



open access

Research Article

Academics or Socialization? Indirect Influence of Pre-College Preparation, Alignment and Spirality Among Filipino Pre-Service Teachers

ABSTRACT

Should college ensure students' success? College education is the last phase of a learner's life prior work productivity and understanding how their prior experiences relate with their present self-efficacy across their chosen careers is vital to nation-building. Using a survey-questionnaire, this study measured the Filipino pre-service teachers' (n=990) perception of their K to 12 experiences across three independent variables and related it with two dependent variables in terms of social self-efficacy and self-efficacy on academic achievement during the 2nd semester in January 2022 in a large public university in Pangasinan, Philippines. Results revealed a higher number of respondents who claimed that K to 12 has prepared them for college, is aligned with the college curriculum, and that Spiral Progression helped them in their college, than those who did not. Alignment reported the lowest percentage while Spiral Progression showed the highest. Social Self-Efficacy and Self-Efficacy on Academic Achievement are generally high, but their academic achievement registered significant difference across field of specialization while social self-efficacy remains statistically similar. Findings have implications on social practice in HEIs including curriculum summit, competency mapping, understanding the nature of the learners, and implementation of flexible learning in HEIs in the Philippines.

KEYWORDS

Academic Self-Efficacy, Curriculum, Flexible Learning, Higher Education, K to 12, Philippines, Pre-Service Teachers

CITE THIS ARTICLE AS:

Fernandez, T.M., Ballesteros, J.D., Camara, J.S. (2022). Academics or Socialization? Indirect Influence of Pre-College Preparation, Alignment and Spirality among Filipino Pre-Service Teachers . *ASEAN Multidisciplinary Research Journal*, Vol 10(1)

¹Teddy M. Fernandez, PhD

²Joebert D. Ballesteros, MEd

³Jun S. Camara, PhD

Correspondence:

tfernandez.lingayen@psu.edu.ph

jballesteros.lingayen@psu.edu.ph

jcamara.lingayen@psu.edu.ph

^{1,2}Faculty-Lecturer, Social Studies Department, Pangasinan State University – Lingayen Campus

²Dean, College of Teacher Education, Pangasinan State University – Lingayen Campus

INTRODUCTION

Pre-service education evaluation is vital to promote quality education. Avsheniuk (2021) said that ‘teaching profession today is experiencing challenging times: with the development of cognitive neuroscience and the active implementation of new technologies in education, the demands on teachers are changing, forcing teachers to regularly review their approaches and learn new ways of working. He quoted a study of Ingersoll et al (2014) of 50,000 educators in the USA that estimated 41% of teachers from pre-service to high school change careers in the first five years of employment. Further, he stressed the presence of qualified teachers as a key in ensuring universal and equitable access to quality education for all.

Pre-service education is addressed in the Philippines. The Philippines’ Department of Education, or DepEd, released DO No. 42, s. 2017 on the national adoption and implementation of the Philippine Professional Standards for Teachers, or PPST. The PPST defines teacher quality in the Philippines and describes the expectations of teachers’ increasing levels of knowledge, practice and professional engagement. At the same time, the standards allow for teachers’ growing understanding, applied with increasing sophistication across a broader and more complex range of teaching and learning situations.

Further, the Philippines’ Commission on Higher Education has released CMO No. 75, s. 2017 on the Policies, Standards and Guidelines for Bachelor of Secondary Education, or BSEd, stating among others, the minimum program outcomes all in types of schools in the Philippines offering the Education Program, to wit: articulate and discuss the latest developments in the specific field of practice; effectively communicate in English and Filipino, both orally and in writing; work effectively and collaboratively with a substantial degree of independence in multidisciplinary and multi-cultural teams; act in recognition of professional, social, and ethical responsibility; and, preserve and promote ‘Filipino historical and cultural heritage’. With both these mechanisms that showed strong support to the educational processes, there is but one lacking ingredient: the pre-service teachers. The question now is, could pre-service cope with all these standards as well as expectations of them? If an area of concern is found, how could higher education institutions address it? What curricular adjustment could be made? What policy could be used to sustain this even when instruction is done through a flexible learning modality?

This study explored on the perception on prior K to 12 perceived experiences in terms of preparation, alignment and spiral progression (independent variables) as source of influence on the college students’ social self-efficacy and self-efficacy on academic achievement. To provide further direction, information collected were segmented across two dependent variables (i.e. field of specialization and year level) with the aim of presenting findings in light of local curricular implementation among teacher education institutions in the context of public state universities and colleges in the Philippines.

METHODOLOGY

Participants comprised nine hundred ninety (990) pre-service teachers in the Philippine’s Pangasinan State University, Lingayen Campus (PSU-LC) presently enrolled during the School Year 2021-2022. They are classified based on their field of specialization under the Teacher Education Program of PSU-LC: English (16.4%), Filipino (16.3%), Science (14.8%), Social Studies (15.7%), BTLEd (22.5%), and BTVTED (14.3%). At the time of data-collection, flexible learning modality was in place. No face-to-face classes were held, and mobility of people including students was restricted depending on the alert level issued by the government for implementation. Thus, primarily, these participants were reached out using emails and messengers to answer survey-questionnaires, which were sent to them individually through their program coordinators. The participation rate is (900/1287) 70.00% of total enrolled students. Data-collection

only lasted five (5) days from a Monday to a Friday to ensure that similar prevailing conditions of the students existed and that no intervening activities would have potentially altered the responses. The survey items were adapted from several studies on self-efficacy (Camara, 2020, 2018).

Table 1. Segmentation of Respondents across Major

Field	N	%
English	162	16.4
Filipino	161	16.3
Science	147	14.9
Social Studies	155	15.7
TLE	223	22.5
TVTEd	142	14.3
Total	990	100.00

Table 2. Segmentation of Respondents across Year Level

Field	N	%
First	235	23.7
Second	281	28.4
Third	203	20.5
Fourth	270	27.3
Total	990	100.00

Table 3. Segmentation of Respondents across Strand vs Field

Strand vs Field		Field						Total
		Social Studies	Science	English	BTLEd	Filipino	BTVTED	
Strand	HUMSS	79	31	45	22	48	17	242
	GAS	54	47	65	59	72	40	337
	ABM	5	10	17	10	8	6	56
	STEM	3	44	10	10	9	4	80
	TVL	14	15	25	121	24	75	274

RESULTS

K to 12 Preparation, Alignment and Spiral Progression

This study is an attempt to identify the degree of influence of K to 12 to undergraduate pre-service teachers in terms of three independent variables, viz: Preparation, Alignment, and Spiral Progression. The question asked from the respondents is whether K to 12 has prepared them for college or not, whether their college curriculum is aligned with what they learned in K to 12, and whether they think spiral progression helped them in their course or not. The frequencies of Yes and No are presented in Table 4 in terms of the first dependent variable (i.e. Major) and in Table 5 for the second dependent variable (i.e. Year Level).

K to 12 has varying degree of significant influence across Major

Table 4. Perceptions on K to 12 Preparation, Alignment and Progression in terms of Field of Specialization

	Preparation				Alignment				Spiral Progression			
FIELD	Yes	%	No	%	Yes	%	No	%	Yes	%	No	%
English	150	92.59	12	7.41	131	80.86	31	19.14	145	89.51	17	10.49
Filipino	151	93.79	10	6.21	138	85.71	23	14.29	152	94.41	9	5.59
Science	127	86.39	20	13.61	114	77.55	33	22.45	135	91.84	12	8.16
Soc. Stud.	150	96.77	5	3.23	135	87.10	20	12.90	151	97.42	4	2.58
TLE	210	94.17	13	5.83	183	82.06	40	17.94	208	93.27	15	6.73
TVTEd	119	83.80	23	16.20	104	73.24	38	26.76	126	88.73	16	11.27
		91.25		8.74		81.09		18.91		92.53		7.47
Correlates	24.96 (p0.000) ^a				13.03 (p0.023) ^a				11.70 (p0.039) ^a			

^aSignificant at 0.05 alpha

Table 4 shows that majority of the respondents claim that K to 12 has prepared them for college (91.25%) with Social Studies Major claiming to have been prepared the most (96.77%) and TVTEd Majors having the lowest percentage of prepared respondents from their K to 12 experience (83.80%). Further, in terms of alignment, Social Studies Majors had the highest percentage of respondents who claim their college curriculum is aligned (87.10%) with the K to 12 curriculum they completed while TVTEd Major had the lowest percentage (73.24%) curriculum. In addition, majority of the Science Majors numbered close to TVTEd's who claim their college curriculum is aligned with K to 12 (77.55%). Furthermore, in terms of spiral progression, Social Studies Majors registered the highest percentage (97.42%) of respondents who believe that Spiral Progression has helped them in their college course. Moreover, Table 4 reveals that there is a significant relationship between the field of specialization and the percentage of respondents in terms of preparation ($\alpha < 0.001$), alignment ($\alpha < 0.005$), and spiral progression ($\alpha < 0.05$).

K to 12 has varying degree of significant influence across Year level

Table 5. Perceptions on K to 12 Preparation, Alignment and Progression in terms of Curriculum Year

	%	Preparation				Alignment				Spiral Progression			
YEAR	Sum	Yes	%	No	%	Yes	%	No	%	Yes	%	No	%
FIRST	92.1	220	93.62	15	6.38	205	87.23	30	12.77	224	95.32	11	4.68
SECOND	90.0	265	94.31	16	5.69	225	80.07	56	19.93	269	95.73	12	4.27
THIRD	86.9	181	89.16	22	10.84	166	81.77	37	18.23	182	89.66	21	10.34
FOURTH	85.1	240	88.89	29	10.74	208	77.04	62	22.96	241	89.26	29	10.74
Correlates		11.98 (p0.017) ^a				9.84 (p0.043) ^a				18.03 (p0.001) ^a			

^aSignificant at 0.05 alpha

The researchers re-classified the percentage of Yes and No of the respondents, this time, in terms of Year Level to identify their segmented perception among the independent variables. Table 5 shows that second year level registered the highest percentage (94.31%) of respondents who claim that K to 12 has prepared them for college while fourth year level registered the lowest (88.89%). Further, in terms of alignment, first year level registered the highest percentage (87.33%) while fourth year registered the lowest percentage (77.04%). Furthermore, in terms of spiral progression, second year level registered the highest percentage (95.73%) while fourth year registered the lowest (89.26%). In all of these, Table 5, shows a close number and percentages between first- and second-year respondents. Similar situation could be observed with number and percentages between third- and fourth-year respondents. Moreover, Table 2 displays that there is a significant relationship between year level and the three independent variables ($\alpha < 0.005$).

Academics and Social Self-Efficacy

This study is also an attempt to explore on the social self-efficacy (SSE) and self-efficacy for academic achievement (SAA) of the respondents segmented through field of specialization and year level. The researchers believe that the SEE and SAE could serve as moderating variables that would influence the effect of K to 12 experience of the respondents. Table 6 presents the SSE while SAE in Table 7.

Social Self-Efficacy is statistically similar across Major

Table 6. Mean Social Self-Efficacy per Field of Specialization

Profile	NC	MC	C	HC	VHC	M	DE
SSE1 Q and Correlates	I can make and keep friends of the opposite sex. 15.77 (0.734)						
Soc. Stud.	3	7	18	40	87	4.30	VHC
Science	2	2	13	45	85	4.42	VHC
English	2	4	16	36	104	4.46	VHC
TLE	6	5	21	63	128	4.35	VHC
Filipino	4	1	22	44	90	4.34	VHC
TVTEd	2	2	17	44	77	4.35	VHC
SSE2 Q and Correlates	I can make and keep friends of the same sex. 23.04 (0.287)						
Soc. Stud.	3	5	7	37	103	4.50	VHC
Science	2	2	9	46	88	4.47	VHC
English	2	0	14	34	112	4.57	VHC
TLE	3	5	14	57	144	4.50	VHC
Filipino	4	0	12	40	105	4.50	VHC
TVTEd	4	1	15	40	82	4.37	VHC
SSE3 Q and Correlates	I can carry on with communications with others. 26.64 (0.146)						
Soc. Stud.	2	7	16	67	63	4.17	HC
Science	1	7	23	64	52	4.08	HC
English	1	4	32	63	62	4.12	HC
TLE	0	2	29	88	104	4.32	VHC
Filipino	2	2	20	58	79	4.30	VHC
TVTEd	1	6	25	48	62	4.15	HC

SSE4 Q and Correlates	I can work well in a group. 30.77 (0.058)						
Soc. Stud.	4	3	20	66	62	4.15	HC
Science	0	5	26	64	52	4.11	HC
English	2	5	29	66	60	4.09	HC
TLE	0	2	24	95	102	4.33	VHC
Filipino	0	2	21	57	81	4.35	VHC
TVTEd	1	5	16	59	61	4.23	VHC

Legend: Very Highly Confident, VHC (4.20-5.00); Highly Confident (3.41-4.20); Confident (2.61-3.40); Moderately Confident (1.81-2.60); Not Confident (1.00-1.80)

Table 6 showed that respondents across field of specialization have very high confidence in terms of making and keeping friends of the opposite and same sex with English Majors registering the highest weighted means for both indicators (WM=4.46, 4.47), respectively, but registered the lowest weighted mean in terms of working well in a group (WM=4.09). In terms of carrying on with communication with others, TLE Majors showed the highest mean (M=4.32) while in terms of working well in a group, Filipino Majors topped all the others (M=4.35). Despite the presented weighted means, however, Table 6 reveals that there is no significant difference among the fields of specialization in terms of their social self-efficacy.

Self-Efficacy on Academic Achievement differs significantly per Major

Table 7. Mean Self-Efficacy on Academic Achievement per Field of Specialization

Profile	NC	MC	C	HC	VHC	M	DE
AA1 Q and Correlates	I can learn the general education subjects in my course. [32.53 (0.038)]						
Soc. Stud.	0	2	22	77	54	4.18	HC
Science	0	1	21	81	44	4.14	HC
English	0	1	16	96	49	4.19	HC
TLE	0	4	21	104	94	4.29	VHC
Filipino	0	1	15	68	77	4.37	VHC
TVTEd	1	1	23	61	56	4.20	VHC
AA2 Q and Correlates	I can learn the major subjects in my course. [65.15 (0.000)]						
Soc. Stud.	0	1	16	83	55	4.24	VHC
Science	1	2	26	81	37	4.03	HC
English	0	2	17	85	58	4.23	VHC
TLE	1	1	21	85	115	4.40	VHC
Filipino	0	0	10	57	94	4.52	VHC
TVTEd	2	3	22	56	59	4.18	HC
AA3 Q and Correlates	I can learn the technical (applied) subjects in my course. [75.65 (0.000)]						
Soc. Stud.	0	1	37	88	29	3.94	HC
Science	2	2	41	70	32	3.87	HC
English	0	2	29	97	34	4.01	HC
TLE	0	3	24	94	102	4.32	VHC
Filipino	1	3	24	73	60	4.17	HC
TVTEd	2	4	30	54	52	4.06	HC

Legend: Very Highly Confident, VHC (4.20-5.00); Highly Confident (3.41-4.20); Confident (2.61-3.40); Moderately Confident (1.81-2.60); Not Confident (1.00-1.80)

Table 7 shows three indicators under academic achievement self-efficacy. Filipino Majors registered the highest means for learning the general education (MW=4.37) and major subjects (MW=4.54) while Science Majors registered the lowest for both indicators (MW=4.14, 4.03, respectively). TLE registered the highest mean for learning the technical or applied subjects in their course (MW=4.32) while Science Majors registered the lowest mean (MW=3.87).

DISCUSSION OF FINDINGS

This study has invested on the importance of prior K to 12 perceived experiences in terms of preparation, alignment and spirality as influences on the respondents' social self-efficacy and self-efficacy on academic achievement when segmented across field of specialization and year level. The study has reported on findings that provided support on related literature as well as new areas of research interest for future undertakings.

This study revealed that the respondents have high confidence in both social self-efficacy and academic achievement. This is supported by the study of [Yapo & Tus \(2021\)](#) among college students (n=532) from both public and private higher education institutions in the Philippines who were asked to answer a questionnaire on self-efficacy during the pandemic similar to the context of the present study. This implies that even during a pandemic, the COVID-19 has not lowered down the self-efficacy of Filipino college students.

This study found that the social self-efficacy of the respondents remains significantly similar across the field of specialization but their self-efficacy on academic achievement significant differs in terms of field of specialization. This implies that undergraduate learners must have developed some form of social self in college and is uniform across major, but the intensity of perceived difficulty is taken differently by them. In human productivity, especially during college years, GPA is an indicator of academic performance. While in this study the self-efficacy on academic achievement is measured and not empirical evidence, what this study add to the literature is that similar social self-efficacy may not result to similar self-efficacy in terms of academic studies.

This study found that the percentage of students who said that K to 12 has prepared them for college (91.25%) and those who said that their college course is aligned with the K to 12 curriculum (81.09%) is similar to the findings of [Camara \(2020\)](#) among engineering students in a public state university in Pangasinan, Philippines. Arguably, however, the proportion between Yes and No is higher in this study than those reported in the cited study. This means that the respondents in this study (i.e. pre-service teachers) must have better experience in K to 12 than those in the cited study who are engineering students. It should be noted however that in this study, most of the pre-service teachers completed the General Academic Strand (GAS) and the cited study had respondents who mostly completed the Science, Technology, Engineering, and Mathematics (STEM) Strand.

IMPLICATIONS ON SOCIAL PRACTICE IN HIGHER EDUCATION

This study has reported findings that have implications on social practices in higher education. The finding on statistical difference on the views of pre-service teachers in their academic achievement efficacy implies that there is a need to go deeper in understanding the nature of the learner in all phases of an individual's school journey, all the more in higher education since this is the last phase of the individual's formal education prior to work productivity. In Higher Education, the learnings are in themselves the 'life' that there is the world of work.

This finding reported on some fields of specialization with considerable low percentages on preferred Yes responses in terms of their K to 12 experiences. This implies for that there is a need to explore on the issues and concerns on the impact of K to 12 in the attributes of prospective HEI graduates, especially in terms of their readiness for work, and in the case of this present study, the readiness of pre-service teachers in the field of teaching in basic education for both public and private practice.

This finding reported on comparably lower percentages of pre-service teachers who benefited from the K to 12 in terms of 'alignment' (i.e. The K to 12 curriculum is aligned with their college course) compared with the high percentages in terms of preparation and spiral progression across field of specialization. This implies that concerned heads or school administrators or program coordinators should consider in their curriculum summit a thorough curriculum mapping on the K to 12 competencies and their program's outcomes. It should be noted that K to 12 Curriculum has been implemented by the Philippine Government through the Department of Education in 2013, and curriculum guides have been continuously developed until 2016, at the most, but the CHED-prescribed Policies, Standards and Guidelines for the Bachelor of Science in Education (BSE), Bachelor of Technical-Vocational Teacher Education (BTVTEd), and Bachelor of Technology and Livelihood Education (BTLed) were implemented by the Philippine Government through the Commission on Higher Education in 2017. The improved PSGs are supposed to have integrated RA 10533 or the K to 12 Enhanced Curriculum. This may partially explain why there are more first and second year respondents who considered the benefits of K to 12 in terms of preparation, alignment and spiral progression than those who are in their third and fourth year.

Further, the high self-efficacy in both social life and academic life of the pre-service teachers imply that the cohorts have already stable mindset as far as college preparation is concerned. They already have the necessary motivation and life skills in both collaboration with others while sustaining their academics. This has a strong implication on how the HEIs, particularly in Pangasinan State University where the samples are taken from, implemented and sustained their flexible learning as their implemented resulted to the ideal mindset of learners despite the COVID-19 disruption.

FUNDING

This excerpt study is funded by the Pangasinan State University thru BOR No. 195, s. 2021. The researchers are grateful to the generosity of its University President Dr. Dexter R. Buted and Vice-President for Research (and Extension, Innovation and GAD) Dr. Paulo V. Cenas, as well as the Campus Executive Director of Pangasinan State University Dr. Randy Joy M. Ventayen.

ACKNOWLEDGMENTS

The researchers would like to thank C. G. Solomon, J. K. N. Abrera, and Dr. R. R. Molano for the assistantship which they extended to the researchers during the collection, processing, converting, and analysis of indicators excerpted in this published material. Likewise, we thank the members of the accounting office especially to Ms. M. R. A. Sulipa for her extended hours of time for our accounting inquiries and processing. We also thank the program coordinators of CTE PSU LC for their services during the pilot testing and initial administration of the survey-questionnaire.



REFERENCES

- Avsheniuk, N. (2021). UNESCO's Contribution to Teacher Education Quality Assurance. *UNESCO Chair Journal – Lifelong Professional Education in the XXI Century*
- Ingersoll, R., Merrill, L., and What are the Effects of Teacher Education and Preparation on Beginning Teacher Education: Research Report. Consortium for Policy Research in Education. *Consortium for Policy Research in Education*
- Camara, J. S. (2018). Correlates of Self-Efficacy, Learning Style and Aptitude Across Strand of Senior High School Students in San Jacinto National High School. *Asian Journal of Multidisciplinary Studies*, Vol 1(2)
- The 2030 Sustainable Development Agenda: Resolution Adopted by the General Assembly on 25 September 2015. United Nations.
- UNESCO. (2021). Reimagining our futures together – A new social contract for education. Report from the International Commission on the futures of education, 2021. Paris: UNESCO.
- Yapo, F.C. and Tus, J. (2021). The Self-Efficacy and Academic Motivation of the Graduating College Students During the COVID-19 Pandemic in the Philippines. *IJARIE*. Vol 7(3)
- DO No. 42, s. 2017
- CMO No. 79, s. 2017
- CMO No. 78, s. 2017
- CMO No. 75, s. 2017
- RA No. 10533