Abstract:
Community gardens on college campuses provide numerous benefits for the surrounding community. One successful local garden is the Derbyshire Place community garden located in Daytona Beach. The garden has improved the physical wellness of residents through increased access to fruits and vegetables with Food stamps-eligible flea markets and rentable garden beds for $25 per year. The garden also provides opportunities for outdoor exercise, and improving the community relations and interactions between groups of varying demographic backgrounds. We wish to do the same here at the Daytona Campus and through this research project we seek the encouraged support, approval, development and establishment of an on-campus garden for the betterment of the campus community. If approved, the overall wellbeing of the campus community would be increased as noted in the local community and at other institutions. The ideal location of the garden would be on top of the roof next to the Starbucks. Our plan is to inform members of the community about the benefits of a community garden through a short video discussing benefit of a community garden. The video would walk the viewer through the Derbyshire community garden and showcase the provided resources and opportunities provided. Before posing an open-formatted question of how a similar garden on campus could benefit students and faculty followed by a few concept designs of the community garden on campus. All in order to encourage and promote discussion and support of a on-campus community garden. After the viewer watches the video, we intend to have them complete a survey that would provide valuable data for support and tweaking of the final design of the garden. The survey will utilize closed-ended questions to gather quantitative data such as sample size, demographics and plant preferences. To ensure that the garden is serving the community, additional qualitative data would be collected such as community feedback or idea pertaining to the layout use or layout aesthetic of the garden.

Background:
In Volusia county, the success of the Derbyshire Garden has impacted a great amount of the local community. The residents’ overall knowledge of gardening has increased as well as sustainability practices and promoting a healthy diet for a low cost, providing this opportunity to students before the beginning their careers would positively impact their educational and physical achievements as well as their success after they have graduated.

The importance of having a garden has surfaced on campuses around the globe. The University of Central Florida’s (UCF) Arboretum has provided volunteer individual and group opportunities for their students. Building or nutrient-enhancing vegetable beds, planting trees and shrubs, weeding, fertilizing and harvesting are just a fraction of the activities offered in their community garden. All these activities have contributed to an overall increase in community involvement, wellbeing and pleasure on campus.

Within the past years, UCF became the first campus in Florida to be a Bee Campus. This meaning that they create habitats to reduce the loss of pollinator populations that has occurred from pesticide use. Our campus can participate in regenerating the pollinator population by creating butterfly gardens. Butterflies are safer than bees and more aesthetically pleasing making them a great addition to our campus at a comparatively decreased cost. By providing appropriate flowers, a water source and shelter, many of the 200 different species of butterflies would be welcomed to our campus.

In 2008, The American Society for Horticultural Science published a research article comparing the relationship between student use of campus green spaces and their perceptions of quality of life. This study found that, due to the green spaces, the degree of stress that undergraduate students usually felt was decreased over a school year. This positively affected their academic outlook as well, allowing them to achieve more accomplishments, interest in undergraduate students usually felt was decreased over a school year. This positively affected their academic outlook as well, allowing them to achieve more accomplishments, interest in achieving more accomplishments, interest in achieving higher grades, higher academic aspirations, and a greater sense of community involvement, wellbeing and pleasure on campus.

Approach:
Survey Sample goal:
- Minimum 30-40% of the student body or 1900-2600 responses
- This would ensure the on-campus students who would benefit the most voices are heard and enough community feedback to tailor the garden

Survey Advertisement:
- Main form is a flyer containing a url code and qr code for the video and survey
  - Electronic copies will be used to display on the SU TV’s, sent in emails and used on social media platforms such as Snapchat, Facebook, and Instagram.
  - Physical flyers would be pinned to SUA bulletin boards, put in the Avion paper, given to RA’s to share with their residents, placed into A-frames on legacy, and handed out during tabling.
  - Also recruit on-campus clubs, fraternities and sororities to share the survey with their members and spread the word.

Survey Creation/Implementation:
- Starting April 19th, 2021 and over the summer semesters
  - Video would be filmed and survey would created and tweaked.
  - Research and design of garden prototypes will be generated via CAD software for survey
  - Communicate with school about limitations and restrictions for approval
  - Focus on putting together Advertisement sources
  - Survey + Video released to community August 30
  - Let survey circulate for three weeks before consolidating results
  - Advertise survey through this time
  - Start official garden building building and release feedback surveys

Timeline:
Phase 1: Starting April 19, 2021
Week 1-16:
- Begin and keep in constant communication with the Administration and Sodexo for approval process and work around limitations.
- Gather together the needed university resources, location, and logging system.
- Work with Administration create contract for renting/accountability

Week 1-3:
- Test and test survey.
- Great flyers and contact distribution sources.
- Start properly planning distribution and advertisement.

Week 4-14:
- Research garden designs and come up with official ‘prototypes’ using Auto Cad software.
- Print 3-D models of prototypes

Week 8-13:
- Film and put together survey video.

Week 13-15:
- Create social media platforms for advertising survey/project.
- Check in with distribution sources
- Complete flyer and finalize advertisement sources

Phase 2: Starting August 30, 2020
Weeks 16-19:
- Release survey and rollout advertisements

Week 20:
- Consolidate survey results.
- Present final argument to school for approval if not achieved yet.

Week 21-22:
- Implement any popular ideas from survey into design

Week 23-30:
- Buy needed materials for the garden
- Begin garden construction
- Continue to Advertise the garden

Weeks 24-28:
- Release feedback/wanted seed survey.
- Buy wanted seeds by end of week 28.
- Finalize volunteer list by end of week 28.

Week 29-30:
- Finish garden construction
- Advertise opening day

Week 30-34:
- Grow wanted seeds in a green house.
- Transfer to garden at end of week 33

Week 35:
- Officially Open Garden on January 10, 2021
- Week 35-50: observe community and week on report writing

Week 45-48:
- Release closing survey (ask about summer access)

Week 50:
- Fully release garden to the school community's care

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