

## Enhancing the Teaching Style of Faculty and Learning Preferences of Teacher Education Students: The Way Forward

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### ABSTRACT

This study aimed to determine the different teaching style of faculty and to determine the type of learners the College of Teacher Education students are according to their learning style preferences and strategies.

This study used the descriptive-survey type of research. The teaching styles of faculty were determined utilizing the Teaching Style Inventory by Rita Dunn and Kenneth Dunn (1999) which consists of six categories namely: 1) instructional planning, 2) teaching methods, 3) teaching environment which includes student groupings and room design, 4) evaluation techniques, 5) teaching characteristics, and, 6) educational philosophy. The Learning Style and Strategies Inventory of Felder and Solomon (2003) was used.

The faculty respondents were the 23 full time faculty of the college and a total enumeration of the 671 BEED and BSED students in all year levels. Results show that the faculty are transitional in all the six categories. Nobody is found traditional, but the group hasn't reached the most ideal teaching style – the individualized. The students are found moderate active learners but extremely sensing learners. They are well-balanced as visual/verbal learners and as sequential/global learners.

The following are concluded: Faculty is not yet fully academically equipped with skills and competencies for an individualized teaching style. Students favor a learning environment provided with activities, visual aids, concrete examples, and a clear step by step explanation of lessons.

It is recommended that the faculty should attend in-service trainings to enhance their capability in preparing syllabi that favor the learning preferences and strategies of students.

**Keywords:** Teaching style, learning style and preferences, learning environment, learning engagement.

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## INTRODUCTION

In order to create an optimal learning environment, it is necessary to determine the teaching styles of faculty, and the learning style preferences and strategies of the learners. In this premise, mismatching between the teaching and learning styles could be determined. Should there be mismatching, the teacher could alter his/her teaching style basing on the needs, capacities, potentials and learning style preferences and strategies of the learners. A mismatch between teaching and learning styles should be avoided, as this oftentimes leads to learning failure and demotivation.

### Background

The purpose of this study is to determine faculty teaching styles as well as student learning style preferences and techniques in the College of Teacher Education. It was specifically designed to determine faculty teaching methods as well as the types of learners Teacher Education students are based on their learning styles and strategies. This is critical because, in recent years, students' performance on the Licensure Examination for Teachers is not favourable, despite efforts of the administration to improve instruction by sending faculty to seminars and trainings, encouraging faculty to pursue advanced studies, and improving student services, to name a few. Other criteria such as amicable examination schedules and syllabus alignment to the Table of Specifications in the Licensure Examinations as stated forth in the Philippine Professional Standard for Teachers were also taken into consideration. However, no substantial improvements in test scores were observed. Hence, this study is conducted.

The Teaching Style Inventory model established by Rita Dunn and Kenneth Dunn was employed in this study (1999). This is a tool for determining how a teacher truly works so that groups can be formed based on complementing student and instructor styles. Instructional planning, teaching methods, teaching environment (including student groupings and room design), evaluation procedures, teaching qualities, and educational philosophy are the six components.

The Learning Styles and Strategies Inventory utilized in this study was created by North Carolina State University's Richard M. Felder and Barbara A. Solomon. Learners can be classified into four categories based on their learning preferences, according to this model: active/reflective learners, sensing/intuitive learners, visual/verbal learners, and sequential/global learners. There are 44 items in total, with 11 indicators in each category.

### Objective

The purpose of this study is to determine faculty teaching styles as well as student learning style preferences and techniques in the College of Teacher Education. It was specifically designed to determine faculty teaching methods as well as the types of learners Teacher Education students are based on their learning styles and strategies.

## LITERATURE REVIEW

### Background Theory

Edward Thorndike established the Stimulus Response Theory, which states that learning is based on two factors: stimulus and response. The "stimulus" in Pavlov's famous experiment was food, and the "response" was salivation. He felt that all learning was dependent on the strength of the stimulus-response link.

### Previous Studies

Teachers, being the central figure in education, must be qualified and knowledgeable in order to pass on their knowledge to their students. Teaching is a very personal experience. Effective teaching is concerned with the student's whole development as a person. Individual differences among students must be recognized by the teacher, who must alter instructions to best suit the individuals. Educators perform many different and important responsibilities in the classroom. Teachers are thought to be the bright spots in the classroom.

The learning behaviours of students are influenced by the classroom environment. It has an impact on academic performance as well as the students' capacity to govern their sense of independence and identity exploration. As a result, students begin to doubt their ability to succeed and question the value of homework, which may lead to a reduction in academic effort. The teaching styles and instructional approaches become increasingly important in this context.

## METHODOLOGY

This study used a descriptive-survey research design with checklists to determine teachers' teaching styles and students' learning style preferences and methods. Faculty teaching styles were determined using Rita Dunn and Kenneth Dunn's Teaching Style Inventory (1999). Richard M. Felder and Barbara A. Solomon's Learning Style and Strategies Inventory was utilized as the learning style inventory. The 671 students ranging from the first year to fourth year were taken as respondents. Same procedure was done in collecting data from the 23 full time faculty engaged in the College of Teacher Education.

The Likert scale was used to assign a rating to each item on the Teaching Style Inventory, and the results were interpreted based from frequency counts and was further given corresponding adjectival rating like Always, Frequently, Occasionally, Rarely and Never. Teaching style comprised of eight categories namely: instructional planning, teaching methods, student groupings, room design, teaching environment, evaluation techniques, teaching characteristics, and educational philosophy. Each of which have individual indicators and are given weights according to the relative importance of each item, 5 as the highest and 1 as the lowest. The total score for each category was taken by multiplying the weight of the item by the frequency, then all the scores of the indicators were summed up.

The following are the indicators and corresponding weights for instructional planning arranged from the biggest weight to the lowest: diagnosis and prescription for each student (5); Contracts, learning activity packages, or instructional packages (5); programmed materials or drill assignments (4); Objectives (4); Small-group assignments (3); Creative activities with student options (3); Task cards or games (3); Peer tutoring or team learning (3); Role playing or simulations (3); brainstorming or circles of knowledge (3); and, Whole class lessons (1). For teaching methods, the corresponding indicators with assigned weights are presented in descending order as follows: Individualized diagnosis and prescription for each student (5); Class discussion (4); question-answer method (4); Small groups of 3-8 members (3); Media like films, tapes, etc. (3); Teacher demonstration (2); and, Lecture of the whole class (1).

The corresponding weights of the indicators for student groupings are as follows: Independent study assignments (5); Two or more of the above groupings at one time (4); Several small groups like 3-8 students (3); Pairs (3); One-to-one interactions with teacher (2); and, One large group or entire class (1). As to room design, the corresponding weights of the indicators are as follows: A variety of areas (5); Three or more of the above arrangements at the same time (5); Individual and small-group of 2 – 4 members, alcoves or dens (4); Learning stations or interest centers (4); Small groups of 3-8 students (3); and, Rows of desks (1). While on teaching environment, the indicators with corresponding weights are the following: Varied instructional areas are provided in the classroom for different, simultaneous activities (5); Varied time schedules are in use for individuals (5); Nutritional intake is allowed for all students as needed (4); Instructional areas are designed for different groups that need to talk and interact (4); Students are permitted to choose where they will sit and/or work (4); Many

multisensory resources are available in the classroom for use by individuals and groups (4); Alternative arrangements are made for mobile, active, or overly talkative students (4).

Moreover, the following are the corresponding weights of the indicators for evaluation techniques: Criterion-referenced achievement tests\* based on student self-selected, individual objectives (5); Observation by moving from group to group and among individuals (4); Student self-assessment tests (4); Criterion-referenced achievement tests\* based on the individual student's potential (4); Performance tests like demonstrations (4); Criterion-referenced achievement test\* based on small-group objectives; (4); Teacher-made tests (2); and, Standardized achievement tests based on grade-level objectives (1). As to the corresponding indicators and weights for teaching characteristics, it is presented as follows: Concerned with how students learn (4); With high expectations based on individual ability (4); Evaluative of students as they work (3); Concerned with how much students learn (1); Concerned with what students learn (1); Lesson plan oriented (1); Authoritative to reach group objectives (1).

Meanwhile, on educational philosophy, the following are the corresponding weights of the indicators: Diagnostic-prescriptive teaching (5); Individualized instruction (5); Matched teaching and learning styles (5); Open education (4); Alternative education (4); Behavioral or performance objectives (4); Independent study (4); Humanistic education (3); Multiage groupings (3); Student-centered curriculum (3); Traditional education (1); Whole-group achievement (1); Grade-level standards (1); and, Teacher-dominated instruction (1).

Questions for the learning style inventory were tailored to Felder and Soloman's four learning type preferences (1983). Each question had two possibilities, and respondents had to choose which one applies to them. If both alternatives apply to them, they must choose the option that applies to them most frequently. They were then asked to translate their responses into the ILS Scoring Sheet and finally onto the ILS Report. The ILS Report shows if the learner has a well-balanced preference, a moderate preference, or a strong preference for one of the dimensions. The dimensions are active/reflective, sensing/intuitive, visual/verbal, and sequential/global. The student is well balanced on the two dimensions of the scale if the score on the scale is 1-3. If the learner's score is 5-7, he or she has a modest preference for one dimension and will learn more quickly in a classroom that emphasizes that dimension. If the learner's score is 9-11, he or she has a strong predilection for one of the scale's dimensions. In an atmosphere that does not promote that preference, the learner may struggle to learn.

## DATA ANALYSIS AND RESULTS

This section presents the results of investigation of the variables included in this study.

### Teaching Style of the Faculty

The faculty are transitional in terms of instructional planning, teaching methods, student groupings, room design, teaching environment, evaluation procedures, teaching qualities, and educational philosophy, based from the faculty scores. It's worth noting that none of the faculty members are still traditional in any of the categories examined in this study.



However, the group has not yet arrived at the most ideal teaching method - personalized instruction. This indicates that the faculty are not fully prepared to provide an interactive classroom in which all students are encouraged to engage. Teachers still lack the necessary abilities for 21st-century classrooms.

While traditional classroom paved its way towards effective learning in the past, personalized instruction is found to be promising during this digital age, as education is also moving forward in terms of advanced technology. This mindset is supported by Herold (2016), when he and his colleagues conducted the most complete analysis in the topic in 2015. They discovered that 11,000 students in 62 schools using personalized-learning approaches improved their math and reading scores more than children in traditional schools. Students' achievement grew faster the longer they were exposed to "personalized-learning activities." This study focused only on math and reading and did not consider all the different learning areas, and result shows a good outcome. When individualized learning is encouraged, this may also enhance learning among students across all areas of learning.

This finding, which is corroborated by the data, indicates that teachers have trouble getting to know their students individually. This is due to the large number of students in each class, which can range from 45 to 60, and in some circumstances, even more. With such a large number of subjects in a semester, teachers can rarely recall and be as familiar with each student as they should be. Knowing each student adds to more engaging teaching-learning experiences. The score also indicates that student engagement in learning contracts and learning activity packages is low on the priority list during instructional planning. Employing the use of learning contracts in the classroom should be given a try as studies shows the effectiveness of increasing learning gains among the students. Ismail (2008) in his preliminary findings of the pilot study suggests that the learning contract could be useful in the language classroom for developing resourceful and independent language learners. The results were based on first-year students' responses. Although this is conducted in language learning, it may somehow be applicable to other learning areas. It is also worth looking at using learning contracts to help students toward being resourceful and independent learners. The contract stresses more student involvement in self-monitoring and self-assessment as a means of supporting learning autonomy.

Teachers are still constrained to the practice of assigning large assignments as home works, which are vastly different from the learning packages indicated. Furthermore, the score demonstrates that the availability of programmed resources as employed by teachers does not imply a positive descriptive rating. This is also attributed to a variety of student and school-related variables. Poor study habits induced by their engagement social media and online gaming, as well as the family's economic position, as some students work to support their family and school needs, are all variables that affect students which ultimately contribute to the instructional preparedness of the teachers. The lack of instructional technology such as laptops, projectors, smart TVs, favorable internet connectivity, and other school-related aspects that may aid them in displaying their maximum teaching competencies have a significant impact on teaching behavior and engagement.

The faculty are classified as transitional based on their rankings on many indices of teaching methods. According to the results, the teachers' practice of personalized diagnosis and prescription of individual students in the class is lacking. This is due to teachers' incapacity to know pupils individually due to large populations in classes of at least 8 students and a short semester. In this situation, teachers find it easier to use the lecture method for the entire class rather than the question-and-answer method. Although the size of the class does not allow for small group discussions, films and other media are frequently used as needed. Teachers are trying to implement innovative strategies such as engaging learners in authentic tasks and activities in order to move away from traditional methods. Faculty are beginning to experiment with incorporating ICT into their teaching, particularly the younger ones who are more tech-savvy than those who lecture for the entire class period. With student groupings, teachers are rated transitional. The score collected from them indicates that engagement of students on group work is not emphasized indicating that the classroom is at most dominated by lectures. Cooperative learning and collaboration are not yet fully practiced among some teachers, which, in turn is a result of lesser support and encouragement of other teachers.

This category is classified as transitional based on teacher ratings on room design. It demonstrates that teachers are still shifting from the old practice of teaching the class while remaining in front of his desk, as novel student groups are rarely done during lessons. This backs up previous findings that student groupings during class engagements are also found to be transitional. The school's infrastructure for classroom size does not facilitate the construction of several instructional zones for different simultaneous activities, as the room size is only large enough to accommodate a large class size, except for tiny groups in small group discussions. Due to the restricted number of classes compared to the population, classrooms are fully utilized by various student groups or sections. Because classrooms are completely occupied during class hours, it is not feasible for students to use them at different times.

For evaluation techniques, teachers are dependent on teacher-made tests and standardized achievement tests but not to criterion-referenced achievement tests as shown by the scores gathered. The teachers are not highly engaged with performance tests, self-assessment tests and criterion-referenced tests. Both teachers and students are on the process of shifting to different authentic activities and assessment forms. For teaching characteristics and classroom management, result of score shows that teachers are lesson plan oriented, authoritative, and concerned more on what and how much the students have learned, and not how the students are learning.

With this result, the teachers should become more aggressive in providing themselves with the 21<sup>st</sup> century skills of a teacher to be able to meet the demand of time and become agents of transformation in attaining the vision and mission of the institution as a whole, and in the goals and objectives of the College of Teacher Education in particular.

## Learning Style and Preferences of Students

The students are found to be moderate active learners. They tend to retain and understand information best by doing something active with it – discussing or applying it or explaining it to others. They tend to like group work more than reflective learners, who prefer working alone. Active learners say “let’s try it out and see how it works”, while reflective learners would reply “let’s think it through first”.

The students are also found to be extremely sensing learners. They have a very strong preference on sensing while learning. Because of the strong extremely strong preference to sensing the students find difficulty in learning when the classroom environment does not provide that learning condition. Sensors often like solving problems using a particular method and dislike very complicated ones. These learners tend to be patient with details and good at memorizing facts and doing hands-on (laboratory) work; but intuitions tend to work faster than sensors do. Sensors remember and understand information best when these are connected within their experiences.

The respondents are found to be well-balanced as visual/verbal learners.

Visual learners learn best when they see – pictures, diagrams, flowcharts, time lines, films and demonstrations. Verbal learners on the other hand learn best with written and spoken explanations.

Lastly, the students are well-balanced as sequential/global learners. Sequential learners learn more effectively when they follow a step by step path in solving problems. Global learners on the other hand maybe able to solve problems quickly but they have difficulty explaining how they did it.

## CONCLUSION AND RECOMMENDATIONS

### Conclusion

It is concluded, based on the findings that faculty are not yet fully equipped with skills and competencies for an individualized teaching style. Likewise, students favor a learning environment provided with activities, visual aids, concrete examples, and a clear step by step explanation of lessons particularly those that require logical presentation of solutions arriving to a correct answer. The teaching style of the teachers do not match with the learning style and preferences of the students.

### Recommendation

It is then recommended that faculty should be provided with more in-service trainings/workshops which intend to enhance their capability in preparing classroom activities that favor a teaching style suited to the learning preferences and strategies of students. Such in-service trainings/workshops enable them to make a collaborative preparation of course syllabi in their own disciplines provided with activities that meet the needs of the learners. Further, it is recommended that students are encouraged to participate in the preparation of course syllabus/and suggest activities suited to their learning style preferences and strategies aligned with the Table of Specifications of the Licensure Examinations for Teachers as well as the



Philippine Professional Standards for Teacher (PPST) the then National Competency – Based Teacher Standards (NCBTS).

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North Carolina State University's Richard M. Felder and Barbara A. Solomon

Rita Dunn and Kenneth Dunn's Teaching Style Inventory (1999)

## BIOGRAPHY



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