Eduponics Institute USA presents

Sixth Grade to the Rescue!

Malnutrition in many areas of the United States, both urban and rural, has reached epidemic proportions. According to recent studies, from 9 million to 13 million elementary school students miss at least one meal daily, most often breakfast, which has cumulative effects on physical growth and academic and intellectual development. Undernourished children do poorly in school and often grow up to a life of menial jobs and insecure family environments.

Negative patterns of social status, community development, below-standard housing, transportation and access to food reinforce these issues. Are we sensing a problem yet?

There is no magic bullet to solve these issues at once, but Eduponics[1] offers a simple, straightforward program by which elementary school students can work together to improve the nutritional quality of food served in school cafeterias. We call it *Sixth Grade to the Rescue* (SGR).

In SGR, the oldest class in the school (usually the 6th) operates a garden in its own classroom or in other converted space on campus. The food grown is then provided to the cafeteria or otherwise added to the school lunch or breakfast programs, which may already exist. We start with microgreens, but local preferences can lead to desirable and delicious alternatives. In any case, meals will be more interesting than government cheese and canned goods or whatever the kitchen manager procures from the lowest bidder. Add for SGR participants the satisfaction of completing an important job and the gratification of feeling like an adult fulfilling responsibility.

SGR's requirements to begin are simple. The necessary equipment to grow microgreens (an easy and highly nutritious supplement to any diet) consist of shelving, lights, ventilation, temperature and heating with controls, and of course seeds. The initial investment is around $2,500. With labor by the sixth graders (just minutes per day) the class(es), using the equipment, can produce over $24,000 worth of nutritious vegetable greens in the typical 36 week school year. In ensuing years the cost drops to about 15 cents per student per day; not the often sought *free lunch*, but close. In addition to the gardening experience, companion science and business content can be easily attached to the program, as befits local economic conditions and each teacher's course plans. Additional equipment can easily be added to produce more servings.

Teacher training is provided at our Puget Sound training facility or in cooperation with participating colleges. Our affiliate Evergarden Farms can assist with implementation.

Interested? Contact an Eduponics representative or visit our website.

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[1] Eduponics Institute promotes classroom programs in hydroponic gardening at the K-12 level.

SGR Hypothetical Budget

Sixth Grade to the Rescue!						**Eduponics.com**
Elementary School Microgreens Garden Project						**Evergarden.farm**
Revenue & Expenses Estimate						
Goals						
Servings/student/day	**1**					
School wks	**36**					
Schooldays/wk	**5**					
Students/class	**25**					
N/classes	**12**					
Total students	**300**					
Garden Factors	All	Generic	Peas	Broccoli	Amaranth	Averages
µG/trays 20X10	**200**	*200*	*200*	*200*	*200*	*200*
Growth cycle (days)	**10**	**10**	**14**	**10**	**14**	**12**
Days lighted/wk	**7**	**7**	**10**	**7**	**10**	**8.5**
Serving (sq.in.)	***4***	***5***	***6***	***4***	***4***	*5*
Servings reqd/wk	*1,500*	*1,500*	*1,500*	*1,500*	*1,500*	*1,500*
Servings/tray		*50*	*33*	*50*	*50*	*46*
Trays reqd/wk		*30*	*45*	*30*	*30*	*34*
Operations & Instruction						
Seeds, est.	$0.250	**$0.248**	**$0.250**	**$0.250**	**$0.250**	$8.42
Labor, technician, hrs/ wk 5 @	***$20***	*loaded*	*5*	*hours*		*$100.00*
Labor, est. (students)	*$0.000*	*$0.000*	*$0.000*	*$0.000*	*$0.000*	*$0.00*
Cost/tray, total	$0.250	$0.248	$0.250	$0.250	$0.250	$3.21
Cost/week		$7.44	$11.25	$7.50	$7.50	**$108.42**
Cost/serving		$0.000	$0.000	$0.000	$0.000	$0.002
Setup & Operation						Annual
Teacher training						$1,000
Teacher wage	30	min/day@	$50	/hr		$900
Equipment						$2,500
Operation						$3,903
Other, contingency					10%	$830
Total first year cost						***$9,133***
Total servings/yr	*54,000*				Cost/serving	$0.169
Wholesale value of crops	**$20.00**	/tray @ 34 trays weekly for 36 weeks.				***$24,300***
		Consider the educational value plus an ROI of				166%