

## RESEARCH ARTICLE

---

### PEDAGOGICAL INNOVATION IN PROFESSIONAL EDUCATION (PIPE): IDEA MODEL

Ma. Corazon B. Sigua  
Bert J. Tuga  
Judy C. Bautista  
Marivilla Lydia B. Aggarao

---

#### Abstract

*This study aimed to develop an innovative pedagogical model for professional education based on current pedagogical practices of the professional education faculty on five PNU campuses. Survey was administered to gather the data while focus group discussion, classroom observations and interviews were conducted to validate the survey results. In the documentary analysis done the common themes of their pedagogical practices were equally identified. The IDEA model, a Pedagogical Innovation in Professional Education (PIPE) was created. IDEA stands for Induction of Prior Knowledge, Dissection of Concepts, Experiential Episodes, and Authentic Assessment.*

**Keywords:** *Pedagogical Innovation/Practices, Professional Education, Instructional Model*

#### INTRODUCTION

Invariably, the demand for innovation can be daunting and challenging so that to stay attuned in the arena of successful teaching, the need for teachers and educators to innovate cannot be overly stretched. Considered a superior fad, innovation has proven to improve test results; helps unlock students' minds, raises

their self-belief and self-worth, and boosts their self-esteem. More importantly, it allows institutions to respond to global changes to keep pace with the varying needs of their students. Innovation plays a pivotal role to attain development more so now that nations are at the threshold of globalization.

One of the pressing dilemmas that beset our current trend in education is the archaic, if not obsolete ideologies and methods of teaching that still preoccupy teachers during their encounter with students. While some of these methods may prove useful at present, there are those which are found less relevant or ineffective in the modern learning environment where learners' needs, demands, and interests constantly change.

In order to relate well with children, teachers have to keep themselves upgraded with newer and better ways of teaching. After all, learning never stops in the life of both the teacher and the taught. For them to evolve as good teachers, they must explore and try innovative educational measures in the classroom (Adair, 2009).

Innovation is the key to development. One has to be innovative with teaching, as highlighted in *Innovations in Teacher Education* by Joshi and Thomas (1991) (cited by Govindarajah, et al, 2012). They underscored the importance of integrated teaching, teacher curriculum and teacher education for rural development.

According to a recent report by the General Teaching Council for Education, many teachers are too modest to share their success or fail to realize that what they do in their classroom is innovative or successful. Yet most are innovating – 84% told the GCTE in its annual survey of teachers in 2006 that they had plenty of opportunities to innovate in the classroom – but it requires more than just willingness to do something different, as much as demonstrates positive ethos in the workplace.

In the past decades, teaching models have been developed to address the changing needs and demands of teaching and learning. These models have helped improve instruction in specific area disciplines. Models have also been developed to fit the

presence of modern technology in the classroom.

In teacher education, for instance, a number of teaching models have influenced the way current teachers deliver their lessons and measure learning outcomes. The focus of education has shifted to the learners who, indeed, play a very significant role in the teaching-learning process. Thus, teachers and educators make this prevail in almost all of their practices.

Professional Education as a very important component of the Teacher Education Curriculum has to be revisited not only in terms of content but also delivery systems. Admittedly, the nature of the subjects under this component is distinctly different from other subjects. The goal of professional education is to develop nurturing and reflective teachers.

### **Context of College Instruction**

An indication from literature exists, postulating that there are various contexts and modes of college instruction. For his part, Martinez-Ponz (2003) claims that the institutional setting within which instruction transpires, the typical time frame within which program completion happens, and the particular mode of instructor-student interaction through which the teaching-learning effort is carried out, serves as the context of higher-education instruction. Furthermore, he postulates an essential need for adjustments in the way college instruction is mapped out and operationalized, as variations on such conditions in higher education do exist.

One can easily infer from these claims that if there are changes or alterations with the institutional setting, the time frame for the program completion, and the mode of interaction between student and the instructors, there is a need to develop a framework or model to guide both the planning and implementing the elements of the context of college instruction.

### **Analysis of the Mode of Instructor-Student Interaction**

An important component of the context of college instruction is the mode of instructor-student interaction through which teaching-learning effort is carried out. This is to suggest that there is a need to

evaluate existing approaches, methodologies, strategies, or techniques in the delivery of college instruction, if an institution of higher learning requires quality output or performance.

In fact, Oxino (2009) offers the idea of revisiting the current teaching and learning practices among faculty members in higher education institutions, if one is to ascertain the realignment and further development of the practices.

Ochave's and Suatengco's (2005 and 2006) series of studies on the approximation and cohort revalidation of the university students' preferred teaching methodologies provide a baseline data or initial input regarding the existing practices of higher-education faculty. Their studies provide a description of the methodologies that their respondents claim to be the strategies used by their respective college teachers or instructors. With these baseline data, it is imperative, therefore, to analyze critically the current pedagogical practices that higher education faculty use with their students.

A study by Regmi (2012), for example, looks into the analysis of two of the most time-tested methodologies in teaching and learning in professional education in HEIs: lecturing and facilitation methods. She implies that both methodologies analyzed have their strengths and limitations. Citing "lecturing", for instance, he found out that in professional education and development in higher education, the positivist notions of knowledge are not always sufficient. The adherents of the positivist notions of knowledge lend themselves to the idea of using lecturing in their instruction of professional education. This goes to tell that even if "lecturing" methodology is helpful in the development of professionals, there is a need to compensate it with other methodologies due to the fact that the context of professional education includes or takes into accounts the perspectives and involvement of many participants.

This finding implies that the transmission modality of a lecture can be enhanced by real-life applications, because in such contexts, other participants, besides the professor and the professional-student can participate in the development of the student's knowledge and skill as a future professional. To further emphasize the findings of his meta-analysis, he goes on to discuss that the other methodology, which is "facilitation", can be considered an

important approach to teaching and learning. Regmi (2012), citing Mezirow and Associates, (1990), Shor and Freire (1987), and Mezirow (2000); avers that,

*“the context for much of this [professional education or development] might be conveyed through a lecture, but for students to develop deeper understanding, and to reflect on their own values, dialogical approaches to learning are needed where the issues can be discussed and explored through interaction and sharing of perspectives, views and values, out of which new understanding (learning) can emerge.”*

### **Pedagogical Coherence and Instructional Model Development**

Hake (1998), cited by Regmi (2012), posits further that a gamut of teaching and learning techniques have been popularly used in many educational disciplines, implicitly suggesting that a plethora of pedagogical innovations like interactive engagement methods, as opposed to traditional lectures, would always be correlated to better students' performance.

What can be deduced from the claims and findings made earlier on the effectiveness of instruction in professional education? Precisely, that it can be linked with the ability of professors or instructors to build a myriad of relevant approaches, methods or strategies, and techniques for them to use once a particular teaching and learning context demands such strategies or techniques so as to ensure efficient and effective learning.

Even in the development of newly qualified teachers as professional learners, evidence points out that it is important to have a coherent model of instruction, incorporating a variety of teaching techniques, strategies, and approaches. A case in point is a study by Graham, Lester, and Dickerson (2012) from the University of Hertfordshire, School of Education, who implemented and evaluated a scheme of pedagogical approach intended for newly qualified teachers as professional learners. They have coined their pedagogical approach as the 3D Pedagogical Approach, which stands for Discover-Deepen-Do. The labels of the three Ds in this approach

evoke the underpinning principles that effective instruction should model. In their innovative pedagogical approach, they have included the techniques of reflective journal writing and professional dialogues as techniques to analyze critical incidents or critical moments in teaching. The techniques used show that an alignment or coherence exists between the techniques themselves, the model, the underlying theoretical principles, and the objective of the institution to produce reflective teachers. The findings of their evaluation suggest that the implementation of the new and innovative scheme of the 3D approach for developing newly qualified teachers as professional learners are effective since it has addressed the common issues that teachers actually face in real classrooms.

### **Instructional Model Development in the Local Context**

In the Philippine context, several institutions support the idea of creating a coherent way of delivering instruction, as evidenced by the models they have developed. Some models are intended for basic education and some models for higher education. In the University of the Philippines, Diliman, College of Education, for instance, several faculty members promote the use of the Four-Pronged Approach to reading instruction (see Ocampo, 1997). This approach serves as a model in teaching reading to students in the basic education. Guided by principles in literacy instruction, they have made a stage-by-stage procedure in the execution of a balanced literacy instruction. The stages include 1) Genuine Love for Reading (GLR); 2) Critical Thinking (CT); 3) Grammar and Oral Language Development (GOLD); and 4) Transfer Stage (TS). Currently, due to its educational power, it has made itself popularly used nationally, especially in the public school system of basic education. In the tertiary level, some members of the faculty of the Philippine Normal University have developed another example of an instructional model aimed at improving the delivery of instruction across levels. This model became popularly known as the ACES model or the 4As model, which stands for **A**ctivity, **A**nalysis, **A**bstraction, and **A**pplication. Although initially, the model was intended for the teaching of Values Education, the model eventually became useful for the teaching of other disciplines.

## STATEMENT OF PURPOSE

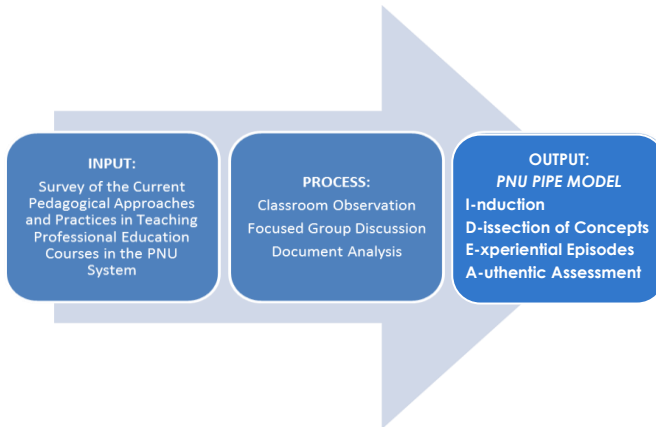
The study aimed to develop an innovative pedagogy /model in the delivery of Professional Education courses based on the current approaches / practices employed by the faculty. Specifically, it answered the following specific objectives:

1. To establish the profile of faculty handling professional education courses in Philippine Normal University in terms of gender, age, highest educational attainment, academic rank, number of years in teaching professional education courses, number of participation in seminar/conferences, and employment status in the University.
2. To identify current pedagogical approaches/practices used by professional education faculty of the PNU in the different professional education courses.
3. To create an innovative pedagogy / model in teaching selected professional education courses based on the current practices of professional education faculty of the University.
4. To determine the acceptability of the proposed innovative pedagogy / model in teaching selected professional education courses to faculty and students.
5. To develop a Teacher's Manual on the use of the acceptable innovative pedagogy / model in teaching selected professional education courses.
6. To produce an acceptable digitized and interactive version of the Teacher's Manual that showcases the innovative pedagogy / model endorsed by the faculty and students.

## RESEARCH FRAMEWORK OF THE STUDY

Using the systems model, the research framework was developed to establish the processes observed in this study. The input is a survey

on the current pedagogical approaches utilized by the professional education faculty in the teaching of professional education courses. The process includes class observations, focused group discussions and documentary analysis. The output is the Pedagogical Innovations in Professional Education: IDEA model.



**Figure 1:** Graphical Representation of the Research Framework

## METHODOLOGY

This study utilized a descriptive-developmental research method. Descriptive research is used to obtain information concerning the current status of the phenomenon to describe “what exists” with respect to variables on conditions in a situation. It is developmental, in a sense, because it is concerned with existing status and interrelationships of phenomena and the changes that take place as a function of time. Specifically, model or system development was used for the creative development of a model (paradigm) based on determining thoroughly the present situation or system and the goals sought.

### Participants of the Study

The study involved selected professional education faculty and students from the different PNU campuses, as shown in the table below.



**Table 1.** Distribution of faculty respondents per campus

<b>Campus</b>	<b>No. of faculty involved</b>	<b>Percentage</b>
PNU Agusan	22	24.4
PNU Cadiz City	14	15.6
PNU Isabela	12	13.3
PNU Quezon	7	7.8
PNU Manila	35	38.9
<b>Total</b>	<b>90</b>	<b>100</b>

Students were involved during the class demonstration of selected professional education faculty.

### **Research Instrument**

To identify the current pedagogical approaches/practices used by professional education faculty of PNU in teaching professional education courses, the researcher devised a self-developed questionnaire which was validated by three (3) experts in pedagogy, research and instrumentation.

The survey questionnaire has two (2) parts. The first part covers personal information which includes gender, age, highest educational attainment, academic rank, years of experience in teaching, number of participation in seminars/trainings in the last five years and employment status in the department/university. The second part surveys the current pedagogical practices.

Observation forms and guide questions were used during the classroom observation and focus group discussion, respectively.

### **Data Gathering Procedures**

This study has observed the following processes:

- I. Pre-Development Phase
  - Identified the current pedagogical approaches/practices used by selected professional education faculty of PNU using a self-developed instrument
  - Recorded and analysed teaching episodes of selected professional education courses/classes representing professional education clusters, namely: theories and

concepts, methods and strategies and field study, as prescribed in the National Competency-Based Teacher Standards (NCBTS) and the New Teacher Education Curriculum (NTEC).

- Conducted FGD with selected professional education faculty, students and identified process observers
- II. Development Phase
- Analysed the results of the survey, teaching episodes and FGD sessions
  - Designed and developed the proposed innovative pedagogy/model in teaching selected professional education courses
  - Determined acceptability of the proposed innovative pedagogy/model through demonstration teaching using rubric assessment
  - Produced digitized and interactive version of the Teachers Manual
- III. Post-Development Phase
- Completed PIPE package

## RESULTS AND DISCUSSIONS

### On the Profile of Respondents

#### Sex

The majority of the faculty teaching professional education courses/subjects is female with a frequency of 58 or 64.4%. Male respondents are 32 or 35.6%, an unsurprising result, since the profile of PNU faculty is female-dominated.

**Table 2.** Sex of the Respondents.

Sex	Frequency	Percentage
Female	58	64.4
Male	32	35.6
<b>Total</b>	<b>90</b>	<b>100</b>

#### Age

Middle age group or the 41-50 age bracket dominates the faculty teaching professional education courses/classes with a frequency

of 29 or 32.2%, followed by 61-above age bracket with 22 faculty or 24.4% and the 51-60 age bracket with 20 or 22.2%. Only 5 or 5.6% of the faculty teaching professional education courses/classes come from 20-30 age bracket. Teaching professional education courses/subjects requires maturity and experience in the teaching profession. Those at the middle age and higher groups have gained their expertise in the different professional education courses/subjects.

**Table 3.** Age of the Respondents.

Age Bracket	Frequency	Percentage
20-30	5	5.6
31-40	14	15.6
41-50	29	32.2
51-60	20	22.2
61-Above	22	24.4
<b>Total</b>	<b>90</b>	<b>100</b>

#### **Highest Educational Attainment**

More than half of the faculty teaching professional education courses/classes are doctorate holders, 47 or 52.2%, while others have doctoral units, 26 or 28.9%. Only one (1) faculty of 1.1% lacks a master's degree; others have MA or have earned units in their respective degrees. The figures above show an excellent educational profile of professional education faculty. Due to their earned degrees, they are considered as experts in the area in addition to their years of teaching professional education courses/subjects.

This profile may have been influenced by the aggressive campaign of the management to encourage and support the faculty in finishing their graduate degrees.

**Table 4.** Educational Attainment of Respondents

Educational Attainment	Frequency	Percentage
AB/BS/BSE	1	1.1
With MA units	0	0.0
MA/MS/MAT	16	17.8
With Ph.D. units	26	28.9
Ph.D./Ed.D.	47	52.2
<b>Total</b>	<b>90</b>	<b>100</b>

### **Academic Rank**

The majority of the faculty teaching professional education courses/subjects belongs to the upper ranks. Thirty (30) or 33.3% are associate professors, while 23 or 25.6% are full professors, with only 14 or 15.6% instructors. This result is consistent with the age of respondents, highest educational attainment and number of years of teaching experience.

**Table 5.** Academic rank of respondents

<b>Academic Rank</b>	<b>Frequency</b>	<b>Percentage</b>
Instructor	14	15.6
Asst. Professor	22	24.4
Asso. Professor	30	33.3
Full Professor	23	25.6
No response	1	0.01
<b>Total</b>	<b>90</b>	<b>100</b>

### **No. of years of teaching professional education courses**

Eighteen (18) or 20% of the faculty have been teaching professional education courses/classes for more than 26 years now. Others have been teaching for 1-5 years, 16 or 17.8%; 6-10 years, 15 or 16.7%; 11-15 years, 14 or 15.6%; and 16-20 years, 13 or 14.4%.

**Table 6.** No. of Years of Teaching Experience.

<b>No. of Years</b>	<b>Frequency</b>	<b>Percentage</b>
1-5	16	17.8
6-10	15	16.7
11-15	14	15.6
16-20	13	14.4
21-25	11	12.2
26-above	18	20.0
No response	3	0.03
<b>Total</b>	<b>90</b>	<b>100</b>

### **No. of participation in seminars/trainings/conferences**

The majority of the respondents have attended 1-5 trainings/seminars/conferences in the last five years with a frequency of 52 or 57.8%, while eighteen (18) or 20% have joined 6-10 seminars/trainings/conferences, only 5 or 5.62% have 16-above

seminars/trainings/conferences to their credit, an equivalent to an average of four (4) seminars/trainings/ conferences in a year.

**Table 7.** No. of Participation to Seminars/Trainings/Conferences.

<b>No. of Seminars/Trainings/ Conferences</b>	<b>Frequency</b>	<b>Percentage</b>
1-5	52	57.8
6-10	18	20.0
11-15	8	8.9
16-above	5	5.6
No response	7	0.08
<b>Total</b>	<b>90</b>	<b>100</b>

### **Employment Status of Respondents**

Most of the faculty teaching professional education courses/subjects are full time with a frequency of 52 or 57.8%. Eighteen (18) or 20% are part time faculty, while 16 or 17.8% are affiliate faculty.

**Table 8.** Employment Status of Respondents.

<b>Status</b>	<b>Frequency</b>	<b>Percentage</b>
Full Time	52	57.8
Affiliate	16	17.8
Part Time	18	20.0
No response	4	0.04
<b>Total</b>	<b>90</b>	<b>100</b>

### **Current Pedagogical Practices of Professional Education Faculty**

By and large, professional education faculty prefer to use the above cited methodologies from moderately extensive to very extensive. On top of these methodologies are discussion method and integrated method with overall mean of 4.57 and 4.50 respectively, verbally interpreted as very extensive. In Integrated method, the faculty ensure that the whole class collectively and collaboratively draw generalizations, conclusions and decisions based on the collective analyses, comparisons, and evaluations. In Integrated method, the faculty combine any of the two complementing methods (e.g. lecture-demonstration, lecture-discussion, etc.).

The finding above is consistent with the study of Regmi (2012) who

analyzed the two of the most time-tested methodologies in teaching and learning in professional education in higher education institutions. In his study, he revealed that lecture method has strengths and weaknesses. The adherents of the positivist notions of knowledge lend themselves to the idea of using lecturing in their instruction of professional education. This goes to tell that even if "lecturing" methodology is helpful in the development of professionals, it has to be compensated with other methodologies due to the fact that the context of professional education includes or takes into account the perspectives and involvement of many participants. From this premise alone, integrated method is very much relevant.

The other method is facilitation or discussion method. Regmi (2012) emphasized that facilitation can be considered an important approach to teaching and learning. He further noted that dialogical approaches to learning are needed where the issues can be discussed and explored through interaction and sharing of perspectives. Through these approaches students develop deeper understanding and reflect on their own values.

Further, the faculty use the following methods extensively: inductive, deductive, problem-solving, project, lecture, demonstration and reporting.

The least preferred methodologies by professional education faculty are laboratory and investigatory methods with a mean of 3.29 and 3.45, respectively. Both are interpreted as moderately extensive. This means that the faculty modestly designate a teaching procedure that allows the learner to have direct or first-hand experiences with actual materials and phenomena. Less considered is the use of scientific method or problem-solving process in teaching professional education courses/subjects, since these methods are often associated with science-based or science-related subjects. This reason can be cited strongly to explain why the professional education faculty moderately consider laboratory and investigatory methods in teaching. Ochave and Suatengco (2005) revealed that the faculty in the Sciences and Mathematics employed research and experimentation methods in teaching.

**Table 9.** Current Pedagogical Practices.

Campus	Methodologies										
	<i>Inductive</i>	<i>Deductive</i>	<i>Problem-Solving</i>	<i>Project</i>	<i>Laboratory</i>	<i>Lecture</i>	<i>Investigatory</i>	<i>Demonstration</i>	<i>Reporting</i>	<i>Discussion</i>	<i>Integrated</i>
PNU North Luzon	4.25	3.83	3.83	3.00	2.92	3.92	3.25	3.58	3.92	4.67	4.33
PNU Visayas	4.28	4.14	4.21	3.43	3.00	4.21	3.14	3.86	4.14	4.57	4.46
PNU South Luzon	3.86	3.86	4.43	4.00	3.57	3.86	3.71	4.57	3.57	4.57	4.71
PNU Manila	4.23	4.17	4.08	4.2	3.46	4.17	3.77	4.00	3.94	4.77	4.51
PNU Mindanao	4.14	3.64	3.68	3.68	3.32	4.23	3.18	3.91	4.18	4.18	4.54
<b>Overall Mean</b>	<b>4.19</b>	<b>3.97</b>	<b>4.00</b>	<b>4.00</b>	<b>3.29</b>	<b>4.13</b>	<b>3.45</b>	<b>3.94</b>	<b>4.00</b>	<b>4.57</b>	<b>4.50</b>
Verbal Interpretation	Extensive	Extensive	Extensive	Extensive	Moderately Extensive	Extensive	Moderately Extensive	Extensive	Extensive	Very Extensive	Very Extensive

The research further analysed the specific teaching strategies/techniques revealed by professional education faculty not listed or excluded from the questionnaire. These were validated through classroom observations and focused group discussions to establish the consistent and common elements present in other methodologies and techniques.

The grid below shows the other techniques utilized by professional education faculty:

- Active Learning
- Algorithm
- Blended Instruction
- Case Study and Analyses
- Comparative Analyses
- Concept Formation
- Constructivist
- Cooperative/Collaborative Learning
- Delegator
- Discovery Method
- Experiential Learning
- Experiments
- Field Work
- Film Analysis
- Group Discussion
- Heuristic
- Process Approach
- Reciprocal Questioning
- Reflective
- Research-Based
- Rubrics
- Technology-Based
- Tutorial

### ***Pedagogical Innovation in Professional Education: IDEA Model***

After a thorough analysis of the survey results, classroom observations, and focused group discussions administered and conducted across PNU campuses and the comprehensive review of relevant literature and studies, the research came up with common themes/elements that represent all the pedagogical practices (methodologies, strategies, techniques) captured by this study. Consistent and common themes/elements present in the methodologies/ strategies/techniques employed by professional education faculty comprised of: (1) the use of students' prior knowledge or previous experiences before presenting the lesson, (2) critical and deep analysis of facts and concepts, (3) activity-based and experiential lesson presentation, and (4) the use or application of real life exercises to gauge learning outcome. These themes served as the fundamental bases in crafting the innovative pedagogy/model that is believed to be effective in teaching professional education courses/subjects.

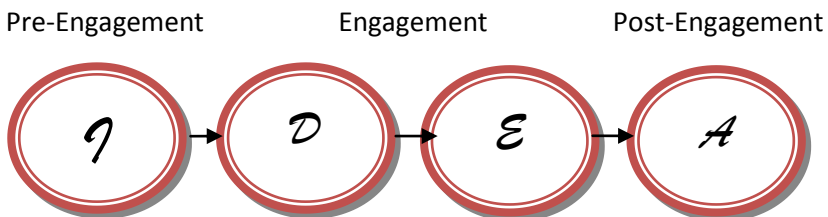
The model follows a sequential flow from pre-teaching to post-teaching phase. These phases were obtained from the analysis of the teaching practices employed by PNU professional education faculty.

The pattern employed appears very consistent with what Martinez-Pons (2003) calls as the *Phases of College Instruction*. He holds that successful teaching in higher education must consider the three phases of college instruction, namely, the pre-engagement phase, the engagement phase, and the post-engagement phase. He describes 'pre-engagement phase' as the stage where the



educator prepares the students for engagement in the teaching and learning effort. One of the procedures involved in the pre-engagement phase is the analysis of the learning readiness of both the students and the instructor, so that the latter could eventually provide opportunities to allow the former to establish focus on the lesson to be learned and that they could activate experiences related to the lesson about to unfold. The professor or instructor during the 'engagement phase' of college instruction, on one hand, involves the students in the actual teaching-learning effort, exposing them to the actual materials and physical environment, engaging them to the actual execution of what was planned before actual instruction, and allowing them to transfer what has been learned into situations where the understanding can be applied but different from that which learning has occurred. After the engagement phase, the professor or instructor for post-engagement, resorts to evaluating student performance using different kinds of assessment methods.

The model can easily be recalled through its acronym, IDEA, taken from the initial letter of the name of each step: **I**nduction of prior knowledge, **D**issection of concepts, **E**xperiential Episodes, and **A**uthentic Assessment. Like the conceptual definition of the term, IDEA poses as a spark of innovation that intends to fill-in the gaps in the teaching-learning process. It also seeks to address problems in professional education instruction.



**Figure 2.** Schematic Diagram of the IDEA Model

### ***Induction of Prior Knowledge***

This is the preliminary phase of the IDEA model in engaging the learner to a captivating lesson. Primarily, the teacher initiates and engages learners with stimulating and thought-provoking activity/ies

that will trigger their prior knowledge and build on what they already know. In particular, this stage prompts and stimulates the learners to develop a shared understanding and common language to help them chart a course leading to the dissection of concepts.

Dochy, et al (1995) defines prior knowledge as the totality of a person's knowledge, including explicit and tacit knowledge, conceptual and metacognitive knowledge. Prior knowledge has a positive impact on student performance (Dochy, Segers and Buehl, 1999). In addition, high correlations have been established between prior knowledge and speed and accuracy of study behaviour (as reviewed by Dochy, et al, 1999) as well as interest in a topic (Tobias, 1994). Thus, prior knowledge is associated with beneficial academic behaviors and better academic performance.

### ***Dissection of Concepts***

This phase deals with the presentation and development of concepts, observes the logical presentation of the lesson from facts and attributes to the concepts and their analysis and the formulation of generalization. The term "dissection" is used to emphasize the depth and comprehensiveness of the process of presenting the lesson to the class.

Taba, et al (1971), in Gallagher (2012), believe that students make generalizations only after organizing and exemplifying information. They further said that students can be guided towards making abstractions by developing concept and attaining them. They proclaimed that generalizing hypothesis is a higher order of thinking.

Inductive teaching strategies, as used in this model, are powerful tools that can be used and manipulated by teachers in the classroom. They cover content ranging from concept, relationship of concepts, to organized bodies of knowledge.

More pointedly, the model stresses learner's dynamic and active participation in the classroom processes to heighten critical thinking.

### ***Experiential Episodes***

This phase deals with the application or transfer of the generalized concepts established in the second phase. The experiential episodes

may take the form of one or a combination of two or three of the modalities, namely, 1) real-life or field experiences, 2) simulated experiences, and 3) vicarious experiences.

Essentially, the term "experiential" means that learning and development are achieved through personally determined experience and involvement in the teaching and learning processes. In experiential learning, the starting point of the teaching process is the learner, and purposely seeks to help the learner grow and learn and develop in their own direction and in their own way.

Enormous are the advantages of developing people as individuals. By developing them as independent learners, we enhance their confidence, self-esteem, personal strengths with fundamentally improved attitude, life-balance and emotional adjustment. Experiential learning also brings into play the concept of multiple intelligences.

### ***Authentic Assessment***

This phase focused on the use of assessment methods that simulate true-to-life situations. This could be in form of objective tests that reflect real life situations or alternative methods parallel to what we experience in actual life.

Authentic Assessment requires students to develop responses rather than select from pre-determined choices; it elicits higher order thinking, besides basic skills; it directly evaluates holistic competencies; it relates more closely to classroom learning; and, it encourages independent evaluation by the learners.

To Wiggins (1990), authentic assessment is used when we: directly examine student performance on worthy intellectual tasks; require students to be effective performers with acquired knowledge; present them with the full array of tasks that mirror the priorities and challenges in the best instructional activities; attend to whether they can craft, polish thorough and justifiable answers, performance or products. Beyond these technical considerations, the action to transform assessment is based on the principle that assessment should support the learners' needs.

### ***On the Acceptability of the PIPE: IDEA Model***

To establish the acceptability of the IDEA Model to the professional education faculty and students, the researchers conducted a series of demonstration teaching using the model in selected professional education subjects. Their prepared prototype lesson plans that exactly reflect or represent the fundamental elements of the model were demonstrated to the class with a pool of experts in professional education present to rate the acceptability of the model using a set of criteria. Unanimously, the experts rated the model as "acceptable".

### **SUMMARY**

In sum, the findings of this study reveal that:

#### **Profile of respondents**

- The majority of professional education faculty is female.
- The middle age group, 41-50 years old, dominates the faculty teaching professional education courses
- More than half of the faculty teaching professional education courses are Ph.D./Ed.D. holders
- The majority of the faculty teaching professional education courses belong to the upper ranks (associate to full professors)
- The number of years of teaching professional education courses varies among professional education faculty
- Most of the faculty teaching professional education courses are full time faculty of the department

#### **Current pedagogical practices employed by professional education faculty**

- Professional education faculty preferred using discussion

and integrated methods of teaching in teaching professional education courses. However, fewer faculties preferred the use of laboratory and investigatory methods. They also use the following methods: inductive, deductive, problem-solving, project, lecture, demonstration, and reporting or oral presentation.

### **Pedagogical Innovation in Professional Education: IDEA Model**

- Consistent and common elements present in the methodologies/techniques/strategies employed by professional education faculty include: (1) the use of students' prior knowledge or previous experiences before presenting the lesson; (2) critical and deep analysis of facts and concepts; (3) activity-based and experiential lesson presentation; and the use or application of real life experiences to gauge learning outcome.
- The IDEA model cuts across all phases of instruction from engagement to post-engagement part. Induction of prior knowledge comes first in the process, followed by Dissection of Concepts and Experiential Episodes. Authentic Assessments concludes the teaching process.

### **Acceptability of the IDEA model**

- Generally, faculty/experts of professional education rated the IDEA model as "acceptable."

## **RECOMMENDATIONS**

In light of the above findings, the following are recommended:

- A research on how demographic profile of faculty of professional education relates/affects their preference for teaching methodologies/techniques be conducted in the future in order to develop a model of teaching

that would address specific needs of faculty based on their situation or condition.

- The Professional education faculty should examine existing topics/contents in the professional education courses they handle and explore the possibility of using the IDEA model in some of these topics/contents. It is also recommended that proper documentation be done to establish the strengths and weaknesses of the model for further improvement.
- The model is so general and flexible that it can be utilized in almost all of the subjects under professional education. It is recommended, however, that in implementing the model in the classroom, the suggested format of the prototype lesson plans developed for this model be used to observe consistency and ensure its effectiveness.
- Moreover, another study be conducted among general education faculty to develop a pedagogical model in teaching general education courses.

## REFERENCES

- Balagtas, U. & Philippine Normal University. (2013). *Professional Education: A Reviewer for the Licensure Examination for Teachers*. CalQ Publishing, Manila.
- Borich, G. (2000). *Effective Teaching Methods* (4<sup>th</sup> Ed.). Prentice Hall, Inc.
- Carnine, D. (1990). *New Research on the Brain: Implications for Instruction*. **Phi Delta Kappan**, 71, 372-337.
- Gallagher, S. (2012). *Concept Development: A Hilda Taba Teaching Strategy*. Royal Fireworks Publishing Company, Inc., New York.
- Govindarajan, G., Jayalakshmi, T., & Gopal, M. (1993). Innovations in

Teacher Education in India: An Auxiliary Perspective. Education Winter. Retrieved from [www.questia.com/library/journal](http://www.questia.com/library/journal).

Graham, S., Lester, N., & Dickerson, C. (2012). Discover – Deepen – Do: a 3D Pedagogical Approach for Developing Newly Qualified Teachers as Professional Learners, *Australian Journal of Teacher Education*, 37(9).

Gronlund, N. (2003). *Assessment of Student Achievement* (7<sup>th</sup> Ed.). Pearson Education, Inc.

Hake, R. (1998). Interactive engagement versus traditional methods: a six thousand student survey of mechanics test data for introductory physics courses. *American Journal of Physics*, 66(1).

Kauchak, D. & Eggen, P. (1993). *Learning and Teaching: Research-based Methods* (2<sup>nd</sup> ed). Allyn and Bacon. Needham Heights, MA.

Lardizabal, A., Bustos, A., Bucu, L., & Tangco, M. (2004). *Principles and Methods of Teaching*. Phoenix Publishing House, Inc.

Martinez-Ponz, M. (2003). *The Continuum Guide to Successful Teaching in Higher Education*. Biddles Ltd, Guilford and King's Lynn: Great Britain.

Mezirow, J. (2000). Learning to think like an adult: Core concepts of transformation theory. In Mezirow J. & Associates (Eds.), *Learning as transformation: critical perspectives on a theory in progress*. San Francisco, CA: Jossey-Bass, 3-34).

Mezirow, J. & Associates (1990). *Fostering critical reflection in adulthood: a guide to transformative and emancipatory learning*. San Francisco: Jossey-Bass.

Morrison, G., Ross, S., & Kemp, J. (2001). *Designing Effective Instruction* (3<sup>rd</sup> Ed.). John Wiley and Sons, Inc.

Ocampo, D. J. (1997). *Trends in Reading Instruction*. University of

the Philippines Open University.

Ochave, J. & Suatengco, R. (2006). College Students' Preferred Professors' Instructional Methodologies: A Cohort Revalidation, Research Series No. 85. Philippine Normal University Center for Research and Development in Education.

Ochave, J. & Suatengco, R. (2005). Approximation of University Students' Preferred Teaching Methodologies: A Qualitative Study, Research Series No. 80. Philippine Normal University Center for Research and Development in Education.

Oxino, Ramer V. (December 2009). Learning Styles of PNU Freshman College Students School Year 2009-2010, Research Series No.116. Philippine Normal University Center for Research and Development in Education.

Ornstein, A. (1990). *Strategies for Effective Teaching*. Harper Collins Publishers, Inc.

Regmi, K. (2012). A Review of Teaching Methods--Lecturing and Facilitation Methods in Higher Education (HE): A Summary of the Published Evidence. *The Journal of Effective Teaching*, 12(3), 61-76.

Shor, I., & Freire, P. (1987). *A pedagogy for liberation: dialogues on transforming education*. London: MacMillan.