Supplementary Material B

Information Extracted From Each Independent Study
(see Table 1 for the coding description)

ID	Year	Author	Total N	Background	Task	Examples	Timing	Number of Examples	Unbiased Effect Size Estimate: Degree of Copying	Quantity	Novelty	Variety	Quality	Common-ness Score[b]
Studies Presenting Non-Negative Examples														
1	1992	Purcell & Gero	37	Architecture/ Industrial Design	Design a bicycle rack	Bicycle rack (boot)	Before	1	0.00	0.06	/	/	/	3.67
2	1992	Purcell & Gero	48	Architecture/ Industrial Design	Design a bicycle rack	Bicycle rack (A frame)	Before	1	0.00	0.82	/	/	/	3.83
3	1992	Purcell & Gero	40	Architecture/ Industrial Design	Design a bicycle rack	Bicycle rack (single)	Before	1	0.00	0.36	/	/	/	4.67
4	1992	Purcell & Gero	44	Architecture/ Industrial Design	Design a bicycle rack	Bicycle rack (A frame) (word)	Before	1	0.00	0.42	/	/	/	3.83
5	1992	Purcell & Gero	38	Architecture/ Industrial Design	Design a bicycle rack	Bicycle rack (single) (word)	Before	1	0.00	0.82	/	/	/	4.67
6	1993	Purcell, Williams, Gero, & Colbron	20	Mechanical Engineering	Design a measuring cup for the blind	Measuring cup for the blind (Blind society, new product)	Before	1	0.40	/	/	/	/	4.00
7	1993	Purcell, Williams, Gero, & Colbron	11	Industrial Design	Design a measuring cup for the blind	Measuring cup for the blind(Blind society, new product)	Before	1	0.28	/	/	/	/	4.00
8	1993	Purcell, Williams, Gero, & Colbron	8	Interior Design	Design a measuring cup for the blind	Measuring cup for the blind(Blind society, new product)	Before	1	0.22	/	/	/	/	4.00
9	1993	Smith, Ward, & Schumacher	47	Unspecified	Design a toy	picture example	Before	1	0.55	0.07	/	/	/	3.00
10	2002	Dahl & Moreau	32	Engineering	Design a product that will meet the needs/solve the problems of the commuting diner	drive in window food tray (single)	Before	1	0.39	/	/	-0.25	-0.12	4.67
11	2002	Dahl & Moreau	32	Engineering	Design a product that will meet the needs/solve the problems of the commuting diner	drive in window food tray (multiple)	Before	1	0.51	/	/	-0.31	-1.06	4.67
12	2002	Dahl & Moreau	45	Engineering	Design a product that will meet the	drive in window food tray (single)	Before	1	/	/	-0.61	/	-0.61	4.67

					needs/solve the problems of the commuting diner									
13	2002	Dahl & Moreau	45	Engineering	Design a product that will meet the needs/solve the problems of the commuting diner	drive in window food tray, cup holder, lunch box, airplane foldout table (multiple)	Before	4	/	/	-0.61	/	-0.61	4.67
14	2006	Pettula & Sipilä	16	Mechanical Engineering	Design an automatic watering device	4 examples	Before	4	/	0.18	-0.64	-0.03	/	3.55
15	2008	Tseng, Moss, Cagan, & Kotovsky	24	Mechanical Engineering	Design a clock	three clocks	Before	3	0.00	0.75	0.92	0.00	/	2.39
16	2008	Tseng, Moss, Cagan, & Kotovsky	24	Mechanical Engineering	Design a clock	Heart rate monitor, cassette tape deck, water meter	Before	3	0.00	0.75	0.00	0.00	/	3.28
17	2008	Tseng, Moss, Cagan, & Kotovsky	24	Mechanical Engineering	Design a clock	Heart rate monitor, cassette tape deck, water meter	After	3	0.00	0.70	0.64	0.61	/	2.39
18	2010	Wilson, Rosen, Nelson, & Yen	13	Mechanical Engineering	Design a device to immobilize a joint	Mutable connective tissue of sea cucumber	After	1	/	/	1.18	-0.33	/	2.00
19	2010	Wilson, Rosen, Nelson, & Yen	13	Mechanical Engineering	Design a device to immobilize a joint	Variable-stiffness behavior of electro-rheological fluids	After	1	/	/	1.57	-1.54	/	2.00
20	2011	Cardoso & Badke-Schaub	30	Industrial Design Engineering	Design a device to help people to pickup a book from a shelf that is out of reach	Device to help people to pickup a book from a shelf that is out of reach (line drawing)	Before	1	0.62	0.00	0.00	-0.21	-0.02	4.67
21	2011	Cardoso & Badke-Schaub	29	Industrial Design Engineering	Design a device to help people to pickup a book from a shelf that is out of reach	Device to help people to pickup a book from a shelf that is out of reach (photo)	Before	1	0.62	0.00	0.62	-0.21	-0.03	4.67
22	2011	Chan, et al	20	Mechanical Engineering	Design a device to collect energy from human motion	Freeway power generator, Apparatus for producing electrical energy from ocean waves (uncommon, near)	After	2	-0.15	0.15	0.34	-0.60	-0.21	2.17
23	2011	Chan, et al	20	Mechanical Engineering	Design a device to collect energy from human motion	Acceleromater, Earthquake isolation floor (uncommon far)	After	2	0.86	-0.93	0.99	-0.37	-0.42	2.33
24	2011	Chan, et al	19	Mechanical Engineering	Design a device to collect energy from human motion	Waterwheel-driven generating assembly, recovery of geothermal energy (common near)	After	2	0.44	-1.18	0.21	-1.53	0.11	2.50

25	2011	Chan, et al	19	Mechanical Engineering	Design a device to collect energy from human motion	Escapement mechanism for pendulum clocks, induction loop vehicle detector (common far)	After	2	1.24	-1.18	0.50	-1.09	0.03	2.00
26	2011	Chan, et al	20	Mechanical Engineering	Design a device to collect energy from human motion	Freeway power generator, Apparatus for producing electrical energy from ocean waves (uncommon, near)	After	2	-0.16	0.62	0.33	-0.04	-0.40	2.17
27	2011	Chan, et al	19	Mechanical Engineering	Design a device to collect energy from human motion	Acceleromater, Earthquake isolation floor (uncommon far)	After	2	0.16	0.49	1.19	0.00	-0.53	2.33
28	2011	Chan, et al	16	Mechanical Engineering	Design a device to collect energy from human motion	Waterwheel-driven generating assembly, recovery of geothermal energy (common near)	After	2	-0.19	0.07	-0.52	-0.53	0.78	2.50
29	2011	Chan, et al	18	Mechanical Engineering	Design a device to collect energy from human motion	Escapement mechanism for pendulum clocks, induction loop vehicle detector (common far)	After	2	0.08	-0.61	0.00	-1.21	-0.07	2.00
30	2011	Lujun	25	Mechanical Engineering	Design a pumping unit for extracting petroleum	a motor drives the roller to rotate forward	Before	1	1.36	-0.21	/	/	1.30	2.67
31	2011	Lujun	25	Mechanical Engineering	Design a pumping unit for extracting petroleum	beam pumping unit	Before	1	1.40	-0.24	/	/	1.25	2.83
32	2011	Lujun	25	Mechanical Engineering	Design a pumping unit for extracting petroleum	rail car move forward and backward to drive suck rods to go up and down	Before	1	1.72	0.17	/	/	1.12	2.50
33	2012	Cardoso, Gonçalves, & Badke-Schaub	29	Industrial Design Engineering	How human transportation will be like in 2050	transportation system (picture)	Before	1	/	0.14	1.01	/	/	4.50
34	2012	Cardoso, Gonçalves, & Badke-Schaub	29	Industrial Design Engineering	How human transportation will be like in 2050	transportation system (word)	Before	1	0.87	0.14	0.28	/	/	4.50
35	2012	Gonçalves, et al.	28	Industrial Design Engineering	How human transportation will be like in 2050	textual related stimuli , example of a transportation concept	Before	1	/	-0.01	0.30	-0.38	/	3.83
36	2012	Gonçalves, et al.	29	Industrial Design Engineering	How human transportation will be like in 2050	stimulus, which contained an excerpt from the book The Wonderful Wizard of Oz by L. Frank	Before	1	/	0.49	0.91	0.49	/	1.50

37	2013a	Fu, et al.	36	Mechanical Engineering	Device to collect energy from human motion	Seat arrangement for sitting furniture Power transmission device for sewing machine Thread clamping device figuring weft threads on jacquard machines Toy vehicle track	After	3	/	/	0.00	/	0.53	2.52
38	2013a	Fu, et al.	36	Mechanical Engineering	Device to collect energy from human motion	Safety ski binding. Compensating rope sheave tie down Hanger tilt mechanism for hanging transportation apparatus Shelter structure Converging sphere joint assembly	After	3	/	/	0.00	/	0.00	2.28
39	2013b	Fu, et al.	23	Mechanical Engineering	Device to collect energy from human motion	Fuel injection apparatus having fuel pressurizing pump Inflating/deflating device for an inflatable air mattress Wireless communication device and signal receiving/transmitting method Paper guiding arrangement for a business machine	After	4	/	0.27	-0.35	/	/	2.17
40	2013b	Fu, et al.	23	Mechanical Engineering	Device to collect energy from human motion	Photovoltaic cell powered magnetic coil for operation of fluidic circuit flapper Virtual-wheeled vehicle Gray water interface valve systems and methods	After	4	/	-0.26	0.24	/	/	1.75

41	2013b	Fu, et al.	23	Mechanical Engineering	Device to collect energy from human motion	Air-blower tidal power generation device Wave operated power apparatus System for recovering wasted energy from IC engine Method and device for capture, storage, and recirculation of heat energy Water current powered motor	After	4	/	-0.46	0.68	/	/	2.33
42	2014	Agogue, et al.	66	unspecified	Design a device to ensure that a hen's egg dropped from a height of 10 m does not break	Idea of freezing the egg before dropping it	Before	1	/	/	0.42	/	/	3.33
43	2014	Agogue, et al.	65	unspecified	Design a device to ensure that a hen's egg dropped from a height of 10 m does not break	Idea of slowing the fall with a parachute	Before	1	/	-0.35	0.58	/	/	4.67
Studies Presenting Negative Examples														
44	1991	Jansson & Smith	25	Mechanical Engineering	Bicycle rack	Bicycle rack	Before	1	0.77	0.00	/	/	/	4.17
45	1991	Jansson & Smith	31	Mechanical Engineering	Measuring cup for the blind	Measuring cup for the blind	Before	1	0.77	0.00	/	/	/	3.33
46	1991	Jansson & Smith	35	Mechanical Engineering	Spillproof coffer cup	Spillproof coffer cup	Before	1	0.48	0.00	/	/	/	3.17
47	1991	Jansson & Smith	13	Professional Engineer	Device to measure speed and pressure	Device to measure speed and pressure	Before	1	0.92	0.00	/	/	/	2.67
48	1993	Purcell, Williams, Gero, & Colbron	18	Mechanical Engineering	Measuring cup for the blind	Measuring cup for the blind	Before	1	0.84	/	/	/	/	3.83
49	1993	Purcell, Williams, Gero, & Colbron	11	Industrial Design	Measuring cup for the blind	Measuring cup for the blind	Before	1	0.52	/	/	/	/	3.83
50	1993	Purcell, Williams, Gero, & Colbron	10	Interior Design	Measuring cup for the blind	Measuring cup for the blind	Before	1	0.52	/	/	/	/	3.83
51	1993	Purcell, Williams, Gero, & Colbron	15	Mechanical Engineering	Measuring cup for the blind	Measuring cup for the blind	Before	1	0.72	/	/	/	/	3.83
52	2005	Chrysikou & Weisberg	60	Psychology	Design a bicycle rack	Bicycle rack	Before	1	0.89	0.04	/	/	/	4.17

53	2005	Chrysikou & Weisberg	60	Psychology	Design a spillproof coffee cup	Spillproof coffer cup	Before	1	0.81	0.05	/	/	/	3.17
54	2009	Hassard, Blandford, & Cox	32	Interaction Design	Design a bike rack and a spill-proof coffee cup	flawed example (bicycle/spill proof)	Before	1	1.12	/	/	/	/	3.67
55	2009	Hassard, Blandford, & Cox	32	Interaction Design	Design a digital music player and a medicine dispenser problem	flawed example	Before	1	0.97	/	/	/	/	/
56	2013a	Viswanathan & Linsey	21	Mechanical Engineering	Design a device to shell peanut	Device to shell peanuts	Before	1	1.38	-1.18	/	/	/	3.00
57	2013a	Viswanathan & Linsey	17	Mechanical Engineering	Design a device to shell peanut	physical flawed example	Before	1	1.15	0.89	0.07	/	/	2.50
58	2013a	Viswanathan & Linsey	17	Mechanical Engineering	Design a device to shell peanut	pictorial flawed example	Before	1	0.98	-0.18	-0.98	/	/	2.50
59	2013a	Viswanathan & Linsey	21	Mechanical Engineering Faculty	Design a device to shell peanut	Device to shell peanuts	Before	1	0.68	-1.01	/	/	/	2.67

[a].An effect size of +/- 0.2 is a small effect, and an effect size of +/- 0.5 is a medium effect (Cohen, 1988).

[b] The common-ness score ranged from 1 to 5, with a higher score reflecting a more common example (1: very uncommon, 5: very common)