRATEGY 20

**INTRODUCE THE  
PROCESS OF  
PRE-COMMITTING  
BEFORE A  
SPECIFIC  
ACTIVITY.**

# TIPS •

## **(ask yourself)**

- > How might pre-commitment be used as a form of insurance in terms of reward and punishment?
- > In what ways can pre-committing be incentivised?

## **(example)**

*Students who were required to sign a university's honor code subsequently acted more honestly.*

● STRATEGY 21

**USE POSITIVE  
PEER AND  
SOCIAL  
INFLUENCE TO  
ENCOURAGE  
DESIRED  
BEHAVIOURS AND  
HABITS.**

# TIPS •

## **(ask yourself)**

- > How might we use the multiplication/viral effect to induce positive behaviours?
- > How can peer to peer interactions be encouraged through activities or physical locales?

## **(example)**

*Happiness tends to cluster. With a given individual, for every happy friend, his or her likelihood of being happy increased by 9%, whereas every unhappy friend decreases his or her likelihood of being happy by 7%.*

● STRATEGY 22

**REFRAME  
EXISTING  
CONVENTIONS TO  
STEER ATTITUDES  
TOWARDS NEW  
DIRECTIONS.**

# TIPS •

## **(ask yourself)**

- > How might a simple tweak in wording or labelling drastically change existing attitudes?
- > How else can we thoroughly encourage and convince people to adopt new attitudes or change mindsets?

## **(example)**

*The word “patients” is favoured over “customers” in a dental software program to predispose the secretary to think in a care giving mentality and not a business perspective.*

● STRATEGY 23

**INTRODUCE  
URGENCY AND  
TIME CONSTRAIN  
IN SMALL DOSES  
AS A TOOL FOR  
BOOSTING  
PRODUCTIVITY.**

# TIPS •

## **(ask yourself)**

- > In what scenarios would time constraints be beneficial to an activity?
- > How might we gamify the use of time constraints to create more incentives?

## **(example)**

*Short and deliberate time constraints in idea generation and creative thinking activities have been shown to boost the productivity of these sessions.*



● STRATEGY 24

**EMBRACE  
INDIVIDUAL  
VARIABILITY AND  
PERSONALIZATION.**

# TIPS •

## **(ask yourself)**

- > In what ways can individuality create value within the school community?
- > How might we find a right balance between individuality and a common school identity?

## **(example)**

*More companies in Silicon Valley are allowing employees to create their own job titles. About 85% of the employees in an interview revealed that self-named titles helped them cope with the emotional exhaustion of the job by providing self-verification, psychological safety, and external rapport.*

Why Your Job Title Means A Lot More Than You Think  
- Gwen Moran

● **STRATEGY 25**

**CREATE RICH  
EXPERIENCES  
THAT ENGAGE  
INDIVIDUALS  
THROUGH A  
VARIETY OF  
SENSORY  
TRIGGERS.**

# TIPS •

## **(ask yourself)**

- > Apart from the traditional 5 senses, what other special senses can be used in enhancing an experience?
- > What does it mean for an environment to be able to communicate with its users?

## **(example)**

*The smell, taste, and touch of a product create an engagement level that is three to four times higher than the engagement level stimulated by merely seeing the product being displayed.*

● STRATEGY 26

**REDESIGN  
COMMON  
EVERYDAY  
OBJECTS TO BE  
INTERACTED WITH  
IN NOVEL WAYS.**

# TIPS •

## **(ask yourself)**

- > How might the physical usage of an object simultaneously involve mental and cognitive processes?
- > How might we encourage new ways of object interaction without necessarily involving digital technology? (e.g. there could be 10 different ways to physically hold a cup).

## **(example)**

*The Albert Clock makes you calculate the time through a simple mental sums interface.*

This clock doesn't just tell you the time, it makes you work for it  
- Meg Miller

● **STRATEGY 27**

**PLAY WITH  
SPATIAL LAYOUTS  
TO PROMOTE  
DESIRED  
INTERACTIONS.**

# TIPS ●

## **(ask yourself)**

- > How might we use different layouts to encourage different types of social dynamics?
- > How might we allow a space to take on several different characteristics?

## **(example)**

*Single-story finger plan schools were found to be more advantageous for fostering social interactions among students.*



● STRATEGY 28

**SCATTER GOAL  
RELATED CUES  
IN THE  
ENVIRONMENT  
TO REINFORCE  
COMMITMENT TO  
THE SPECIFIC  
GOAL.**

# TIPS •

## **(ask yourself)**

- > In what ways can cues be placed strategically in an environment?
- > Do goal-related cues always need to be visual in nature, or can they take another form?

## **(example)**

*Putting up a poster announcing a low-calorie recipe that was “good for a slim figure” primed subjects to stay resilient against temptation (a tray with small meat snacks was presented at the checkout counter).*

● STRATEGY 29

**USE COLOUR  
APPROPRIATELY  
AS A STIMULUS.**

# TIPS ●

## **(ask yourself)**

- > What if the moods of people were to cause the colours around them to change?
- > How might external conditions like the weather and time of day affect the colours used within school compounds?

## **(example)**

*Painting the teaching wall of a classroom a deeper or brighter shade than is used on the side walls provides stimulation and motivation, while also providing a visual break for the eyes.*

● STRATEGY 30

**CREATE AN  
ENVIRONMENT OF  
PHYSIOLOGICAL  
AND  
PSYCHOLOGICAL  
COMFORT.**

# TIPS ●

## **(ask yourself)**

- > What kind of comfort can be derived from one's environment?
- > Apart from familiarity and nostalgia, what else might play a part in creating psychological comfort?

## **(example)**

*Hakemiya Nursery School is designed to remind children of their homes by embracing kids' daily activities like eating, sleeping and playing.*

Hakemiya Nursery School is designed to remind children of their homes  
- Amy Frearson

● STRATEGY 31

**USE SMELLS TO  
INFLUENCE AND  
REGULATE MOOD  
AND BEHAVIOUR.**

# TIPS ●

## **(ask yourself)**

- > What would a calming scent be like, and what about a happy scent?
- > How might smell be used in the context of reward or punishment?

## **(example)**

*People exposed to a clean-smelling environment were induced to act more fairly and charitably toward strangers than people in a neutral-smelling place.*

Clean environments encourage generosity and fairness  
- Richard Alleyne



● STRATEGY 32

**ALLOW  
FLEXIBILITY AND  
DYNAMISM IN  
CONTROLLING THE  
CLASSROOM  
ENVIRONMENT TO  
SUIT DIFFERENT  
ACTIVITIES AND  
TIMES OF THE DAY.**

# TIPS ●

## **(ask yourself)**

- > What does it mean to have a living and breathing classroom?
- > How would subjects like math and literature require different environmental conditions to be taught and learnt most effectively?

## **(example)**

*A year-long scientific experiment in schools across Hamburg, Germany showed that attention span, concentration and the behaviour of pupils improved significantly under dynamic lighting conditions.*

● **STRATEGY 33**

**INFLUENCE  
BEHAVIOURS  
AND ATTITUDES  
THROUGH  
CONTEXTUAL  
IMMERSION AND  
MAKE-BELIEVE.**

# TIPS •

## (ask yourself)

- > How might the element of make-believe make learning and teaching more enjoyable?
- > How might we access various contexts while still being indoors in the classroom?

## (example)

*Elderly volunteer subjects spent 5 days living as if they were 20 years younger; surrounded by magazines, music and movies from before, and were encouraged to speak in the present tense about these topics. After which, they performed significantly better on cognitive tests, and showed improved physical health.*

What if Age Is Nothing but a Mind-Set?  
- Bruce Grierson