

How to Create a Science Buddies Program Near You!

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1. Connect with an elementary local school near you and a faculty from that school that is willing to help start this program with you during their afterschool care hours.
2. Share your interest to start the program and find a group of motivated and passionate undergraduate students that are excited to be leaders.
3. Split the students to be group leaders for various stem topics. Here are the STEM topics NSU group leaders chose to cover during the 2022 - 2023 school year:
 - a. Sensory Science
 - b. Biology
 - c. Chemistry
 - d. Physics
 - e. Neuroscience
 - f. Earth Science
4. Have leader(s) from each group brainstorm a list of activities for their respective STEM topic.
5. After brainstorming, each group must finalize three activities that they wish to do with the students.
6. Create lesson plans for each activity.
 - a. Here is the template that the NSU Science Buddies use to create their lesson plans: [Copy of Copy of Experiment Template](#)
 - b. Sensory Science
 - i. Sound: [Sound Lesson Plan](#)
 - ii. Skeleton Support: [Skeleton Support Lesson Plan](#)
 - iii. Mystery Sense: [Mystery Sense Lesson Plan](#)
 - iv. Play-Doh Body: [Lesson Plan Play-doh Body](#)
 - v. Build Your Own Lungs: [Lesson Plan Lungs](#)
 - c. Biology
 - i. Potato Enzyme: [Potato Enzyme Activity](#)
 - ii. Bottle of Lava: [Copy of bottle of lava NSU.docx](#)
 - iii. Bacteria Shapes with Stuffed Animals: [Bacteria Shapes with Stuffed Animals](#)
 - d. Chemistry
 - i. Quick Freeze Delight: [ice cream.docx](#)
 - ii. Foaming Fountain: [foaming fountain.docx](#)
 - iii. Penny Pipetting: [Penny Pipetting.docx](#)
 - e. Physics
 - i. Hot Wheels Gravity Check: [Hot Wheels/Gravity Check Experiment](#)
 - ii. Energy Stick: [Energy Stick Activity](#)
 - iii. Lightsaber Training: [Static-lightsaber training](#)
 - f. Neuroscience
 - i. It's hard to Remember!: [Copy of Short Term Memeory-Science Alive](#)
 - ii. Reflexes and Reaction Time: [Copy of Reflexes and Reaction Time Activity](#)
 - iii. Visual Impairments: [Copy of Visual Impairments](#)
 - g. Earth Science
 - i. What is Hydroculture: [What is Hydroculture?](#)
 - ii. Snow in Florida!: [Snow in Florida!](#)
 - iii. Create Your Own Rain: [Copy of CreateYourOwnRain.docx](#)
7. Create a pre-survey and post-survey to give to the students before you do the activities and after you successfully complete the three activities for your group.
 - a. The pre-survey and the post-survey should be three questions each and should be the same questions to assess their change in knowledge after doing the activities with the students.
 - b. Sensory Science: [Sensory Science pre and post.docx](#)

- c. Biology: [Biology Pre and Post Questions.docx](#)
- d. Chemistry: [Chemistry pre and post.docx](#)
- e. Physics: [Physics pre and post.docx](#)
- f. Neuroscience: [Neuroscience Pre and Post Test.docx](#)
- g. Earth Science: [Hydroculture pre and post.docx](#)

8. Create a rotation system for the school year. Each group should complete their three activities with a specific grade for three week (1 activity per week) and then rotate to the next grade after three weeks have gone by.

a. Here is the rotation system template that the NSU Science Buddies use:

Table 1: List of Curricular Units to be covered by the SuperNovas program during the school year 2022-2023. 16 Visits are planned to NBF with approximately 20 NSU volunteers each week. Groups will consist of 10-20 students in grades K-5 (groups formed according to grade level) and two college peer leaders (NSU students). There will be regular aftercare teachers in the rooms. There will be 8 units and each week one group will complete that unit and these units will rotate through all students in the entire program. Each group will spend 3 weeks on each unit.

Grade	K	1	2	3	4	5
26-Aug , 2 Sep – organization meeting at NSU Parker 338 (Meet at Nova Blanche on Sep-9 to get ready)						
16-Sept	A	B	C	D	E	F
23-Sept	A	B	C	D	E	F
30-Sept	A	B	C	D	E	F
7-Oct	F	A	B	C	D	E
14-Oct	F	A	B	C	D	E
28-Oct	F	A	B	C	D	E
4-Nov	E	F	A	B	C	D
18-Nov	E	F	A	B	C	D
2-Dec	E	F	A	B	C	D
20-Jan	D	E	F	A	B	C
27-Jan	D	E	F	A	B	C
3-Feb	D	E	F	A	B	C
10-Feb	C	D	E	F	A	B
17-Feb	C	D	E	F	A	B
24-Feb	C	D	E	F	A	B
10-Mar	B	C	D	E	F	A
31-Mar	B	C	D	E	F	A
14-Apr	B	C	D	E	F	A

Activities by topic and key leaders

A = Sensory Science; K in Ms. Dehart's room as you enter aftercare door it is straight back on the right.
Annabella Valois
David Habib

B = Biology; 1st grade meet in Ms. Chang's room leave STEM room turn right down long hall on the left
Ramsha Ahmed

C = Chemistry; start with 2nd grade Mr. Goodman's room near the aftercare entrance
Rajin Persaud
Trisha Sudhakar

D = Physics; 3rd grade – Meet in Media center and can stay or move outside
Ashley Abad

E = Neuroscience; 4th grade (meet in media center)
Philopatier Ibrahim

F = Nova Hydroculture Project and Environmental Science – STEM Room, 5th grade (can move from media center)
Alessa Celestin
Carol Manikkuttiyil
Dr. Schmitt

9. Take pictures and create a website to show your work that you are doing and possibly inspire others around you!

a. www.sciencealivefl.org