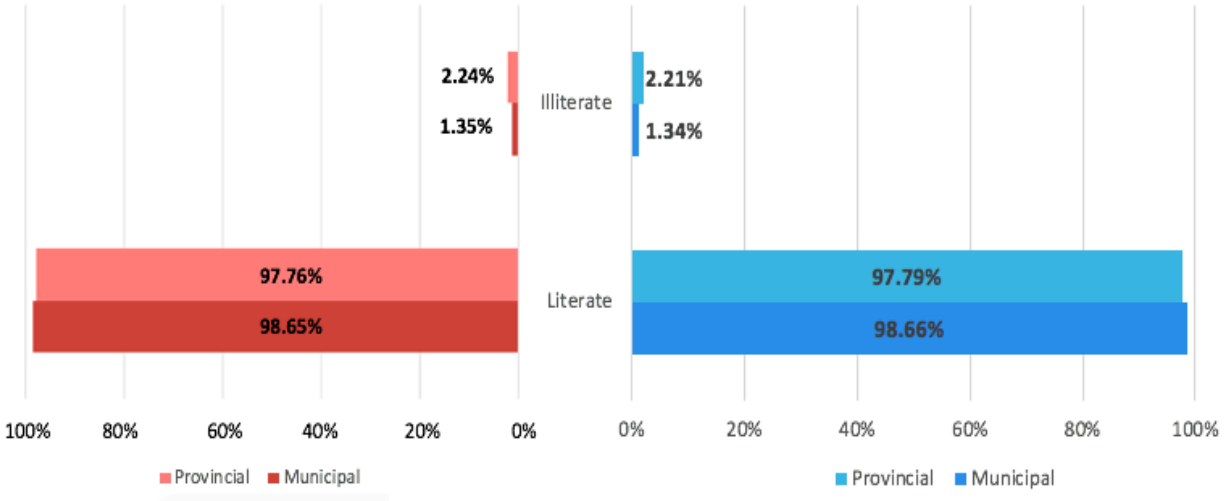
D3. EDUCATION

Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs and habit. Education frequently takes place under the guidance of educators, but learners may also educate themselves. It can take place in formal and informal settings and any experience that has a formative effect on the way one thinks, feels or acts may be considered educational.

Education in the Philippines is provided by public and private schools, colleges, universities, and technical and vocational institutions. Funding for public education comes from the national government. By law, education is compulsory for thirteen (13) years (kindergarten and grades 1-12). These are grouped into three (3) levels: elementary school (kindergarten-grade 6), junior high school (grades 7-10), and senior high school (grades 11-12). Institutions of higher education may be classified as either public or private college or university, and public institutions of higher education may further be subdivided into two types: state universities and colleges and local colleges and universities.

In this sub-sector revealed the literacy rate of population ten (10) years old and over by sex; household population five (5) years old and over by highest educational attainment; schools by level, type, facilities and condition; student-teacher and student-classroom ratio by level; tertiary and vocational/technical schools by type and total enrolment; historical enrolment by level for the past five (5) years; projected classroom, teacher requirement in public schools by level; and historical enrolment participation rate for the last five (5) years.

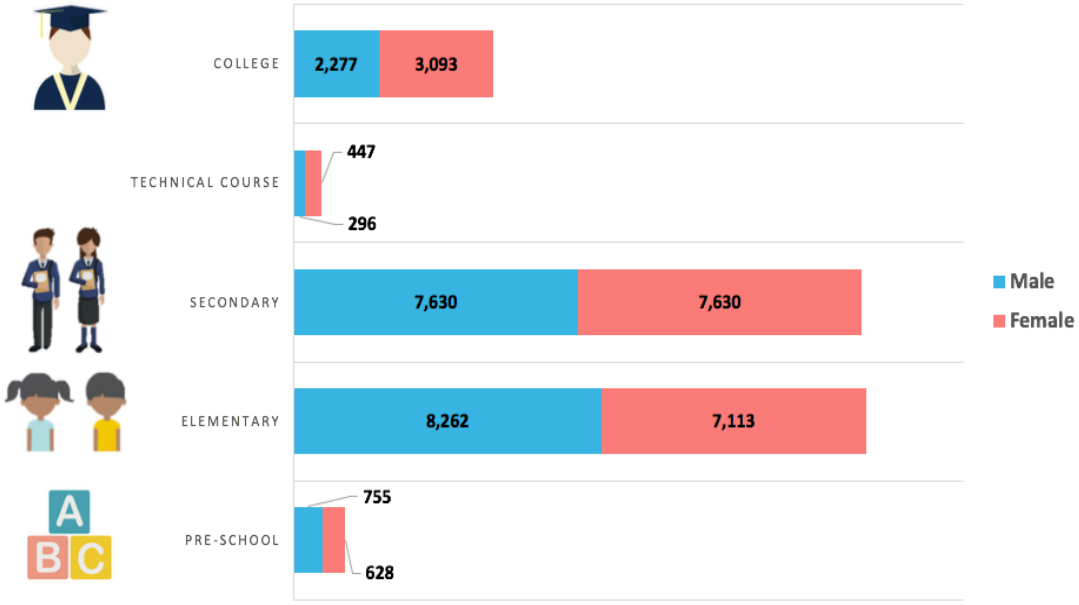
Figure DE-8. Literacy Rate of Population 10 Years Old and Over by Sex, 2015



Source: Municipal Health Office, 2017

Literacy rate is the percentage of the population who has at least completed a year in elementary education to the population seven (7) years old and over. The literacy rate of the population 10 years old and over, by sex in 2015 which covers the residence in 27 barangays of Gloria was 98.66%. Almost thirty-three thousand nine hundred twenty- four (33,924) were able to read and write a simple sentence. However, the table shows that there are still 1.34% of the population categorized as illiterate which is corresponding to four hundred sixty-one (461) persons. This means that the percentage of the illiterate persons of year 2015 indicates lower illiteracy rate. The same with the provincial level, it shows lower illiteracy rate which is only 2.23% of the total population.

Figure DE-14. Total Population 5 Years Old and Over by Highest Educational Attainment, 2015



Source: Philippine Statistics Authority, 2015

The literacy rate of Gloria pegged at about 97.77% of the total population. 40.32% of the population, which is the group of five years old and over, has attended or completed elementary education, while 40.02% have reached or completed secondary education. Only 6.77% were college graduate. There were more female academic degree holders with 8.25% or 1,560 than male with 5.31% or 1,020.

Table SO–2. Schools By Level, Type, Facilities and Condition, SY 2016-2017

School	Brgy.	Area Occupied (ha)	Ownership	Facilities and Condition							Used as Evacuation Center (Y/N)	Hazard Susceptibility (H/M/L)						
				La	S	Li	Cl	CR	P	Others		Fl	Tc	Eq	Vo	Ln	Ts	Su
Elementary																		
Agos Elementary School	Agos	6,999 sq. m.	Public	N	N	N	P	P	P	Stage	Y	L	L	M	L	L	L	L
Agsalin Elementary School	Agsalin	1 ha.	Public	N	N	N	N	P	P	Stage, Canteen, Feeding Room	Y	M	L	M	L	L	L	M
Alma Villa Elementary School	Alma Villa	7,300 sq. m.	Public	N	N	N	N	G	G	Stage, Canteen	Y	L	L	L	L	L	L	L
Balete Elementary School	Balete	5000 sq. m.	Public	N	N	N	N	G	P	Stage, Canteen	Y	M	H	H	L	L	L	M
Banus Elementary School	Banus	1.3 has	Public	N	N	P	N	G	P	Stage, Computer Room	N	H	L	H	L	L	L	L
Banutan Elementary School	Banutan	1 ha.	Public	N	N	N	P	G	G	Stage	Y	L	M	M	L	L	L	L
Batingan Elementary School	A. Bonifacio	1 ha.	Public	N	N	N	N	G	G	Stage, Canteen	Y	L	L	L	L	L	L	L
Bulaklakan Primary School	Bulaklakan	9,600 sq. m.	Public	N	N	N	N	G	G		Y	L	L	L	L	L	L	L
Buong Lupa Elementary School	Buong Lupa	1 ha.	Public	N	N	N	N	P	G	Stage	Y	L	M	M	L	H	L	L
Bulbugan Elementary School	Sta. Maria	1 ha.	Public	N	N	N	N	N	P	Stage, Canteen	N	H	M	M	L	L	M	M
Center for Excellence Development Academy	Maligaya	600 sq. m.	Private	N	N	G	N	G	G	Canteen, Multi-media room	N	M	L	L	L	L	L	L
Dalagan Elementary School	San Antonio	5,000 sq. m.	Public	N	N	N	N	G	G	Stage	Y	L	L	L	L	L	L	L
Don Juaquin Roque Memorial Elementary School	Lucio Laurel	1 ha.	Public	N	N	N	N	G	G	Stage, Canteen, Hand washing	N	M	L	L	L	L	L	L
Gloria Central School	Maligaya	1.5 has	Public	P	N	N	P	G	G	Multi-purpose Hall, Canteen, stage, hand washing	Y	L	L	L	L	L	L	L
Kawit Elementary School	Kawit	1,080 sq. m.	Public	N	N	N	N	P	N	School Canteen, School Stage	Y	M	L	L	L	L	L	L
Langgang Elementary School	Sta. Theresa	1.2 has	Public	N	N	N	N	P	P	Stage	Y	M	M	L	L	L	M	M
Malamig Elementary School	Malamig	1 ha.	Public	N	N	N	N	G	P	Stage, Multi-purpose Hall, Canteen, Basketball Court	N	L	H	L	L	L	L	L
Malayong Elementary School	Malayong	1 ha.	Public	N	N	G	N	G	P	Stage	Y	L	L	L	L	L	L	L
Malubay Elementary School	Malubay	1 ha.	Public	N	N	N	N	G	P	Stage	Y	L	L	L	L	L	L	L
Malusak Elementary School	Narra	1 ha.	Public	N	N	N	N	P	P	Stage, canteen	Y	H	H	L	L	L	L	L
Manguyang Elementary School	Manguyang	1 ha.	Public	N	N	N	N	P	P	Stage	Y	M	H	H	L	L	L	L
Manuel Sadiwa Memorial Elementary School	Guimbonan	1 ha.	Public	N	N	N	N	P	P	Stage	Y	M	H	H	L	M	L	L
Maragooc Elementary School	Maragooc	3000 sq. m.	Public	N	N	N	N	G	G	Stage, Canteen	Y	L	L	L	L	L	L	L
Melecio D. Cantos Elementary School	M. Adriatico	1 ha.	Public	N	N	N	N	P	G	Stage, Multi-purpose hall	Y	M	H	H	L	L	L	L
Mirayan Elementary School	Mirayan	5,361.5 sq. m.	Public	N	N	N	N	P	G	Stage	Y	M	L	H	L	H	L	L
Pakpak Lawin Elementary School	Manguyang	5000 sq. m.	Public	N	N	N	N	G	G	Stage	Y	H	M	M	L	H	L	L
Papandungin Elementary School	Papandungin	1 ha.	Public	N	N	N	N	P	P	Stage	N	L	L	L	L	L	L	L
Sacred Heart Academy (Elementary Department)	Maligaya	1 ha.	Private	G	N	G	G	G	G	Canteen, Stage, Stockroom, Basketball Court	Y	L	L	L	L	L	L	L
Tambong Elementary School	Tambong	5,210 sq. m.	Public	N	N	N	N	P	P	Handwashing	Y	L	H	L	L	L	M	H
Tinalunan Elementary School	G. Antonino	7,091 sq. m.	Public	N	N	G	G	G	G	Stage	N	L	L	M	L	L	L	L
Secondary												L	L	L	L	L	L	L
Center for Excellence Development Academy	Maligaya	600 sq. m.	Private	G	G	G	G	G	G	Canteen, Multi-media room, Learning Center		M	L	L	L	L	L	L
Bulbugan National High School	Sta. Maria	1 ha.	Public	N	N	G	N	G	G	Canteen, Stage, Filipino Park, Basketball Court	N	L	L	L	L	L	L	L
Malamig National High School	Malamig	2 has	Public	G	N	G	N	G	G	Multi-purpose Hall, Stage, Canteen	N	L	L	L	L	L	L	L
Manuel Adriano Memorial National High School	Malubay	3 has.	Public	N	N	G	G	G	G	Canteen, Stage, Deepwell	Y	L	L	L	L	L	L	L
Pres. Diosdado Macapagal Memorial National High School	Bulaklakan	1.35 has	Public	P	N	P	N	P	G	Multi-purpose Hall, Canteen, HE Room	Y	L	L	L	L	L	L	L
Sacred Heart Academy	Maligaya	1 ha.	Private	G	N	G	G	G	G	Canteen, Stage, Stockroom, Audio-Visual Room, Basketball Court	Y	L	L	L	L	L	L	L
Oriental Mindoro Institute	Lucio Laurel	1,400 sq. m.	Private	G	G	G	G	G	G	Canteen, Auditorium	N	L	L	L	L	L	L	L
Tertiary/ Vocational																		
Erhard Science and Technological Institute	Bulaklakan	9,600 sq. m.	Private	G	P	G	G	G	G	Canteen, Basketball Court	N	L	L	L	L	L	L	L
Gloria Institute of Science & Technology	Maligaya	616 sq.m.	Public	N	G	N	N	G	G		N	L	L	L	L	L	L	L

Source: Department of Education and Individual Private Schools, 2017

Most of the schools need extensive repair or replacement and almost one-half have at least three inadequate/no building such as library, clinic, and laboratory. Moreover, other facilities have poor condition and need improvement.

According to Evaluation and Education Policy Analysis, facility quality is an important predictor of teacher retention and student learning. The physical and emotional health of students and teachers depend on the quality of the physical location, which makes establishing safe, healthy buildings essential. School facilities should provide a physical environment that is comfortable, safe, secure, accessible, well illuminated, well ventilated, and aesthetically pleasing. It should consist of not only the physical structure but including the mechanical, plumbing, electrical and power, communication tool, security, and fire alert system. It also includes furnishings, materials and supplies, equipment and information technology, as well as various aspects of the building grounds, namely, athletic fields, playgrounds, areas for outdoor learning, and parking area.

Schools are also used as evacuation center during calamities but some of these are susceptible to flood and tropical cyclone.

Figure SO-3.1 Number of Enrollees by Level, S.Y.2016-2017

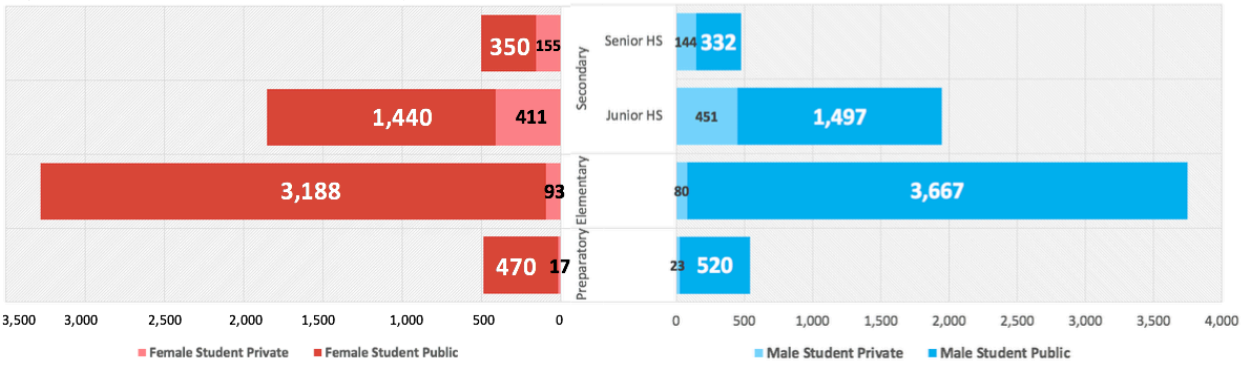


Figure SO-3.2. Number of Teachers by Level, S.Y.2016-2017

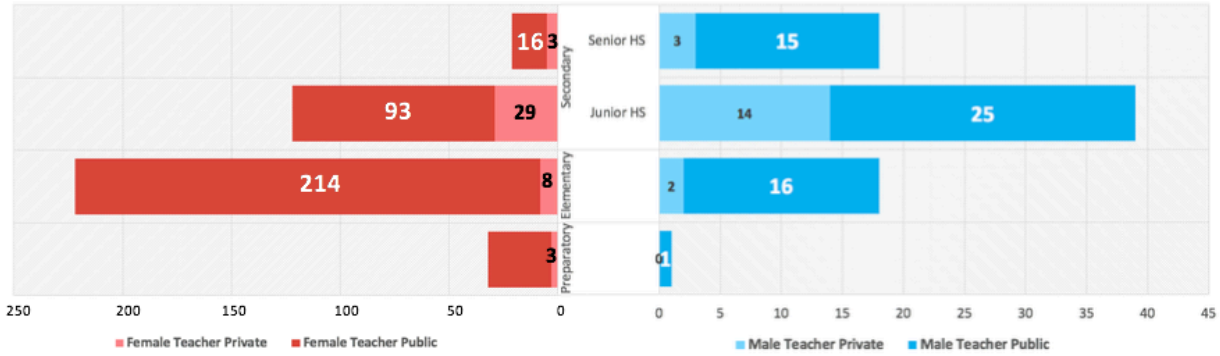
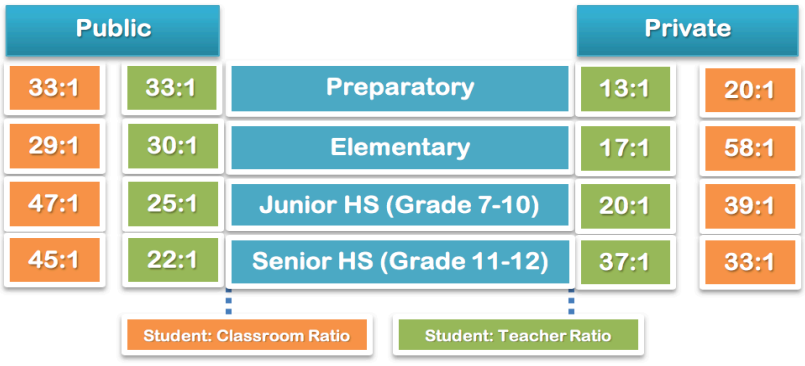


Figure SO-3.3. Student-Teacher and Student-Classroom Ratio by Level, SY 2016-2017



Source: Department of Education and Individual Private Schools, 2017

Student-teacher ratio by year level varies from 13:1 to 37:1 student per teacher. The private senior high school has the greatest number of students with 37:1 student-teacher ratio, while the elementary level has 58:1 student-classroom ratio. On the other hand, the preparatory in private has an ideal student- teacher-classroom ratio of 13:1 and 20:1 respectively. Preparatory Level in public school has 33:1 student-teacher-classroom ratio, while both Junior and Senior High School have disparity of one (1) and two (2). It means provision of one (1) teacher and two (2) classrooms in high school level are necessary.

According to the National Center for Education Statistics, the average for primary and secondary level student-to-teacher ratios is at least 18:1. On the other hand, the DO 93's 2010 – Revision to DepEd Order No. 77, S. 2010 (Guidelines on the Allocation/Deployment of New Teaching, Teaching Related and Non-Teaching Positions for FY 2010 the ideal pupil-teacher ratio is 25:1 in Pre-School alone. To date, the average student to teacher ratio in the Philippines is 36:1 and 35:1 in elementary and secondary respectively, but according to a study conducted by the Center for Public Education, the ideal ratio should be around 15 to 18 students per teacher. In view of this, almost all elementary schools in the Municipality of Gloria have inevitability for an additional teaching force, including some of the institutions from private school.
Conversely, public high school classroom condition is two times the ideal class size. That is why; students are still forced to crowd in one class sitting to address the shortage of proper classroom. Since a teacher and classroom has a key role in ensuring the quality of education provided, the student-teacher and student-classroom ratio is considered as important determinant learning outcomes and an indicator of the overall quality of education that a student can be acquired from school.

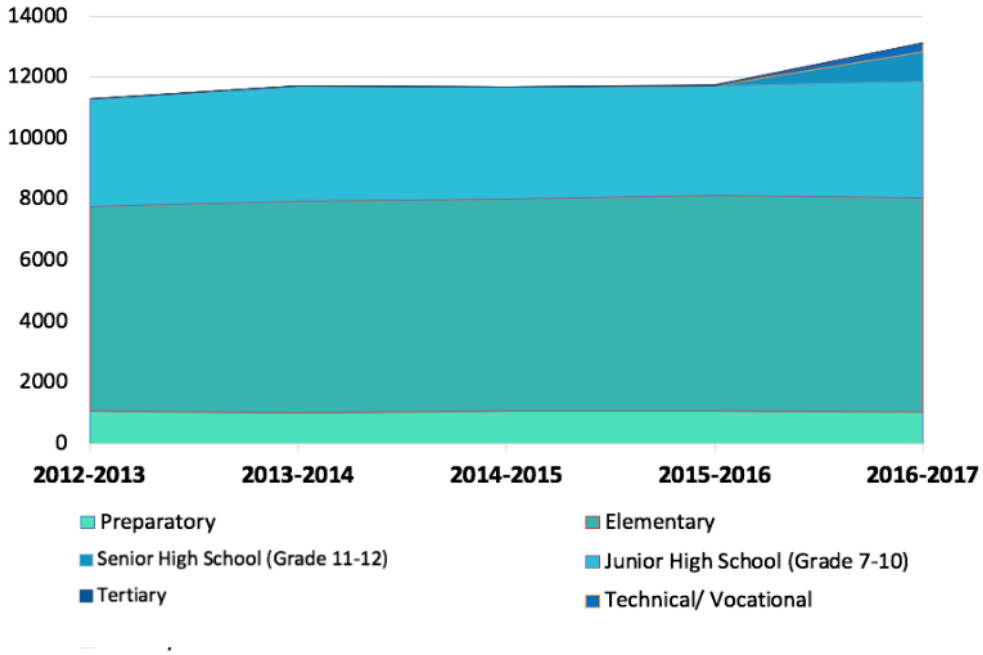
Table SO–4. Tertiary and Vocational/Technical Schools by Type and Total Enrollment, SY 2016-2017

Name of School	Location (Barangay)	Area (sq.m.)	Ownership	Total Enrollment		Hazard Susceptibility (H/M/L)							
				Male	Female	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
TERTIARY													
Erhard Science and Technological Institute	Bulaklakan	9,600 sq. m.	Private	8	10	L	L	L	L	L	L	L	
VOC. / TECH.													
Gloria Institute of Science and Technology	Maligaya	616 sq.m.	Public	240	34	L	L	L	L	L	L	L	
TOTAL		**10,216 sq. m.**		**248**	**44**								

Source: Individual Tertiary and Vocational School, 2017

The specific type of school in which a building built can have a huge impact on many aspects of students learning process. Considering the location of Tertiary and Vocational/Technical schools building, the table SO-4 showed that all potential source of harm or natural hazard is very low. However, hazard susceptibility and its potential outcome are considered in concurrence with other factors including the types of hazards and level of susceptibility. According to the Natural Disasters and Assessing Hazards and Risk - Professor Stephen A. Nelson, people can sometimes influence natural disasters (for example when poor drainage design results in a flood), other disasters that are directly generated by humans, such as massive waste dumping, toxic materials spills, pollution and the likes are considered as man-made hazards. The important point of Nelson-we can develop an action to take to minimize the risk, by answering some questions such as; How often do these hazards develop into disasters? or How can each type of hazards be predicted and/or mitigated. And then, make all this information available in a form useful to municipal/public officials who are responsible in making decisions in event of a disaster.

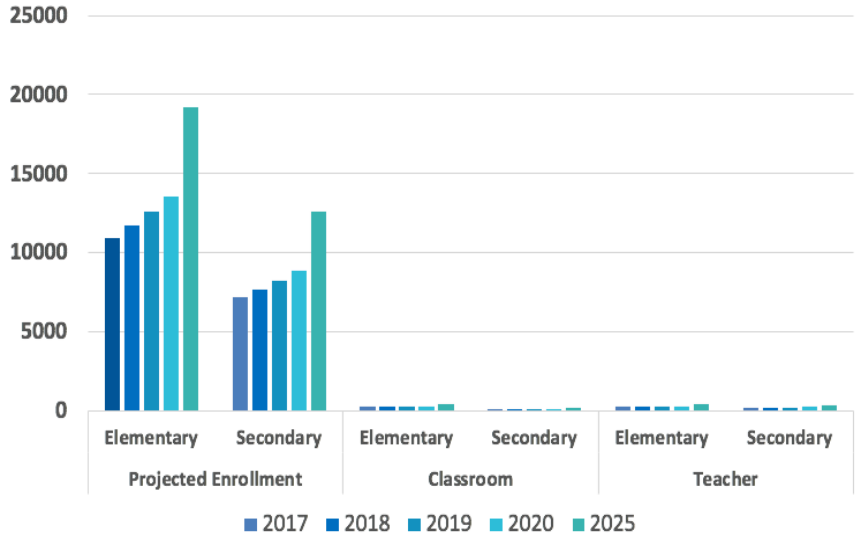
Figure SO-5. Historical Enrollment by Level for the Past Five School Years



Source: Department of Education 2017, Individual Private School

As the population increases, the total number of enrollees for the past five years increases. From the school year 2013-2014, enrollees increased by 3.79% but decreased 7.60% from the preparatory level as evident in Figure SO-5. It can be noticed also that from 2014-2015, preparatory, elementary and secondary levels decreased by some percentage then, continued to the succeeding years. The K-12 curriculum started on school year 2016-2017 in some public and private schools. The Erhard Science and Technological Institute was established in 2014 and started with eight college students (4 males and 4 females) then increased to thirty-nine (39) enrollees in the next school year.

Table SO-6. Projected Classroom, Teacher Requirements in Public Schools by Level

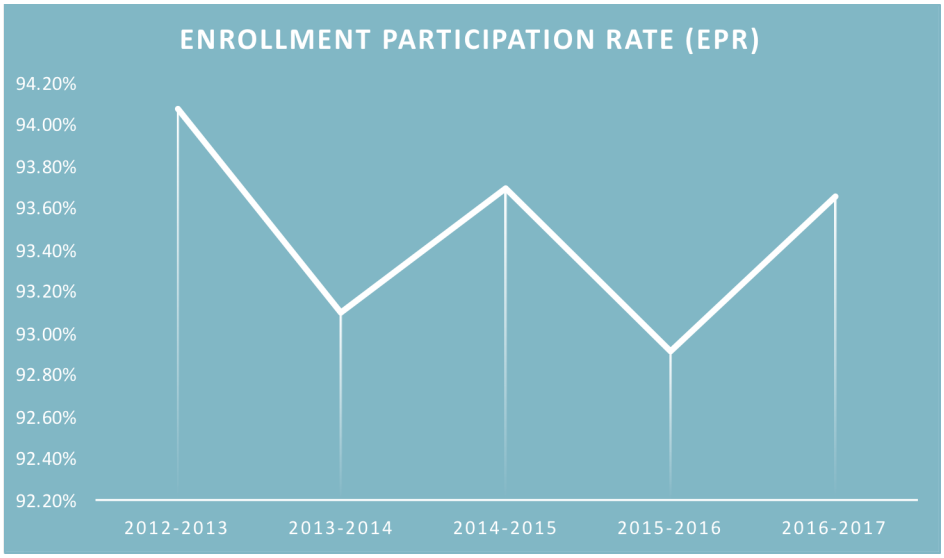


Source: Municipal Planning and Development Office, 2017

Considering the projected classroom-teacher requirements versus projected enrollees in 2025, the scenario of classroom setting will be the same – students will be crowded in one room. In elementary, the 418 classrooms are not commodious for 19,212 pupils – 1:46 ratio, while 421 teachers or 1:46 ratio are not sufficient to achieve the ideal 18:1 pupils-teacher ratio. This is similar to the public high school condition in all levels. The projected classroom-teacher requirements will not suffice for 12,579 students. Obviously, realities of this situation have been accepted for a long time, and we settle for less than the ideal. Perhaps, emphasis on the increase or the decrease

of the average class size or student-teacher ratio and provisions for the building of additional schools, classrooms and facilities will address the said problems.

Figure SO-7. Historical Enrollment Participation Rate for the past five years



Source: Department of Education, 2017

Enrollment growth is measured by the number of students being enrolled in a span of school year. Although, enrollment for the past five years in Gloria shows little disparity, it is important that schools have strict monitoring of enrollment; on the other hand, the LGU-Gloria should review education intervention programs.

According to studies conducted by the Center for Rural Pennsylvania, there are many factors that may affect enrollment however, these are the usual features observed like lower birth rate which in general can gradually decrease school enrollments. Students drop out of school is also a factor, especially those students who are forced into financial situations in which they need to work to bring an income in that can support themselves and their family. Some families do not value education and prefer that their children enter the workforce. Pregnancy sometimes leads to high school dropout, those students who have poor grades or attendance and some parents choose to send their children to other private school in neighboring town.

DEVELOPMENT NEEDS

It is evident that good education has the power to change a life. Education is not limited to read and write. It is about utilizing knowledge that would contribute to the individual's growth. Here are some distinguished education development needs:

- Additional classrooms or more public primary and secondary schools, repair/upgrade of school facilities and additional learning facilities such as audio-visual room, computer room and speech laboratory to accommodate more students and improve the quality of education.
- Teachers play a critical role in improving learning outcomes. They are essential in solving learning crisis and closing the gap between poor and good quality education. Therefore, it is vital that all children have teachers that are well-trained, motivated, able to identify weak learners, and are supported by well-managed education system. Additional teaching personnel are needed to meet the needs of the learners.
- The effective use of technology has changed the face of education and it created more educational opportunities. Both teachers and students benefited from various technologies, teachers have learned how to integrate technology in their classrooms

and students are getting more interested in learning with technology. The government must increase the fund allocation to education to purchase digital learning tools that can improve the teaching-learning process.

- Children with disabilities face multiple forms of discrimination which leads to their exclusion from school and society as a whole. The government must promote accessible and inclusive learning spaces to children with disabilities. Learning materials need to be made available in accessible formats to suit the needs of children with different types of disabilities. Additional teachers who specialize in special education are needed.
- Public library is often considered an essential part of having an educated and literate population. It serves the general public's information needs rather than the needs of a particular school, institution, or research population. The existing municipal library must be expanded and maintained to serve more students and professionals.