



# Transformative Education in Pre-Service Teacher Training: Experiences and Impact

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**Abstract.** Education is in a constant state of evolution, mirroring the changes in our world. Therefore, an adaptable and inventive approach to learning, transcending conventional models, is imperative to nurture individual development, critical reasoning, and societal transformation. Based on the principle that education should not only convey information but also provoke profound shifts in attitudes and behaviors, this research, employing a descriptive mixed-method design, aimed to explore the experiences and perceived effects of transformative education within the College of Teacher Education at the University of Saint Anthony. The study employed surveys and interviews to delve deeply into the subject matter. Data analysis was conducted using Weighted Mean and Wilcoxon Rank-Sum Test as statistical tools. Findings revealed a significant presence of transformative education in the learning process, particularly in terms of social support, self-directed learning, attitude towards uncertainty, and critical thinking, as evidenced by teacher education students' experiences in classroom discussions/dialogues, internships, and class activities. These experiences contributed to the enhancement of students' critical thinking, communication, and interpersonal skills, empowering them to realize their potential and seek meaning and clarity in their lives. The support of teachers was identified as crucial in facilitating these endeavors.

**Keywords:** Education, Transformative Education, Mixed-Method, Descriptive Design, Philippines.

## 1 Introduction

“The great aim of education is not knowledge but action.” Education is continuously transforming while the world is evolving. Adapting to new modes and strategies in learning and teaching was immediate. Hence, the vitality of innovation is for a more advanced education system. It is now possible to carry off a coherent and effective education that is better inclined to future educators. It empowers the students to be catalysts of change to attain the ethical principles of learning. With the help of technology and other factors that could affect their viewpoint in teaching matters, they could go more beyond the complexity, as we are now in the era of latter-day instructional materials, approaches, and strategies.

The University of Saint Anthony amid the pandemic ensures that provision of quality education is never compromised. Along with the institution's vision and mission, the College of Teacher Education continues in online learning of producing teachers who are highly motivated, highly equipped with technical and professional competencies, and strictly adherent to the moral principles and ethical standards of teaching. Learning Management System, digital journals, online applications, project-based learning materials, digital performance tasks, augmented reality books, among others are utilized to ensure that learning will not stop. The department having been granted the Level III Re-Accredited Status of the Philippine Association of Colleges and Universities Commission on Accreditation (PACUCOA) continues to achieve its mission, vision, and goals.

In an online article of United Nations Educational, Scientific and Cultural Organization (UNESCO) [1], The educational framework should undergo a reorientation to furnish students with the understanding, ethics, and skills necessary to contribute positively to society and the environment, as conscientious members of a worldwide community. Transformative education encompasses instructional methods aimed at inspiring and enabling contented and well-adjusted students to make thoughtful choices and participate actively at personal, communal, and global tiers. It's imperative that learners interact with their surroundings and discern the correlation between their educational experiences and the collective aspirations for the world beyond the classroom.

To build this world, we need to learn to read and write, but we also need to learn collaboration, empathy, complex problem solving, connection to other human beings and nature. Education can only be "transformative" when students feel valued, acknowledged, safe and are included in the learning community as full and active members. This starts by preventing and addressing school violence and bullying, gender-based violence, as well as health and gender related discrimination towards learners and educators. Teachers are expected to transform their teaching, for example, ensuring that the curriculum, pedagogy, learning materials, schools or learning environments are meaningful in the natural, political, economic, and cultural contexts.

The Transformative Learning [2] has three fundamental components that facilitate the learning and transformation of adults in the working environment. These are: (a) critical reflection, Individuals must engage in critical reflection on their experiences, leading to a shift in perspective. This process fosters self-awareness and facilitates a deeper understanding of oneself. (b) Rational discourse, an integral aspect of transformative learning, involves discussions with others aimed at examining personal and societal beliefs and assumptions in a logical and reasoned manner to identify biases, blind spots, or inconsistencies, thereby enabling individuals to address them consciously. Additionally, (c) the centrality of experience encompasses various aspects of individuals' lives, including their actions, beliefs, reactions to situations, and aspirations. Essentially, this component elucidates their life journey and the diverse array of experiences they have encountered.

To equip learners for achievements in the modern era, higher education institutions should offer them substantial learning experiences, which involve engaging in discussions and critical thinking. The community of inquiry framework outlines the essential

components for establishing collaborative online learning settings, while transformative learning outlines the substance and results of meaningful learning experiences [3].

On this end, the researcher was driven to conduct the present study to know how the College of Teacher Education of the University of Saint Anthony provide transformative learning experiences and cater the essential needs of the pre-service teachers in meeting the competencies of a Beginning Teacher. Likewise, to know its impacts in developing the teacher education students and come up with approaches and strategies that would help creating a more meaningful teaching-learning experiences in preparing them into the world of teaching.

## **2 Methodology**

### **2.1 Research Design**

This study utilized the mixed-method research design to collect and analyze the data through the modified Learning Activities Survey (LAS) instrument (King, 2009; Cox, 2017). Both quantitative and qualitative phases were given equal importance in data collection and analysis. The descriptive method is used to obtain information concerning the current status of the phenomena to describe “what exists” with respect to variables or conditions in a situation. According to McCombes (2020) [4]. Descriptive design aims to describe a population, situation, or phenomenon accurately and systematically. It can answer what, where, when and how questions, but not why questions. This is an appropriate choice when the research aim is to identify characteristics, frequencies, trends, and categories.

In this study, the descriptive method was used to determine quality criteria that contribute to quality transformative learning experiences. And to support and discuss the study thoroughly, interview will be done.

### **2.2 Sources of Data**

Data collection for this study was divided into two phases: the quantitative phase with the Learning Activities Survey (LAS) [5] patterned to King’s and modified by Robert Charles Cox and the qualitative phase with LAS follow-up interviews. The population of the study covered a total of fifty-six (56) teacher education students and thirteen (13) faculty members of the University of Saint Anthony, College of Teacher Education, S/Y 2021 – 2022.

### **2.3 Data Gathering Instrument**

To sufficiently gather information in the conduct of the study, the data gathering tools that were utilized are: questionnaire, focused group discussion, and narrative analysis.

Questionnaire. The main instrument in the gathering of data was the questionnaire. The questionnaire was constructed in accordance with the following criteria defined by

Planning Tank (2020) [6]; measurable, comprehensive, specificity of content, grammatical reliability, freedom from assumption, freedom from suggestion and time required to finish accomplishing the questionnaire. Close ended questions answerable by selecting any of the five options using Likert-type rating scale.

Focused Group Interview. An interview guide was prepared to supplement the data gathered through the questionnaire. In the focus group discussion, the researcher had a conversation with the participants via google meet on a particular phenomenon and through that focus, generate new knowledge and insights. This was conducted, as deemed necessary to substantiate the given data found in the questionnaire and the preparation of output. The result of which would contribute much in the interpretation of the data study.

Narrative Analysis. Aside from various data gathering tools that were utilized by the researcher, a narrative analysis was also employed. In this tool, the researcher calls for the analysis of narratives. Narratives are collected as data or are identified in data and then analyzed. Through this, the researcher listens to the stories of the participant that talk about the phenomenon under study [7].

### 2.4 Statistical Tools

To have a better treatment and interpretation of the data, the researcher utilized the following statistical tools:

**Weighted Mean.** Weighted Mean was used to quantify the respondents on the extent of experience of Transformative Education as perceived by the students and teachers. The formula is:[8]

$$WM = \frac{\sum WF}{N} \tag{1}$$

Where WM = weighted mean; F = frequency; W = weight of the category; and N = number of respondents

**Five-Point Rating Scale.** The Likert-type scale was applied in calculating and interpreting the weighted mean for each indicator [9], consisting of the following interpretations:

Table 1. Likert scale

Scale	Interval	Verbal Interpretations
5	4.20 – 5.00	Very much experienced
4	3.40 – 4.19	Much experienced
3	2.60 – 3.39	Moderately experienced
2	1.80 – 2.59	Less experienced
1	1.00 – 1.79	Least experienced

**Wilcoxon Rank-Sum Test.** This was employed to test a significant difference in the perception of the teachers and students [10]. The formula is:

$$U_1 = W_1 - \frac{n_1(n_1+1)}{2} \quad (2)$$

$$U_2 = W_2 - \frac{n_2(n_2+1)}{2} \quad (3)$$

Where  $U_1$  = Wilcoxon Rank-Sum Test;  $W_1$  = sum of ranks of group 1;  $n_1$  = sample size of group 1;  $U_2$  = Wilcoxon Rank-Sum Test;  $W_2$  = sum of ranks of group 2; and  $n_2$  = sample size of group 2

The interpretation of the statistical results of the Wilcoxon Rank-Sum Test was based on the comparison of the computed value against their respective critical value with vital consideration on the degrees of freedom and the level of significance. Hence, if the computed value is lesser than the tabular value, the research hypothesis is rejected however if the computed value is greater than the tabular value, the null hypothesis is accepted. The level of significance was set at 0.05.

### 3 Results and Discussion

#### 3.1 Extent of Experience of Transformative Education

This presents the extent of experience as perceived by the students and teachers of the College of Teacher Education. These experiences have impacted the transformative learning which are conceptualized in psychometric framework with its subscales – Social Support, Self-directed Learning, Attitude toward Uncertainty, Criticality and lastly the Transformative Learning Outcomes.

**Social Support.** The extent of experience of Transformative Learning Process Along Social Support is presented in Table 2. As seen in the tabular presentation, the teachers' perception of transformative learning is Very Much Experienced with 4.66 average weighted mean and shows that teachers establish classroom norms; accept order, justice, and civility as well as respect and responsibility for helping each student learn with 4.92 weighted mean.

Meanwhile, it also shows that students Very Much Experienced the transformative learning with 4.61 average weighted mean and that the teachers establish authentic, meaningful, and genuine relationships with others with 4.68 weighted mean.

As perceived, both the teachers and the students have Very Much Experienced the transformative learning along social support with an average weighted mean of 4.64 being the classroom norms; order, justice, and civility as well as respect and responsibility for helping each other learn" as the most experienced in the transformative learning process along social support, 4.77; followed by "Establishing authentic, meaningful, and genuine relationships with others" with 4.73 weighted mean; "Prepare students to function effectively in a culturally diverse and global community" with 4.71; and lastly "Learners are placed on teams and asked to solve a problem or issue; involves extensive reflection and dialogue as they work at a solution" with 4.47 weighted mean. All of those are with Very Much Experienced verbal interpretation.

**Table 2.** Transformative Learning Process Along Social Support

Indicators	Teachers			Students			AWM		
	WM	VI	R	WM	VI	R	WM	VI	R
1. Establish authentic, meaningful, and genuine relationships with others	4.77	VME	2.5	4.68	VME	1	4.73	VME	2
2. Establish classroom norms; as well as respect and responsibility for helping each other learn	4.92	VME	1	4.61	VME	4	4.77	VME	1
3. Allow students to have opportunities for social discourse	4.69	VME	4.5	4.59	VME	5.5	4.64	VME	4
4. Prepare students to function effectively in a culturally diverse and global community	4.77	VME	2.5	4.64	VME	2	4.71	VME	3
5. Instructor creates a “world” in which the learners interact with one another based on specific parameters set by the instructor	4.62	VME	6	4.59	VME	5.5	4.61	VME	6
6. Learners are placed on teams and asked to solve a problem or issue; involves extensive reflection and dialogue as they work at a solution	4.38	VME	8	4.55	VME	8	4.47	VME	8
7. Give learners the opportunity to participate in social action and help others	4.69	VME	4.5	4.57	VME	7	4.63	VME	5
8. Creating an environment where learning is student-driven with teachers and other outside experts, all assisting/coaching in the learning process	4.46	VME	7	4.63	VME	3	4.55	VME	7
<b>Average Weighted Mean</b>	<b>4.66</b>	<b>VME</b>		<b>4.61</b>	<b>VME</b>		<b>4.64</b>	<b>VME</b>	

Legend: 4.20-5.00 – Very much experienced (VME); 3.40-4.19 – Much experienced (ME); 2.60-3.39 – Moderately experienced (MoE); 1.80-2.59 – Less experienced (LE); and 1.00-1.79 – Least experienced (LtE)

According to Malecki and Demaray [11], “an individual's perception of general support or specific supportive behaviors whether available or enacted upon from people in their social network, enhances their functioning and/or may buffer them from adverse outcomes.”

Those with stronger social support are better embedded in a supportive network and are more socially integrated in their university academic environments, thus they are better positioned to improve their academic achievements. Several studies have found that students with higher perceived social support reported better attendance and university adjustments. It has shown that social support is a significant factor to predict university students' academic achievement. (Jie Li,2018) [12] With that, learning becomes more meaningful and transformative if social support is felt and experienced by

the learners. Thus, students will be more engaged and motivated if they know that they have hands to hold and shoulders to lean on.

**Self-Directed Learning.** Being a method of learning in which students are in responsibility of planning, carrying out, and assessing their own learning, self-directed learning is an essential factor that affects meaningful learning process being ready to learn, setting learning goals, engaging in the learning process, and evaluating learning. Table 3 provides the data of Transformative Learning Process Along Self-directed learning.

**Table 3.** Transformative Learning Process Along Self-directed Learning

Indicators	Teachers			Students			AWM		
	WM	VI	R	WM	VI	R	WM	VI	R
1. Instructor nurtures a learning environment that promote self-directed learning	4.62	VME	5	4.64	VME	4	4.63	VME	4
2. Allows students to make observations and reflect on their learning	4.77	VME	2.5	4.73	VME	1	4.75	VME	2
3. Give learners the opportunity to connect and respond which allows them to see themselves as thinkers and knowledge seekers	4.85	VME	1	4.70	VME	2	4.78	VME	1
4. Gives learners individualized learning goals and permits individual pacing	4.77	VME	2.5	4.66	VME	3	4.72	VME	3
5. Helps individuals discover new talents	4.69	VME	4	4.50	VME	6	4.60	VME	5
6. Students experience the reality of the “world” and gather meaning from it	4.46	VME	6	4.59	VME	5	4.53	VME	6
<b>Average Weighted Mean</b>	<b>4.69</b>	<b>VME</b>		<b>4.64</b>	<b>VME</b>		<b>4.67</b>	<b>VME</b>	

Averagely taken, it can be noted that teachers perceived self-directed learning as Very Much Experienced with 4.69 average weighted mean for a reason that “giving learners the opportunity to connect and respond which allows them to see themselves as thinkers and knowledge seekers,” with 4.85 weighted mean refine this experience.

Furthermore, as perceived by the students, self-directed learning is also Very Much Experienced with an average weighted mean of 4.64 and “allowing them to make observations and reflect on their learning” is the experience that mostly affected their learning with 4.73 weighted mean.

This means that self-directed learning is Very Much Experienced by both students and teachers with 4.67 average weighted mean and their learning was meaningful and transformative by “giving learners the opportunity to connect and respond which allows them to see themselves as thinkers and knowledge seekers” with 4.78 weighted mean. Allows students to make observations and reflect on their learning with 4.75; “Gives learners individualized learning goals and permits individual pacing” with 4.72; and “Students experience the reality of the “world” and gather meaning from it” being the last with 4.53 weighted mean. All of those were verbally interpreted as Very Much Experienced.

To foster greater self-directed learning abilities in university students, it's essential to empower them to recognize their individual learning needs. Their input should be valued when determining learning objectives. Diverse learning strategies should be incorporated into lessons, and students should be motivated to oversee and assess their own learning progress [13]. This means that if students are given the responsibility for their own learning and reflect on it, they will be driven by a need to do something on their own, discover learning, and be a critical thinker.

**Attitude Toward Uncertainty.** This aspect related to uncertainty aids in managing ambiguity, seeking knowledge, and stepping out of one's comfort zone. It's not unexpected that feeling disoriented, whether gradually or suddenly, arises when learners adopt a new viewpoint, as transformative learning theory underscores the learner's realization that previous habits, perspectives, and expectations no longer align with a stable worldview.

Table 4 shows the data of Transformative Learning Process along Attitude toward Uncertainty. As seen in the table, the teachers perceived that Attitude toward Uncertainty is Very Much Experienced by them with 4.46 average weighted mean. It is highly evident by “Engaging students in complex tasks and higher-order thinking skills, such as analyzing, synthesizing, designing, manipulating and evaluating information” with 4.69 weighted mean. Meanwhile, the students also perceived it as Very Much Experienced with an average weighted mean of 4.60 attesting that “engaging them in complex tasks and higher-order thinking skills, such as analyzing, synthesizing, designing, manipulating and evaluating information” patently revealed it.

In conclusion, both the students and teachers attest that the Attitude toward Uncertainty as perceived by them is Very Much Experienced with 4.53 average weighted mean. It shows that “Engaging students in complex tasks and higher-order thinking skills, such as analyzing, synthesizing, designing, manipulating and evaluating information” highly influenced this experience with 4.70 weighted mean; followed by “Authentic, concrete teaching problems are presented for students to analyze” with a weighted mean of 4.58; Instructor nurtures a learning environment that create students who are engaged in exploration and inquiry with a weighted mean of 4.56; and lastly “Creates a form of a web diagram that is useful in exploring knowledge as well as gathering and sharing information” with 4.37 weighted mean. All of those indicators are verbally interpreted as Very Much Experienced.



**Table 4.** Transformative Learning Process along Attitude Toward Uncertainty

Indicators	Teachers			Students			AWM		
	WM	VI	R	WM	VI	R	WM	VI	R
1. Instructor nurtures a learning environment that create students who are engaged in exploration and inquiry	4.54	VME	2.5	4.57	VME	5	4.56	VME	3
2. Creates a form of a web diagram that is useful in exploring knowledge as well as gathering and sharing information	4.15	ME	6	4.59	VME	3.5	4.37	VME	6
3. Authentic, concrete teaching problems are presented for students to analyze	4.54	VME	2.5	4.61	VME	2	4.58	VME	2
4. Engaging students in complex tasks and higher-order thinking skills	4.69	VME	1	4.71	VME	1	4.70	VME	1
5. Specific observations, case studies, or problems are examined and theories are developed based on the solutions	4.38	VME	5	4.59	VME	3.5	4.49	VME	4
6. Learners voluntarily participate in solving a problem or issue that is framed by the group with no external interference	4.46	VME	4	4.50	VME	6	4.48	VME	5
<b>Average Weighted Mean</b>	<b>4.46</b>	<b>VME</b>		<b>4.60</b>	<b>VME</b>		<b>4.53</b>	<b>VME</b>	

The evaluation of an individual's risk attitude typically relies on their behavior in risky situations. However, conventional self-report assessments of risk attitudes often lack explicit mention of "risk" in all items, leading to a mix of perceived uncertainty and risk (such as loss) without a systematic distinction. Previous knowledge notably influences the endorsement of items implying risk information more strongly than those explicitly addressing uncertainty or risk. Consequently, an individual's endorsement of such items can fluctuate based not only on their underlying attitudes toward risk but also on factors such as prior knowledge and emotional responses to uncertainty [14]. This means that their exploration of knowledge through inquiry and engagement to task such as problem solving and their experience in the past still influence the way they react on uncertainty.

**Criticality.** Criticality, or critical reflection, centers on the identification, critiquing, and reformulation of underlying beliefs or assumptions, as a deep process of identifying, testing, reformulating, and validating one's beliefs regarding self and others, setting

a learner's thoughts into motion in search of new explanations and attributions to account for gaps and contradictions between expectations and observations.

Table 5 presents the Transformative Learning Process along Criticality. As shown in the table, the teachers' perception of Criticality is Very Much Experienced with an average weighted mean of 4.62. It is seen by which "Discussion helps students to gain interest in the material, correct misconceptions, and analyze information critically" as the top indicator of this subscale with a weighted mean of 4.77. Also, the students' perceptions are the same with the teacher as Very Much Experienced with an average weighted mean of 4.63. Along criticality, students perceived that it is Very Much Observed since discussion helps them to gain interest in the material, correct misconceptions, and analyze information critically, 4.70.

**Table 5.** Transformative Learning Process along Criticality

Indicators	Teachers			Students			AWM		
	WM	VI	R	WM	VI	R	WM	VI	R
1. Learners are engage in classroom practices that assist in the development of critical reflection	4.54	VME	6.5	4.61	VME	5.5	4.58	VME	6
2. Speech is used for purposes such as motivation, influence, persuasion, informing, translation, or simply moral belief.	4.69	VME	2.5	4.57	VME	7	4.63	VME	5
3. Engage emotions in the learning process	4.46	VME	8	4.61	VME	5.5	4.54	VME	7
4. Discussion helps students to gain interest in the material, correct misconceptions and analyze information critically	4.77	VME	1	4.70	VME	1	4.74	VME	1
5. Collaborative process of discussing contested issues are observed	4.62	VME	4.5	4.68	VME	2.5	4.65	VME	3.5
6. Give learners the opportunity to challenge assumptions and develop their own perspectives in relation to others	4.62	VME	4.5	4.68	VME	2.5	4.65	VME	3.5
7. Has the potential to bring about emotional experiences that foster deeper engagement of the self with the learning process	4.54	VME	6.5	4.52	VME	8	4.53	VME	8
8. Give learners the opportunity to understand and reflect on their own experiences as well as the experiences of others	4.69	VME	2.5	4.64	VME	4	4.67	VME	2
<b>Average Weighted Mean</b>	<b>4.62</b>	<b>VME</b>		<b>4.63</b>	<b>VME</b>		<b>4.62</b>	<b>VME</b>	

In conclusion, the students and teachers both perceived that transformative learning process along criticality is Very Much Experienced, 4.62. Among the indicators, it is seen that they both experienced it in discussion which helps students to gain interest in the material, correct misconceptions, and analyze information critically, 4.74. This

means that discussion helps the students to be more critical in receiving and interpreting information. Thus, give learners the opportunity to understand and reflect on their own experiences as well as the experiences of others, 4.67; give learners the opportunity to challenge assumptions and develop their own perspectives in relation to others, 4.65; in the same manner that collaborative process of discussing contested issues are observed by considering various perspectives in order to form opinions and guide judgment, 4.65 and is interpreted as very much experienced.

“Critical thinkers” have the dispositions and abilities that lead them to think critically when appropriate. The abilities can be identified directly; the dispositions indirectly, by considering what factors contribute to or impede exercise of the abilities. (D. Hitchcock, 2018) [15].

### 3.2 Summary of Extent of Experience

The extent of experience of Transformative Education as perceived by the teachers and students is Very Much Experienced, 4.51. As shown in Table 6, the subscales of transformative learning process are social support, self-directed learning, attitude toward uncertainty, and criticality. These experiences should also be seen through the meaningful changes in the transformative learning outcome.

Occupying the first rank is the self-directed learning which manifested Very Much Experienced with 4.67; followed by the social support with 4.64; criticality, 4.62; and attitude toward uncertainty, 4.53, all with qualitative description of Very Much Experienced. However, in terms of the transformative learning outcome being the last in rank with 4.11 has a verbal interpretation of Much Experienced.

**Table 6.** Summary of Extent of Experience of Transformative Education As Perceived by Teachers and Students

Indicators	Teachers			Students			AWM		
	WM	VI	R	WM	VI	R	WM	VI	R
1. Social Support	4.66	VME	2	4.61	VME	3	4.64	VME	2
2. Self-directed Learning	4.69	VME	1	4.64	VME	1	4.67	VME	1
3. Attitude toward Uncertainty	4.46	VME	4	4.60	VME	4	4.53	VME	4
4. Criticality	4.62	VME	3	4.63	VME	2	4.62	VME	3
5. Transformative Learning Outcome	4.25	VME	5	3.96	ME	5	4.11	ME	5
<b>Average Weighted Mean</b>	<b>4.54</b>	<b>VME</b>		<b>4.49</b>	<b>VME</b>		<b>4.51</b>	<b>VME</b>	

Other factors such as what and who gives impact to their learning were also asked. Based on the data, the activities such as Classroom Discussions / Dialogues, Internships, and Class Activities / Exercises helped them to develop their communication

skill, critical thinking, and interpersonal skills. Teacher’s support also plays a vital role in their educational undertakings. This means, both the teachers and students perceived that self-directed learning is Very Much Experienced among the different indicators of Transformative Education. Thus, imply that allowing the students discover and question their own learning develop transformation among them. Along with it are the inputs from the classroom discussions and dialogues with the teachers’ support.

### 3.3 Transformative Learning Outcomes

Transformative learning is a process of modifying one's worldview or changing one's viewpoint. It's "being critically aware of how our presuppositions have come to confine our perceptions, understandings, and feelings about our reality."

**Table 7.** Transformative Learning Outcomes

Indicators	Teachers			Students			AWM		
	WM	VI	R	WM	VI	R	WM	VI	R
1. I had an experience that caused me to question the way I normally act.	4.31	VME	6.5	3.82	ME	10	4.07	ME	8
2. I had an experience that caused me to question my ideas about social roles.	4.15	ME	9	4.05	ME	6	4.10	ME	7
3. As I questioned my ideas, I realized I no longer agreed with my previous beliefs or role expectations.	3.92	ME	13	3.63	ME	12	3.78	ME	12
4. Or instead, as I questioned my ideas, I realized I still agreed with my beliefs or role expectations.	4.15	ME	9	3.89	ME	9	4.02	ME	10
5. I realized that other people also questioned their beliefs.	4.08	ME	11	4.04	ME	7	4.06	ME	9
6. I thought about acting in a different way from my usual beliefs and roles.	4.15	ME	9	3.70	ME	11	3.93	ME	11
7. I felt uncomfortable with traditional social expectations.	4.00	ME	12	3.46	ME	13	3.73	ME	13
8. I tried out new roles so that I would become more comfortable or confident in them.	4.46	VME	2.5	3.96	ME	8	4.21	VME	6
9. I tried to figure out a way to adopt these new ways of acting.	4.54	VME	1	4.16	ME	4	4.35	VME	1
10. I gathered the information I needed to adopt these new ways of acting.	4.38	VME	4.5	4.09	ME	5	4.24	VME	5
11. I realize that I am a different person now than I used to be	4.31	VME	6.5	4.25	VME	2	4.28	VME	4
12. I began to think about the reactions and feedback from my new behaviors.	4.46	VME	2.5	4.21	VME	3	4.34	VME	2
13. I took action and adopted these new ways of acting.	4.38	VME	4.5	4.28	VME	1	4.33	VME	3
<b>Average Weighted Mean</b>	<b>4.25</b>	<b>VME</b>		<b>3.96</b>	<b>ME</b>		<b>4.11</b>	<b>ME</b>	

Table 7 shows the Transformative Learning Outcomes as perceived by the students and teachers. It shows that the transformative learning outcomes is Very Much Experienced as perceived by the teachers with 4.25 average weighted mean. Among the indicators, it is much evident that the students have tried to figure out ways to adopt the

new ways of acting, 4.54 with a verbal interpretation of Very Much Experienced. Meanwhile, on the end of the students, it is perceived that the transformative learning outcomes is only much experienced as perceived by them having a 3.96 average weighted mean. However, the result also shows that it is still greatly observed when the students took action and adopted these new ways of acting, 4.28 and interpreted as Very Much Experienced.

To infer, as both perceived by the students and teachers, transformative learning outcomes is Much Experienced in teacher education students, 4.11. Yet, it is presented in the table that it is still Very Much Experienced in some indicators such as when the students tried to figure out a way to adopt these new ways of acting, 4.35; followed when they began to think about the reactions and feedback from their new behaviors, 4.34; and they took action and adopted these new ways of acting, 4.33.

In an online article of gvi[16], it is explained that there are different ways to approach how to facilitate transformative learning and below are four specific desired outcomes of transformative learning: First is to have an understanding of and appreciation for human diversity; Second when there is a higher level of empathy; Third when there is enhanced communication skills, written and verbal; And lastly, a deepened capacity for confidence, knowledge, and gratitude. From the given data above, all of those are experienced by the students. Therefore, it shows that Transformative Learning is experienced both by the teachers and students in University of Saint Anthony's College of Teacher Education. Thus, the department provides meaningful learning experiences among its students that help in attaining the desired competencies of becoming a teacher.

### 3.4 Test of Significant Difference in the Teachers' and Students' Experience

To test the significant difference in the respondents' experiences on transformative process along social support, self-directed learning, attitude toward uncertainty, criticality, and transformative learning outcome, the Wilcoxon Rank Sum Test was used. Table 8 discloses the results.

Apparently, the statistical results show that the computed value on teachers ( $U_1=15$ ) and students ( $U_2=10$ ) are greater than the critical value of 5 at .05 level of significance which fails to reject the null hypothesis. This implies that there is no significant difference existed between the experiences of the two groups of respondents.

Such discrepancies could mean that the teachers and students viewed the transformative education – process and outcome on the same perspectives. This means that the respondents' appraisal was not different from each other. It could be deduced that both groups of respondents expressed similar perceptions on the transformative education both the process and outcomes that they experienced in the College of Teacher Education.

From the aforementioned findings, it can be determined that teachers and students observe and experience Transformative Education in the College of Teacher Education. Teachers provide students with meaningful learning opportunities and so as experienced by the students along Social Support, Self-directed Learning, Attitude toward Uncertainty, Criticality, and especially in their Transformative Learning Outcomes.

**Table 8.** Test of Significant Difference between the Experiences of the Respondents

<b>U Computed Value</b>	<b>U Tabular Value</b>	<b><math>\alpha</math></b>	<b>Decision</b>	<b>Conclusion</b>
U <sub>1</sub> = 15, U <sub>2</sub> = 10	2	.05	Accept H <sub>0</sub>	Not significant
U must be equal or smaller than 2 to be significant.				

### 3.5 Impact of Transformative Education to the Teacher Education Students of USANT

Transformative learning is the expansion of consciousness through which an individual can question themselves about their own feelings, beliefs, assumptions, and perspective on their purpose.

**Table 9.** Activities that Improve Learning Experience of the Teacher Education Students of USANT

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	T	R
Classroom discussions/ dialogues	2	1	5	1	3	2	1	1	1	1	18	1
Mentoring	4	7	7	7	4	4	6	5	3	9	56	6
Term papers/ Research/ essays/composition/ reflection	7	8	8	8	10	8	9	6	7	10	81	9
Lab experiences	8	9	9	9	9	7	5	4	9	4	73	8
Critical thinking	5	6	4	6	5	5	2	3	4	8	48	4
Internship	1	2	2	2	1	1	4	7	8	2	30	2
Assigned readings	9	10	10	10	8	6	10	10	10	7	90	10
Class activity / exercise	3	4	6	4	2	9	3	2	2	3	38	3
Class / Group projects	6	5	1	5	6	3	7	9	5	5	52	5
Group activities	10	3	3	3	7	10	8	8	6	6	64	7

Individuals who are undergoing such a transformative process are believed to completely rewire and transform their beliefs, assumptions, and experiences into brand new expressive perspectives. To deeply discuss its impact to the teacher education students, the researcher conducted an interview, and the data are shown in Table 9 with the question, which of the following activities greatly improves your learning experience and how?

As presented in the table, Classroom discussions or dialogues improve their learning experiences so much being topped in the rank; followed by Internship, Class Activities or Exercises, Critical Thinking, Class or Group Projects, Mentoring, Group Activities, Lab experiences, Term papers/ Research/ essays/ composition/ reflection and lastly is the assigned readings.

At the top of all the activities is the Classroom Discussions or Dialogues which are avenues for exchange of knowledge in teaching-learning process.

Participants 2, 4, 7, 8, 9, and 10 who have chosen this activity as the one which greatly impacts their learning experience stated:

*“This developed my speaking skills, critical thinking and ways of reasoning. We were allowed to share our thoughts and opinions about certain topics.”*

*“This improves and develops my critical thinking, listening, and speaking skills and this encourages me to learn from others. Because of that, it also develops my confidence level to communicate with many people.”*

*“It is where my ideas are being challenged by others. Listening to my classmates or other’s point of you makes me question my own stand, reconsider other’s viewpoints and do more research to prove my learning is valid.”*

*“This offers a wide opportunity to discourse an in-depth discussion or topic, practice logical analytical thinking and in enrich one’s understanding.”*

*“It is where the teachers are able to teach the students, share their thoughts and ideas and the students are also given the opportunity to share what’s on their mind related to the topic that is given.”*

*“This type of learning creates an avenue for me to participate in the discussion and this the time wherein the exchange of ideas through the learners and the facilitator.”*

This means that the Classroom Discussions or Dialogues as part of the Transformative Learning Process help develop the learning experiences of the students that will make them change and transform into individuals who thinks critically and with confidence to share what’s on their mind.

As shown in the table, it is followed by internship being second in rank which greatly improves the learning experiences of the students. Participants 2, 3, 4, and 10 stated:

*“It gives me an opportunity to apply all the theories and concepts that I have learned in an actual classroom setting. I discovered a lot about my skills and some of my hidden potential.”*

*“Internship boosted my confidence and also my socialization. Just like the group projects and followed by the activities it also showed my way of socializing to different people and also to communicate with them professionally.”*

*“Teaching internship helps me to broaden my familiarity in my chosen field and build my interpersonal skills. I get to assess my ability under the supervision of my cooperating teachers and mentors and discover or explore more that guides me along and helps me become the chosen one as a future educator.”*

*“Internship is an actual learning where you will be able to assess your learning and skills particularly on your field of expertise. Also experiencing what is the real scenario behind the four corners of the classroom.”*

This means that through internship, students get to develop their interpersonal skills to collaborate and socialize. Students get the chance to experience the reality of the world and get meaning from it.

Next in the rank as evaluated by the students are the class activities or exercises. Participants 1, 7, and 10 stated:

*“When there is class activity or exercise, I easily understand the discussion. All of the information being discussed is easily retained in my mind. It results in a higher learning performance level of the students.”*

*“It tests my understanding with validity and reliability. Though online learning provides exercises also, it is only through face-to-face where authentic assessment can happen and that we also know that it is us the students who really create the assessment.”*

*“It allows the learners to assess and showcase what they learn. With this, they will know where and what they need to improve.”*

**Table 10.** Factors which Greatly Impact the Students’ Education

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	TOTAL	RANK
Another student’s support	5	5	5	5	1	5	4	4	5	5	44	<b>5</b>
Classmates’ support	3	2	4	3	2	4	5	3	3	3	32	<b>4</b>
Teacher’s support	1	3	1	1	3	2	2	2	2	1	18	<b>1</b>
Advisor’s support	4	4	2	4	4	1	3	1	1	4	28	<b>2.5</b>
Challenge from teacher	2	1	3	2	5	3	1	5	4	2	28	<b>2.5</b>

From the data gathered, the researcher can now ascertain that the students acquired meaningful pre-service learning experiences with the Transformative Education indicators.

These experiences have aided the students in realizing their full potential and delving into how they find meaning and insight in their life. Indeed, these learning experiences require a fundamental shift in perceptions—learners begin to question what they previously know or believed and analyze things from fresh angles in order to make place for new ideas and knowledge.

Table 10 shows the factors that greatly impact the students’ education. It is seen that teacher’s support bears the greatest impact to student’s education among the five stated; followed by advisor’s support and challenge from teacher. Lastly, are the classmates’ support and another student’s support.

The transformative learning experience varies from one person to the other and is not restricted to a certain situation. As an example, it might be anybody from an adult who improves their capacity to communicate their message after learning how to utilize social media and the internet to someone who has a life-changing event.

Participants 1, 3, 4, and 10 stated:



*“My teacher’s support greatly impacts my education because they are the one who believe in me and give their best to reach my highest potential. Teachers are also one of my inspirations to study hard and do my best in everything that I do. They are the one who are selfless and the ones who give their hundred percent support and effort to the students.”*

*“A support at school shall be materialized whenever there are teachers either School or Extra Curricular activities, but as a student-athlete we duly rely on the teacher’s support as a coach or the administration’s support. It Impacts our performance and on how we are able to improve/master the skills needed.”*

*“Teachers have a very significant, lifelong impact on all of us as students. This impact involves not only the teaching of particular academic skills but most importantly, accepting us and guiding us to reinforce our self-esteem in the classroom to associate increased motivation in learning.”*

*“The support of the teacher because once the teacher believes, supports their students they will have the courage and confidence to let out their full potential, also in this manner it can establish good rapport.”*

This means that teachers play very vital roles in a student’s educational journey. The support and trust that they are giving to the students affect the student in one way or another. Teachers are responsible for influencing a child’s future and making him or her a better person.

Meanwhile Participant 3 also stated:

*“Our advisor’s support will also impact just like the teachers; we students rely on them. They are the coaches or also the trainers in the field which fully impacts us upon learning.”*

Truly, a teacher is a great influencer, and they can either make or break a child’s dream and purpose. Moreover, they are builders of high dreams and hopes of the students and shall be in support in every learner’s endeavor that will them grow and prosper.

The study yielded these salient findings. First, transformative education is very much experienced as perceived by the students and teachers along transformative learning process: self-directed learning (4.67); social support (4.64); criticality (4.62); and attitude toward uncertainty (4.53); all bearing the qualitative description of very much experienced. Meanwhile, transformative learning outcome is rated (4.11) or much experienced. Second, on the test of significant difference between the respondents’ experiences, the computed value on teachers ( $u_1=15$ ) and students ( $u_2=10$ ) are more than the tabular value of 2 at .05 level of significance, which failed to reject the null hypothesis. Third, the perceived impact of transformative education is highly evident from the experiences of the teacher education students through classroom discussions / dialogues, internships, and class activities / exercises which developed and improved students’ critical thinking, speaking, and communication skills. Likewise, through these experiences, students were able to hone their interpersonal skills. Students get the chance to experience the reality of the world and get meaning from it that aided them in realizing their full potentials. Indeed, these learning experiences necessitate a fundamental shift in perceptions—learners begin to question what they previously know or believed and analyze things from fresh angles in order to make place for new ideas and knowledge.

Moreover, teachers' support and motivation greatly impact the students' education. Fourth, transformative education guide can be developed to help the teachers and the curriculum implementors to execute necessary strategies and approaches in teaching to provide meaningful and transformative learning experiences to the students.

## 4 Conclusions

Based from the above-mentioned findings, the following conclusions are made. First, the transformative education in the university of saint anthony college of teacher education is very much experienced by the students and teachers. Second, there is no significant difference in the experiences of students and teachers on Transformative Education. Third, the perceived impacts of transformative education are caused by the experiences of the students in classroom discussions / dialogues, internships, and class activities / exercises which helped them develop their communication skills, critical thinking, and interpersonal skills. teachers' support also play a vital role in these undertakings. Fourth, the transformative education guide developed can help the teachers and the institution to provide meaningful learning experiences to the students that will improve their critical thinking and hone their communication and interpersonal skills.

## References

1. UNESCO (2021, November 26). Five questions on transformative education - UNESCO. Retrieved from <https://en.unesco.org/news/five-questions-transformative-education>
2. Mezirow, J. (2020) "Transformative Learning Theory by with Examples.", Retrieved from <https://www.valamis.com/hub/transformative-learning>.
3. Dempsey, P. (2017). "The Relationship Between a Community of Inquiry and Transformative Learning" *Doctoral Dissertations and Projects*. 1473. <https://digitalcommons.liberty.edu/doctoral/1473>
4. McCombes, S. (2019). "Descriptive Research," Scribbr Retrieved from <https://www.scribbr.com/methodology/descriptive-research/>
5. King, K. P. (2009). Handbook of the evolving research of transformative learning based on the learning activities survey (10th anniversary ed.). Charlotte, NC: Information Age Publishing.
6. The Planning Tank (2020). "Characteristics of a Good Questionnaire, The Planning Tank Retrieved from [www.planningtank.com](http://www.planningtank.com)
7. Quinlan, C. (2020). Inquiries, Investigations, and Immersion (Rex Book Store.), 56
8. Pagoso, C., Garcia, G. and De Leon, C. (2010). Fundamental Statistics for College Students (Manila: Sinagtala Publishers, Inc.), 116.
9. Aquino, G. and Garcia, L. (2011). Fundamentals of Measurement and Evaluation (Manila: National Bookstore Publication House), 23.
10. Broto, A. (n.d). Statistics Made Simple: Second Edition (National Bookstore), 171.
11. Malecki, C. K., and Demaray, M. K. (2002). Measuring perceived social support development of the child and adolescent social support scale (CASSS). *Psychol. Sch.* 39, 1-18. doi: 10.1002/pits. 10004

12. Jie Li, et. al (2018) How social support influences university students\* academic achievement and emotional exhaustion: The mediating role of self- esteem, *Learning and Individual Differences* (Volume 61) Pages 120-126
13. Tekkol (2018) An Investigation of Self-Directed Learning Skills of Undergraduate Students, ORIGINAL RESEARCH article *Front. Psychol.*, 23 November 2018 | <https://doi.org/10.3389/fpsyg.2018.02324>
14. Shou, Y. (2021) Attitudes toward risk and uncertainty: The role of subjective knowledge and affect, *Journal of Behavioral Decision Making* <https://doi.org/10.1002/bdm.2217>
15. gvi Planet (2016) 4 Outcomes of Transformative Learning and How to Achieve Them. Retrieved from <https://www.gviusa.com/blog/4-outcomes-of-transformative-learning-and-how-to-achieve-them/>
16. Hitchcock, D. (2018) "Critical Thinking", *The Stanford Encyclopedia of Philosophy* (Fall 2020 Edition)

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