**DALAGUETE NATIONAL HIGH SCHOOL**

**Poblacion, Dalaguete, Cebu**

<http://dnhs6022.weebly.com/>

**4848484-4848485-4848486-4840051**

**A PROJECT PROPOSAL FOR INNOVATION**

**Name of Proponent: GEORGE P. LUMAYAG and ROGER D. BANOGBANOG**

**Project Title:**Homemade Aluminum WiFi Booster for Teaching and Learning and Governance

**Project Time-frame: Two (2) Months**

**I. PROJECT CONTACTS**

Mr. George P. Lumayag, Teacher III, Lead Proponent Innovator, 09213964825, 4840051, george.lumayag@deped.gov.ph, and <https://georgelumayag.weebly.com/>

Mr. Roger D Banogbanog, Principal IV, Proponent 2, 4848485

**II. PROJECT SUMMARY**

Since, Dalaguete National High School has the total land area of 3.264 hectares, naturally, teachers occupying the buildings from 200 to 400 meters away from the telco’s internet modems will have a problem on internet access. It is because that the school’s internet connections are definitely installed only at the computer laboratories and its conventional routers are also installed inside the computer labs with a limited internet signal from 60 to 100 meter radius. Moreover, the school buildings have no Local Area Network (LAN) connection sharing an internet signal. Therefore, concerning on the suitable intervention of the problem, the proponents will have to propose the Homemade WiFi (wireless) Booster Project to be installed outside the computer lab facing to the DNHS oval and to the buildings without internet connection so that the aim pertaining to the equal distribution of resources to teachers shall be implemented in school; if not to all but at least they are given the chance to access the internet through the Homemade WiFi Booster Project.

This proposed-project innovation “Homemade Aluminum WiFi Booster” is a prototype innovative product which is to be used for governance, research, and teaching and learning. This project has an essence of cost cutting when it comes to the internet infrastructure inside the school campus.

It will be created and assembled using the router, Aluminum basin, Calderon Aluminum cover, screws and other materials. The finished product will be installed at Room 203 of the Dalaguete NHS SHS 4 storey-20 classroom DepEd building. And, an internet connection will be shared to the said WiFi booster using the Local Area Network (LAN).

The innovators will purchase the router, Aluminum basin, other Aluminum materials, Calderon Aluminum cover, screws, UTP cable, RJ45, crimping tool, paint and paint brush. The router will be placed with cover and support inside the Aluminum basin. The crimped UTP cable will be plugged-into the router port for the internet source of the booster. The power cable will also be plugged-into the router. The rare panel of the booster shall then be painted with Marine paint and the booster shall be placed in an elevated area of the window frame facing to the DNHS oval so that the WiFi signal shall be shared to teachers.

The lead proponent will have to request the principal the needed materials in creating the Homemade WiFi booster. The 2nd proponent will have to process the documents for the funding source which will be presented to the Parent Teacher Association (PTA). When the needed materials are available, the lead proponent will assemble the Homemade WiFi Booster and it will be installed right away. He will have to make it sure that the WiFi Booster has an internet connection.

The lead proponent will have to assemble the WiFi booster inside the computer laboratory at Room 203 of the 4-storey 20 classroom SHS building.

The creation and installation of the Homemade Aluminum WiFi Booster has only a duration of 2 days.

And, the total cost of materials is **Php 3,193.50.**

**III. PROJECT BACKGROUND**

 The Homemade WiFi (wireless) Booster is an answer to the problem of internet connectivity inside the 3.264 hectare school campus wherein buildings are situated more than 200 meters away from the telco’s internet modems. And naturally the installation of the Local Area Network to all buildings is a big problem. The resolution of this problem is that the school shall install the proposed prototype Homemade WiFi Booster conceptualized by the lead innovator. His first Homemade WiFi Booster was created in 2008 which was installed at Mantalongon National High School, Mantalongon, Dalaguete, Cebu. And it is now replicated at Dalaguete National High School. It is a proven innovative device that can really help teachers in school for research and communication purposes.

**IV. PROJECT OBJECTIVES**

This innovative project has the following objectives: 1) to minimize the expenditures of Local Area Network (LAN), 2) to improve the physical facilities of ICT Department, 3) to provide non-teaching personnel with internet connection for them to update school transactions online, 4) to provide teachers with internet connection for them to make an advanced research for their academic and personal development, and 5) to enable teachers to browse online educational sites that can be used for teaching and learning utilizing the WiFi booster.

**V. PROJECT METHODOLOGY**

 The Dalaguete National High School needs a good internet innovation that can be used by teachers in their teaching and learning approaches. This is the reason why the proponents will have to propose the Homemade Aluminum WiFi Booster Project to be innovated by the lead proponent and such can be utilized by teachers, students and other personnel. Once this proposed project is approved by the Schools Division Superintendent (SDS), the lead proponent will have to inform and provide the principal copies of the documents for the implementation of the project. Then, the 2nd proponent will have to present the documents to the Parent Teacher Association (PTA), the funding source - for the implementation of this project. The Bids and Awards Committee (BAC) will have to produce the needed documents for the canvass and procurement of the needed materials for the said project. The usual accounting and bookkeeping shall be observed and shall be presented to the officers of the Parent Teacher Association (PTA) and or to the donors of funds.

 The lead proponent will have to assemble the Homemade WiFi Booster and install it at Room 203 of the 4-storey 20 classroom SHS DepEd building facing to the Dalaguete NHS oval and other buildings with teacher occupants for them to access the internet connection through the WiFi Booster. The proponent will have to manage and maintain the functionality and sustainability of the project. And on regular basis, the proponents will have to monitor and evaluate the usability of the Homemade WiFi Booster.

**A. WORK BREAKDOWN AND TASK TIME ESTIMATES**

|  |  |
| --- | --- |
| COMPONENTS | DURATION / TIME COVERED |
| JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| Project Proposal Endorsement  |  |  |  |  |  |  |  |  |  |  |  |  |
| Approval of Project Proposal from Schools Division Superintendent |  |  |  |  |  |  |  |  |  |  |  |  |
| Presentation and Financial Allocation of the Project from the PTA |  |  |  |  |  |  |  |  |  |  |  |  |
| Canvass and Procurement of Materials |  |  |  |  |  |  |  |  |  |  |  |  |
| Intervention: Creation and Installation of the Homemade WiFi Booster |  |  |  |  |  |  |  |  |  |  |  |  |
| Utilization, Management and Maintenance of WiFi Booster |  |  |  |  |  |  |  |  |  |  |  |  |
| Monitoring and Evaluation Program |  |  |  |  |  |  |  |  |  |  |  |  |

Table 1. Work Breakdown and Task Time Estimates

**B. PROJECT DELIVERABLES**

 The Homemade WiFi Booster is a combination of the router modem, Aluminum basin, Calderon Aluminum cover, other Aluminum materials and screws to be assembled properly to create a good innovative WiFi Booster so that teachers occupying the buildings without Local Area Network (LAN) connection can precisely access the internet connection transmitted from the Homemade WiFi Booster which will be protected by a password.

The crimped UTP cable shall be produced by the lead proponent so that it will connect from the telco modem to the Homemade WiFi Booster.

 The power adapter of the router shall be plugged-into the device and shall also be plugged-in the wall outlet so that the router may generate and produce internet signal.

**C. PROJECT RISK MANAGEMENT**

This innovative Homemade Aluminum WiFi Booster Project has also the corresponding risks that may challenge the proponents in terms of control, management and maintenance. The lead proponent shall change the password of the Homemade WiFi Booster twice a week or even once a week. He needs the secondary router receiver so that the internet signal becomes stable when users are using the nearest router. The router shall be placed in an elevated area outside the computer laboratory.

**VI. PROJECT COSTS**

**A. Project Budget**

|  |
| --- |
|  **Cost Estimates** |
| **Activities** | **Resources/Materials** | **Estimated Cost** |
| 1. Secure the Aluminum basin.
2. Create a router holder using the flat Aluminum material. Place the router on it.
3. Use some screws to fasten the router holder in the Aluminum basin.
4. Place the conventional router into the attached holder.
5. Plug-in the UTP cable into the router to secure the internet signal.
6. Attach the Calderon cover to protect the router.
7. Use some screws to fasten the Calderon cover.
 | Aluminum BasinRouter & Aluminum holder10 pcs. screws10 meters UTP2 pcs. RJ451 pc. Calderon cover | Php 450.00Php 2,500.00Php 2.50Php 100.00Php 16.00Php 125.00**Php 3,193.50.** |

Table 2. **Detailed Budget for the Project Proposal**

**B. Sources**. The sources of fund of this project proposal shall be allocated from the **Parent Teacher Association (PTA) and or Donations**

**VII. references**

<https://www.dictionary.com/browse/wifi?s=t>

<https://www.teacherph.com/deped-format-project-proposal-for-innovation-in-schools/>

Republic Act No. 9155 known as Governance of Basic Education Act of 2001

Prepared by:

**GEORGE P. LUMAYAG ROGER D. BANOGBANOG**

Teacher III / Lead Proponent Principal IV / 2nd Proponent

<https://georgelumayag.weebly.com/> <http://dnhs6022.weebly.com/>

Noted: Recommending Approval:

**AILEEN P. RAAGAS CECILIA C. CARTILLA**

 PTA President Public Schools District Supervisor

<http://dalaguetesecondaryschools.weebly.com/>

 Approved:

**RHEA MAR A. ANGTUD, Ed. D.**

Schools Division Superintendent

<http://www.depedcebuprovince.ph/>

***gpl.09.10.2019***