Dear Dr. Bauer:

my expectancy was high of seeing you here last week. I would so much like to talk to you. I write in my expression of joy in your being elected President of Poly. I, like Paul of all, was never elected and never resigned. You are in that far ahead of me. May God give you a daily supply of wisdom and strength in the leadership of Poly into an institution big and qualified for the increasing demands of higher Christian education. I trust you will see no limit in your supply of the need - Poly is a good beginning but need - if you can keep growing in number, faculty, in enrollment of students, and in strong religious life. And the sky is the limit. A word about our precious buildings:

They were erected entirely by student labor - those who could pay nothing were given additional daily hours of work not as a faculty for rent paying
to as a privilege and chance in achieving and paying for their education. This lifted them above those who had parents who paid all the costs. It worked.

Student direction in work needs careful planning and supervision. That does not mean a supervisor will stand over and watch the student. The student must know what he is to do and how. We found that college grade students could read the blueprints and learn easily just how to erect a building.

We started out with concrete blocks because I had a $40 = concrete receiving building, plenty of sand and gravel, and did not have money to buy forms for concrete and steel rods. I built the first block house in San Bernardino and changed to reinforced concrete when finances permitted such. I first tried with board forms. Then turned to 6" channels, cut in several standard lengths with which we built the permanent buildings in Italy. These forms were stored away by Mrs. Morris. I think she told me they are in the Bartacks' barn. The channels were held in place by traces made of two angle irons between which wood passed for keeping the edges even when filled. The corner channels formed the channel wall and held the channel wall in place above for refilling.
work no hired labor was needed - only checking to see that it was placed by
brother Clarence. Lucy and the rest students remember time it was done for they
did it all. Rev. Louis Angel Torres and
hundreds of others did the work over the
years from 1936-37. The channels were
used in all building. But Clarence Horn's
were in the others. We used lumber
forms on some units -- formed it very
cruly and turned to the channels.
The channels were cut to fit the rooms
of Science Hall and dormitories. No
wood was used except for the corners.
2" x 3" were used as struts to hold the
forms plumb... also in support of floors
and roofs. These supports can be bought
with adjustable height and are efficient
in long span.
Reinforcements are most important, and
buildings like Science or Pearson have
heavier upright rods for two first stories.
It does not pay to make walls wider than 6"
in 8" for economy ones also in supporting
large stones in the center of fragile pouring
concrete. We set our own sand and gravel
concrete from the Rico Granite near DW, Iowa state
and brought same in a truck. Felicia
People once drove our Ford trucks.
Put my right sides 1/2" back of plane jokes.
Heavy rods upright on both interior
and exterior sides of the walls, held in
place by 3/4" cross rods. The windows
doors etc must have strong reinforcement
Twice as many rods as do the walls, like this
1/2" by 9g. gauge.

All this is done to withstand the earth quakes
and hurricanes that come once in about
very 33 years.

Do not use blocks - construction. The
labors must be skilled labor. footements
the students can do all the work unless
supervision. Victor Laprise is good at
plumbing. I taught him electric light
installation and he did it well. Of
course the architects have give detailed
plans for all plumbing & electric wiring.
All reinforcements, plumbing work, and elect.
Wire, wires or pipes have to be installed
ahead of the pouring of concrete.
Maybe our steel strips for concrete pouring
and concrete mixers ought to be around
some place. Using your own machinery
the students can and did erect the building
for less than half of contractors. Thus for
many poor boys can work their way through
college.

By all teaching students working abroad
I am daily creating a sense of belonging to the life of the college.

I believe the steel beam construction used in L.A. would be gutted by an earthquake, as in California and Japan around 1913. Rocks, held together tighter than big steel beams. Does fellow N.Y. engineers for reinforcements. We were ordered to do so by Prof. Bd. 17 brace, who paid for 3 hall. Result we had to put two big columns in the big rooms afterwards to take the big loads. N.Y. engineers swag out of the floors. N.Y. engineers said my architect remove beams set six feet apart, we knew it would not six feet apart. We knew it would not hold up the floor. Consequently, froze, big, ugly, columns inside hall and rooms of Science Hall.

I saw next morning has taken some 6' channels for uprights in the new plans. Hope the plans are there. If they have been sold, you can get much better forms made to order in street metal - which will fit in all
future construction.
I might say I had the design
number of reinforcing doubled
that is for every six engineers planned
8 feet in another. You can turn
Bonaventure over and not it done.
He said—maybe you couldn't.

The beauty of concrete is that you can
have metal made to make corners
etc. to which blocks do not press.

I hope you can improve on what
we in pioneer days tried to build &
build for all time. Much is now
known that then was not known.

The change of location of
cliping to East side of West square
from the West side, I think is a better
site. Remember the center line of
the Academy grounds runs from
the Flag Pole (if it still stands) to
the center of the steps and on
the center of the Auditorium turn
in Harris Ave.

I would suggest
that the cliping be as constructed as
during the
past 100 years from men additional
into the main auditorium—as needs may
demand. Poly should have new 3000 enrollees
and would have had that switched slept in
the "Nut". You will see it in your day 3000
people in the only seats in all
the West Building. The door is open to
and the horizon are the limit of our possibilities. A big college can be made just as easy as a small college into a great Christ-like institution if multitudes do not overshadow the individuals. Like a home a per capita cost is decreased by the additional members who eat at the table. A small college will in time become like the small farms—impossible to maintain—once jet-air planes rescue the greatest air planes.

Puerto Rican climate cost and all air conditioning. What it costs, Harvard W.P.I. would maintain a like institution in Puerto Rico. That is why I say plan the college for large numbers—possibly 10,000 students in time. If Poly can offer the highest standards—student will eventually choose to live in that heavenly climate, to which they can fly in an hour at low costs.
and enjoy fresh air and an equal climate. Everything favors Poli. It will become a great institution of worldwide Christian culture on highest academic and spiritual attainments, as I think, God willing it to become.

I forgot to say that when I left my ranch in Texas to P.A.E. I hope to put up a Pavilion over The Steps in memory of Jesse White Harris.

You may want to make Mr. Step into the present of the Chapel—site it stands in the center of Academic Court—If you do as above I shall be glad to make my donation to that end. I should be able to dispose of my balance the near future.

May God be allowed to lead us all into the now unrealized possibilities of our day. I hope I may see you in Texas some day. I shall be there till I can present my application personally to the Fund Foundation. I am as organized for Poli's 3,100,121, 74 from Fund 5. Remember the ball of a rifle rises high or falls to the earth depending on how it is pointed.

And bless you and Poli.

G.W.T. Trues