

Agricultural Education Program with Required Competences through Teaching-Learning Experiences

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ABSTRACT

The study aimed to determine the effectiveness of the King Mongkut's Institute of Technology Ladkrabang (KMITL) professional agricultural education program on the students' teaching-learning experiences. A total of 166 students were surveyed to identify their knowledge, skills and emotional competences, level of preparedness, influencing factors necessary in student education internship particularly on student roles and responsibilities and teacher-supervisor responsibility under the three sub-programs in agricultural education. Research data were analyzed and interpreted using frequency, percentages, and ranking based on student participation and teacher involvement in the agricultural education through the teaching-learning activities. The results were found that the students possess three important competency factors; namely: emotional, physical and mental skills necessary in enhancing their capacities in agricultural education internship program. Positive traits such as loyalty, honesty, humility, trustworthiness, punctuality and values time are important to students during the internship program. Dishonesty, tardiness, quarrelsome, and irresponsibility are the negative traits that students unlike to possess. Understanding the student "self", university policies, teacher's roles and responsibilities complement in making the student more professional in the future as they undergo the different phases of the KMITL agricultural education courses and the internship program. Theoretical implication of the research showed that the KMITL agricultural education-internship program is an evolving systematic process that supports integrated teaching-learning approach into more responsive, innovative and dynamic mechanism enhancing professionalism based on student competencies, level of preparedness, ethics, value system, policies and roles of teacher-supervisors. Providing the appropriate activities and supporting further with experiences will boost and improve the student's competences in teaching agriculture. This paper tries to enhance the student become more professional in the future as they undergo the different phases of the KMITL agricultural education courses and the internship program.

Keywords: Agricultural Education Internship, Traits and Characteristics, Teaching-Learning Experiences, Competences, Professionalizing Teachers, Technical Knowledge and Skills

1. INTRODUCTION

Professional teacher education programs are considered the best avenue in developing the students' technical knowledge acquisition and skills enhancement for future competent teachers [1]. According to Poplin [2], the responsibility of schools is to enhance the teaching-learning process by helping students develop new meanings in response to new experiences rather than to learn the meanings others have created and for some immersing students to basic theoretical and practical experiences [3] in the teaching-learning environment is best achieved.

Agriculture is the main source of social and economic development in most countries; agricultural education program in all levels include agricultural activities [4] [5] as necessary. In particular, teacher education program that visualizes reality for a stable and concrete actualization of technical education like agriculture [6] and engineering [7], appreciation and involvement are attained.

In Thailand, agriculture is viewed as the most sustainable factor towards progressive, competitive and globalized economy supported by institutions like the Ministry of Agriculture and Cooperatives, and Bank for Agriculture and Agricultural Cooperatives. The King Mongkut's Institute of Technology Ladkrabang (KMITL) professional education program is one of the longest running preparatory programs supporting the country's agricultural education and development [8]. Through its intensive courses, the competencies, skills level and attitudes of students and teachers including its implementation support the effectiveness and efficiency in professionalism [9].

While many believe that teachers do not have the tag of professionalism as any other professionals, in contrary, teachers are singled out as key factor in directing student success attributed by the activities employed that remains labelled as "effective" and "professional teaching"[10]. In so doing, the student's ability to grasp the qualities and develop competencies result in attaining educational goals and becoming professionals in the future [9].

On the other hand, the preparation in developing competent and effective future teachers are dependent on the several factors as studied by educators and researchers [10] [11] [12] [13] [14] [15]. Most studied focused on specific characteristics and traits which have bearing on the development of competent teachers like quality of practice [16] technical integrity including beliefs and philosophical practices [17]; Hurst and Reding [18] on behaviours including appearance, punctuality and building strong relationships; Stronge [19] on the complexity, communicating clearly [3] and serving conscientiously; personal identity and perception of self [20] [21] and including hands on teaching technology by Strong, Harden and Carter [22] were considered necessary in preparing future teachers and maintaining professional identity.

In addition, Darling-Hammond [23] pointed out that schools should have highly qualified teachers to support the teaching-learning process in an integrated manner [24] for the students. Beliefs [25]; emotional experiences [26] whether positive or negative emotional experiences [27] [28] incorporating self-identity in designing teaching-learning activities focused on honesty, intuitiveness and perseverance in an integrated professional education program.

In view of this, the KMITL agricultural education-internship program is enhanced as it evolves into more responsive, innovative and dynamic mechanism supporting the aspect of professionalism based on student competencies, level of preparedness, ethics, value system, policies and roles of teacher-supervisors.

2. RESEARCH QUESTION

How is the teaching-learning process contributes in professionalizing agricultural education program?

3. RESEARCH OBJECTIVE

- 1) Identify the student's competences, roles and responsibilities during the education-internship period;
- 2) Determine the influencing factors in the agricultural education internship in relation to attaining student identity and professionalism; and
- 3) Analyse the agricultural education-internship program according to its implementation, student participation, teaching-learning environment and teacher-supervisor responsibility and accountability towards student identity and professionalism.

4. METHODOLOGY

The study was conducted for a period of three months using an administered structured questionnaire for the students and checklist of guide questions for the faculty of the agricultural education department to determine their views in improving the professionalism of the plant production technology, animal production technology and agro-industry sub-programs.

One hundred sixty-six (166) students were surveyed to identify the knowledge, skills and emotional competencies, level of preparedness, influencing factors necessary in student education internship, and the student roles and responsibilities and teacher-supervisor responsibility. Majority of them are males (125 or 75.30%) and the rest are female with 24.70%. The students are from third year (62 or 37.40%), fourth year (64 or 38.60%) and fifth year (40 or 24.10%). The students specialize in plant production technology (68 or 42%); animal production technology (59 or 35.6%), and agro-industrial technology (39 or 23.5%). Data collected were analyzed and interpreted based on student participation and teacher involvement in the teaching-learning processes in relation to the professionalism of the agricultural education activities.

5. RESULTS AND DISCUSSION

5.1 Identified Student Competences

The identified competencies, which includes technical knowledge and skills, based on the agricultural education (AE) students show that mental preparedness is highest rated with 84.30% as identified by 140 students followed by skilfully prepared and technically equipped with 82.50% as identified by 137 students and emotionally prepared with 81.30% as identified by 135 students. The least is physically prepared with 64.50% as identified by 107 students. The results show that the four competencies should be viewed collectively in order to enhance the student's capacity towards professionalism in agricultural education.

The KMITL AE students believed that these are properly provided during the fourth and fifth years when they are exposed to actual field practice in applying the lessons learned and experiences in their sub-programs. The students' insight is supported by the study of Hoyle [16], Javeri [17] and Hurst and Reding [18] when the things learned are applied in practice with technical integrity and behaviours. Accordingly, other students clarified that these competencies should not be separated or stand alone but integrated holistically for student development.

Furthermore, the findings were supported by the works of Chumbley [6] when he pointed out that students should be enrolled in dual major courses to obtain the maximum appreciation of learning agricultural courses in developing the physical, emotional and mental capacities of the students. Also, he noted that the dual-enrolment program have a positive impact on students with rigorous courses and gaining in-depth agriculture knowledge including the teachers job satisfaction because of higher standards, prestige and program reputation.

5.2 Technical Knowledge and Skills Requirement in KMITL Agricultural Education Major Sub-Programs

In support to the KMITL AE student competencies, the technical aspects particularly on the practical skills are strongly agreed by 95 students followed by the 83 students on the basic concepts and perspectives of the agricultural sciences in three major sub-programs. On the other hand, 91 students agree on areas of management and examples/cases for instruction particularly on the technical aspect in agriculture.

These responses are similar to the claims studied by Javeri [17] highlighting the technical integrity including beliefs and philosophical practices necessary in ensuring teacher competence. This further show that in the providing better teaching-learning experiences, KMITL AE sub-programs should focus on the technical merits of the field of study because it is where the students will have the integrity and professionalism as agricultural teachers and educators in the future.

In relation to the technical aspect, the students pointed out that classroom management is required in the teaching-learning environment to obtain ample experiences. Specifically, 102 students strongly agree that lesson plan preparation is necessary requirement in classroom management; 101 students support it with the preparation to engage in daily teaching-learning activities. The least is classroom and field exercises management as 86 students strongly agree.

On the other hand, 64 students simply agree on lesson plan preparation followed by 65 students agreeing on their preparation to engage in daily teaching-learning activities. Such findings, may appear to have direct relationship together because of the kind of professional education courses learned by the students to develop their skill competence. Furthermore, student-teacher relationship and interaction is strongly agreed by 95 students together with the comprehensive topical development and literature presentation when managing classroom teaching-learning activities.

Based on these findings, classroom management is required by the KMITL agricultural education students because they view technical knowledge as well as skills are necessary to enhance their holistic competency. As such teachers are required to discuss and demonstrate these necessary competence to the students whether these are in the agricultural sciences sub-program courses or in the professional education courses.

On a different field, Borrego, Froyd and Hall [7] studied that in order for engineering education students to understand innovations, there should be awareness on the education innovation supported by financial resources, faculty time and attitudes' and student satisfaction and learning for better adoption decisions during teaching-learning experiences. Although noted to have two different education views, the present findings and previous study show that it is important to look at the factors that support the development of the students. Both studies show that the cognitive and affective factors are important including the other external factors that enhance the acquisition of technical knowledge and skills by students during the teaching-learning activities and experiences.

5.3 Technical Knowledge and Skills Requirement of KMITL Students in undergoing the Agricultural Education and Internship Program

Sixty-eight (68) plant production technology (PPT) students pointed out that specific technological skills are necessarily required to develop their competence. These include plant propagation techniques (54 students) including mushroom (53 students), ornamental plant production (52 students), pest control management technology (51 students), plant breeding technology and flowering plant production (50 students).

Nursery management is the least as identified by the PPT five (5) students followed by 38 students who agreed on land preparation and utilization technology. Three students disagreed and identified each particularly on nursery management, hydroponics crop techniques and plant tissue culture as the least required in the teaching-learning experiences related to the development of student competencies. Also, repair of agricultural equipment and machinery and integrated agriculture were simply agreed requirement to enhance student PPT technical skills with one each.

Derived from the results as identified by the PPT students, the basic technical knowledge and skills should include plant propagation techniques, pest control management, plant breeding technologies and crop economics and marketing. Such results show that these are also the required knowledge and skills competence necessary in the development of students during their teaching-learning experiences and activities. In view of this, teachers should further provide more cases and examples for the students to be better equipped in undergoing the educational internship program.

Parr and Edwards [29] studied that making a choice in learning is worthy to develop the teaching-learning process more exciting. Through their so-called developed method, the inquiry-based learning, it assures the students to acquire the basic knowledge and skills of problem solving techniques while learning the new technologies and innovations in agricultural education. Parr's study proved that this could enhance the method of learning through wise decision in making a choice to learn first as pointed out by the KMITL agricultural education PPT students.

Under the animal production technology (APT) sub-program, the 59 APT students identified different required technical knowledge and skills necessary in undergoing the KMITL agricultural education and internship program. They pointed out that commercial swine production (43 strongly agree), commercial poultry meat production (41 strongly agree), animal nutrition (41 strongly agree) as the top three responses followed by animal growth and development, animal biotechnology production, animal feed manufacturing technology, beef cattle and buffalo production, and commercial ornamental fish culture with 40 strongly agree responses each. It could be noted that such responses were high because of the KMITL agricultural education faculty with very strong technical expertise in animal sciences. Animal sanitation was identified the least with one each for agree and strongly agree responses.

On the other hand, animal product processing technology, commercial production and processing technology of selected amphibians and reptiles, inland aquaculture and domestic animal behavior got 2 disagree responses each by the APT students because they believe these are not required. The responses may be attributed to the less exposure of the students in understanding the technical knowledge and skills attached because of their high regard to protection and conservation of animal welfare and rights.

In addition, animal production technology courses are more likely to have triggered interest, utilization and application of technologies because students were more excited and challenged as far as the teaching-learning experiences because more time were spent with different teachers during course work. However, the students pointed out that they have limited laboratory exercises for field application compared to the PPT students. Nonetheless, it is interesting to note that both sub-programs are comparable in terms of students' basic technical knowledge and skills in crop and animal science education courses. As revealed by the fourth and fifth year students, these learned courses are the most practical and helpful in their internship and off-campus teaching in various educational institutions.

Results show that twenty-eight (28) AIT students strongly agree on the principles of food products development and the utilization of agriculture and agricultural industry residues as required technical knowledge and skills under the agro-industry technology sub-program. These are followed by food law and standards, food processing and plant sanitation (27 strongly agreed) each by students and principles of nutrition (26 strongly agree) and food microbiology and beverage technology (25 strongly agreed). Results show that the basics aspects were the same items identified in agro-industry by the students.

On the other hand, computerization of agricultural industry, dairy and fishery products technology, and standards and quality control of food products were identified as the least required technical knowledge and skills under the sub-program.

5.4 Classroom Management Requirements in enhancing the Teaching-Learning Experiences of KMITL Agricultural Education Students

Preparation of lesson plan (125 students strongly agree) and teaching material preparation (122 students strongly agree) are considered the highest in terms of the requirements of classroom management in enhancing the teaching-learning experiences of the KMITL agricultural education students. These are followed by student-student behavior management and student assignment and field exercises with 116 strongly agree responses each. Classroom cleanliness and order is the lowest with 92 strongly agree responses by the students.

Furthermore, the students claimed even with the necessary requirements in classroom management, they felt that proper exposure both in theory and practice during the entire duration of the teaching-learning experiences should be done in a participatory manner by them with their teachers.

These findings were supported by the studies of Bok [30] on the how students learn and why they should learn more. He pointed out that is it necessary to know important areas such as writing, critical thinking, quantitative skills and moral reasoning to improve student competencies. At the same time, the students should be prepared with substantial progress in speaking a foreign language, acquiring cultural and aesthetic interest or learning what they need to know to become active and informed citizens. However, he further found out that even with ample resources and new technologies, courses are taught to students differently some fifty years ago where their learning are limited because of the kind and teacher skills which hamper the students' teaching-learning experiences.

5.5 Requirements of KMITL Students to undergo for the Agricultural Education Internship Program

The student's development is an important aspect in relation to engaging them to undergo to the internship program. Specifically, emotional preparedness is required particularly respect the teacher-mentors (supervisors) at all times (135), Practice and maintain at all times harmonious relationship with supervisor (teacher-mentor) (132), value of the chosen profession (131), conduct myself based on the principles and ideals of a KMITL intern and as a respected individual (129), practice self-control on situation that affects my

identity, integrity and dignity, and respect and be accountable of actions, behaviour in the classroom, field and internship program at all times (127). The aspects were identified as the students believed were necessary because in terms of their emotional stability and behaviour.

However, it is very surprising to note that maintaining self-confidence at all times (98) was the least. When asked to clarify this, the students pointed out that this could be enhanced because of the teacher’s assistance while learning and understanding the different technical knowledge and skills. At the same time, they shared that these could be learned through time as they mature and experience the different teaching-learning activities at KMITL and the internship program.

The study conducted by Nichols, Schutz, Rogers and Bilica [31] pointed out that the model of “identity-work” wherein the teachers’ engagement resulted to a reflective process of understanding themselves strongly support the present study in addressing emotional aspects in the activities to improve the identities including beliefs and some identity adjustments.

Furthermore, the study shows that physical traits and characteristics such as dressing neat and looking good is necessary to the student as well as the time they are engaged during their educational internship program. This is followed by proper posture and conduct in appropriate manner when walking, sitting, standing and communicating. However, there is a difference in terms of the students’ being active, alert and physical presence at all time (Table 1).

Table 1. Required Physical Traits and Characteristics of KMITL students to undergo agricultural education internship program.

Required Physical Traits and Characteristics	To Self (Ranking 1-4)	To Education Internship Program (Ranking 1-4)
dressing neat and looking good	1	1
proper posture and conduct in appropriate manner when walking, sitting, standing and communicating	2	2
active, alertness and physically present all the time	3	4
dressing appropriately in any education and work-internship related activities	4	3

Accordingly, the students emphasized that these physical attributes to one-self are important which should be maintained and practiced more during the actual teaching-learning experiences and activities in the university, in the internships institutions they will be assigned and the off-campus teaching assignments.

5.6 KMITL Students Traits necessary during the Agricultural Education Internship Program

Aside from the emotional preparedness and physical attributes of the KMITL students, they have identified very important positive traits to be enhanced “to self” and should have during the agricultural education internship program. Results show that loyalty, honesty and humility as the first group traits a student should possess (Rank 1) followed by being punctual and values time (Rank 2) and trustworthy (Rank 3). The last is being creative, artistic and imaginative (Rank 10). On the other hand, the students pointed out that they must be punctual and value time (Rank 1) followed by loyalty, honesty and humility (Rank 2) and the last is the same as “to-self” during the educational internship program as shown in Table 2. Accordingly, these positive traits are necessary as the students undergo the teaching-learning experiences; they learn through the different activities shared by the KMITL teachers. They stressed that they were given pointers and exercises that enhances these positive traits necessary in becoming a good student teacher and future teacher.

On the other hand, the negative traits identified by the students include dishonesty (Rank 1), selfish (Rank 2), quarrelsome (Rank 3) and the last is tardiness and not punctual. This result support the earlier positive result that punctuality and value of time is an important trait to self. In relation to the education and internship program, students ranked irresponsible as Top 1 followed by dishonesty (Rank 2) and tardiness and not punctual (Rank 3). The last is no self-confidence (Rank 12) as shown in Table 3.

Table 2. Identified positive traits of KMITL student necessary to self and must have during the agricultural education internship program.

Identified positive traits	To Self (Rank 1-10)	To Education Internship Program (Ranking 1-10)
Loyalty, honesty and humility	1	2
Punctual and values time	2	1
Trustworthy	3	3
Industrious, obedient and helpful	4	4
Willing to learn and open-mindedness	5	5
Friendly and maintains good relationship	6	8
Realistic, pleasant disposition, cheerful and happy	7	6
Courteous, polite	8	9
Cultured and well-manned (practice the “Thainess”	9	7
Creative, artistic and imaginative	10	10

Table 3. Identified negative traits of KMITL student not to have to self and during the agricultural education internship program

Identified negative traits	To Self (Rank 1-12)	To Education Internship Program (Rank 1-12)
Dishonesty	1	2
Selfish	2	5
Quarrelsome	3	6
Impolite/Uncourteous	4	8
Unfriendly	5	9
Arrogant, rude and bossy	6	7
irresponsible	7	1
no self-confidence	8	12
Malicious	9	11
Self-centered and impulsive	10	10
Laziness	11	4
Tardiness and not punctual	12	3

Such findings show that the students believed that it is important to have good positive traits which could be enhanced during the teaching-learning experiences with the KMITL agricultural education teachers and be useful when they will be engaged and undergo the education and internship program in the coming years as they progressed in their academic years. Moreover, the students stressed that positive traits should be maintained and enhanced further to overcome the negative traits seen or perceived that may arise during the teaching-learning activities. In so doing, the students mentioned that they should continue to learn and acquire the best positive traits necessary in becoming a good teacher which could also be practiced during the actual education and internship programs in the coming years of their teaching-learning experiences and activities.

The findings are supported by the studies conducted by Yuan and Lee [32] on student-teacher emotional attributes vis-à-vis teacher identity and positive emotions which led to the motivation to be better and encourage professional learning and teaching; Pillen, Beijaard and den Brok [33] studies on the negative attributes and traits of teachers limit the openness and pleasant condition in teaching-learning environment for the students especially if there are tensions of negativity like feelings of helplessness, anger or an awareness of shortcomings.

5.7 Roles and Responsibilities of KMITL Students in relation to the Agricultural Education Internship Program

As shown in Table 4, the agricultural education students identified three phases of their teaching-learning experiences where roles and responsibilities are important. These are part of the “before- during-after” the experiences. Specifically, the students pointed out that “before”, which is during their third year, they undergo and subject themselves in actual experiences to include roles and responsibilities on practice courtesy, honesty, politeness, respect at all times to classmates/co-interns, and supervisors including the teachers/mentors (Rank 1), understand the KMITL Education/Internship Program Policies (Rank 2), and maintain the identity, integrity and dignity of the SELF and KMITL (Rank 3).

Table 4. Roles and Responsibilities of students before-during-after the KMITL Education/Internship Program.

Before	Rank (1-8)	During	Rank (1-7)	After	Rank (1-6)
Practice courtesy, honesty, politeness, respect at all times to classmates/co-interns, supervisors (teachers-mentors)	1	Maintain balance and proper decorum inside and outside the classroom	6	Apply knowledge acquires, skills gained, and experiences in future job	2
Understand the KMITL Education/Internship Program Policies and Guidelines	2	Follow the KMITL Education/Internship Program Policies and Guidelines	1	Assess the KMITL Education/Internship Program Policies and Guidelines according to relevance and actual practice	1
Maintain the identity, integrity and dignity of the SELF and KMITL	3	Responsible and accountable of actions, attitude and behavior to students, co-interns and supervisors	3	Evaluate the SELF and KMITL Education/Internship Program based on overall “Thainess” Culture	5
Present the SELF as professional as possible	4	Practice and follow the teaching profession principles and ideals	2	Evaluate to improve the KMITL Education/ Internship Program	4
Acquire the complete and appropriate knowledge (innovation and technologies) and necessary skills in teaching	5	Apply the knowledge and skills of the field of specialization	4	Evaluate the knowledge and skills according to utilization and exchange	3
Conscious in valuing and respecting time of others	6	Practice fairness and unbiased judgments in student activities	7		

Table 4. Continued from previous page

Before	Rank (1-8)	During	Rank (1-7)	After	Rank (1-6)
Engage in activities that enhances the development of the SELF	7				
Prepare SELF to the challenges, issues and concerns to be encountered	8	Act/decide objectively for the good of the student, supervisor, T-L environment	5	Reflect and examine the SELF in relation to the overall the KMITL Education/Internship Program	6

These findings show that the students rely mostly on the teacher’s capacity which helps them to practice a direct relationship with what the teachers show. Also, the students focus on teacher-student, student-student and intern-supervisor relationships which support the overall process of teaching-learning experiences.

During the middle phase, which is noted to be in the fourth year of teaching-learning experiences, the student identified follow the KMITL Education/Internship Program Policies and Guidelines (Rank 1), practice and follow the teaching profession principles and ideals (Rank 2), and responsible and accountable of actions, attitude and behavior to students, co-interns and supervisors (Rank 3).

There is a slight change on the focus of roles and responsibilities “during” this phase because of the combination of understanding and reflecting on the theory vis-à-vis the practice. The students are subjected with more intense and specific actual experiences which complement the teaching-learning experiences. The actual in-campus and team teaching exercises enhance and redirect the teaching-learning activities of the students enabling them to adjust their traits and characteristics.

Finally, the “after” phase is observed during the fifth year where practice teaching was completed to real case scenarios. As noted, the students mentioned that they need to assess the KMITL Education/Internship Program Policies and Guidelines according to relevance and actual practice (Rank 1) in order to suggest corrective actions and provide improvements to the program; apply knowledge acquires, skills gained, and experiences in future job (Rank 2); and evaluate the knowledge and skills according to utilization and exchange (Rank 3).

These results show that it is important for the students to understand clearly the KMITL education and internship policies in order for them to conduct themselves properly and avoid any negative behavior during their actual off-campus experiences which determines their life after KMITL. In addition, it was emphasized that the role on the applying what they learned at KMILT is best shown during the actual off-campus teaching because of real teacher-student encounters, teacher-supervisor mentoring and student-teacher relationships.

Furthermore, the students pointed out that before and during their teaching-learning experiences, they should be provided with actual cases and shared experiences in order that they could refine their roles and do better as responsible students and future teachers. At the same time, with constant supervision and mentoring through evaluation and monitoring, the students believed that after their actual internship (off-campus) program, it helped them become better students and future teachers because of the experiences, knowledge and skills gained during the teaching-learning process. The students affirmed further that the final year of their experience led them to improve and change for the better as they will be exposed to the

realities of an agriculture teacher and the teaching profession. It is therefore, necessary that KMITL teacher-supervisors should provide the necessary teaching-learning experiences in the university to the fullest from the early as part of the regular teaching activities until the final days of student KMITL and field practicums.

5.8 The Agricultural Education Internship Program in relation to Student Identity and Professionalism

The King Mongkut's Institute of Technology Ladkrabang – Agricultural Education Internship Program (KMITL-AEIP) is a combination of technical agriculture knowledge and education principles supported by practical application of cases and skills. The program which has been running for years showed that the students undergoing the teaching-learning processes gain the much needed experiences to equip them to be effective and efficient agriculture teachers.

This has been proven by the kind of students selected and identified to specialize in the three sub-programs in agricultural education, namely plant production, animal production and agro-industrial technologies. The courses under the sub-programs are provided to the students to develop their technical knowledge and skills in their chosen field where they can confidently enhance through practical application of the technologies in agriculture as well as the educational strategies required of during the student-teacher preparation.

Accordingly, the students pass through a series of evaluations and activities that determine their capabilities and capacities as future teachers. These are highlighted during the regular activities especially during laboratory exercises with the teachers providing the guidance and training. As such, it is believed that the program is well implemented according to the needs of the students both in-campus and off-campus. In addition, the teachers have encouraged the students to be dependent to work based on the motivations provided supported by the teacher's passion and responsibility to teach whole heartedly through the years. These insightful comments and points were raised by the students about the KMITL-AEIP and their teachers resulted to describe the program as presently effective and efficient given the technical resources and preparations provided to the students.

CONCLUSION

The student competences are very important in undergoing any educational activities whether in crops, animal and agro-industry related activities. In order to be effective and efficient in the process, these should be enhanced to develop further the student's attitude towards professionalism in the agricultural education program and in the teaching profession in the future.

The identified knowledge and skills of the students resulted to the improvement and intensification of the KMITL-AEIP to the fullest, given the teachers' technical specialization and interventions in the teaching-learning activities. The emotional, physical and mental capacities of the students are necessary both to the students and the internship program. These must be provided with appropriate activities and supported further with experiences that will boost and improve the student's competences in teaching agriculture. Understanding the student "self", university policies, teacher's roles and responsibilities complement in making the student more professional in the future as they undergo the different phases of the KMITL agricultural education courses and the internship program.

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