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COLLEGE STUDENTS' PREFERRED PROFESSORS' INSTRUCTIONAL METHODOLOGIES: A COHORT REVALIDATION

JESUS ARCE OCHAVE

Vice President for Planning, Research and Extension

ROSARITO TATEL-SUATENGCO

Faculty Researcher

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Jesus Arce Ochave

Vice President for Planning, Research and Extension

Rosarito Tatel-Suatengco

Faculty Researcher

INTRODUCTION

The selection of a teaching methodology for a classroom interaction is often without due consideration for the preferences of the students, seldom, if ever are the students consulted. As a probable consequence, a professor's instructional methodology may be too discrepant from the students' preferences so as to fail to maximize the students' opportunity for learning. The mismatch may be one large single factor that accounts for variance in learning.

As research showed, students preferred some methods of learning than the others (Diaz and Cartnal 1999). Other researches even revealed that many educators continue to believe that the teaching methods that were effective in traditional classes would also work in alternative classroom settings like the distance education setting (Diaz and Cartnel 1999). Teachers, showed in research, tended to prefer methodologies wherein they themselves had experienced academic success. For many teachers, this academic success usually took place in an

instructor-centered rather than student-centered learning environment (Stitt-Gohdes 2001, cited in Brown 2003).

The Ochave and Suatengco (2005) study on preferred teaching methodologies of students revealed evidences on what appeared to be a general mismatch between the teaching methodologies employed by the professors and the preferred teaching methodologies of first year college student. The professors' instructional methodologies appeared to be dependent on the subject area taught. That is, Science, for example, is more likely taught differently from History. The present study, however, are senior students who may be considered as cohorts of the freshmen respondents. The freshmen were the initial respondents.

The Ng (2000) study on web-based instruction showed that some students found Power Point presentation "boring" if the presentation was too long; however, for a 10-minute presentation, the students found the use of Power Presentation "advisable." In addition, some students tended to favor e-mail communication, because it is user-friendly and convenient. They also said that they preferred to receive feedback from their professors regarding the work they submitted.

The Diaz and Cartnel (1999) study, meanwhile, found out that independent students preferred teaching methodologies such as independent study and projects, while dependent students, who look up to teachers and peers as source of structure and guidance, would most likely opt for lecturing, pure teaching, and reporting. With the collaborative learners, they preferred instructional methods like lectures, small group discussions, and group projects.

All these finding provided the rationale for this research; the second part of a series of studies on students' preferred teaching methodologies. The first research was entitled, "An

Approximation of University Students' Preferred Teaching Methodologies: A Qualitative Study" (Ochave and Suatengco 2005a).

PURPOSE

This study looked into the fourth year University students' observed and preferred instructional methodologies of their professors at the Philippine Normal University. Specific objectives are as follows:

1. describe the instructional methodologies employed by professors of English/Language, Science and Mathematics, Social Science, and Professional Education Course;
2. identify the instructional methodologies unique to a subject area;
3. find out the teaching methodologies of professors shared with other professors;
4. find out which among the instructional methodologies employed by professors are liked by students;
5. explicate other instructional methodologies (beyond those employed by professors concerned) preferred by students; and
6. determine if there exists a match between the observed and the preferred methodologies.

METHODOLOGY

A qualitative study which made use of open-ended guide questions for data gathering, data were analyzed by categorizing

them according to typology: type of participation, extent of participation, uniqueness, and commonalities.

The results provided accounts on the general and specific preferences of students, likewise, the data provided a clear picture of the actual methods utilized by the professors in their classes under different subject areas- English/Language, Science and Mathematics, Social Science, and Professional Education Courses.

Respondents

A total cohort of 87 fourth year college students, with different majors and about to graduate, comprised the respondents of the study. They came from the College of Languages, Linguistics, and Literature (CLLL), College of Science (COS), College of Arts and Social Science (CASS), and College of Education (CED). All the respondents were candidates for a Bachelor's degree in either elementary or secondary education.

The respondents also had just completed their major courses. They took the major courses from third year to fourth year. With the General Education Courses, the respondents took these courses from first year to second year. Moreover, the respondents were given the opportunity to teach elementary or high school students during the on and off campus practice teaching. That is, the respondents had employed in their classes different instructional methodologies.

Instrument

The instrument is a revised version of the same instrument used in the Ochave and Suatengco (2005a) study on the freshmen cohort. In the process of revising the instrument, the researchers studied first the curricular programs of the University, then, came up with a list of the General Education and Specialization courses which the respondents had completed in their four years of college education in the University. A student would normally be accepted in a majorship program after completing the general education courses, and by passing the admission test and the interview conducted by the department handling the specialization program.

Five open-ended questions composed the instrument. The first three questions were about the preferred teaching methodologies, while the two remaining questions pertained to the rating /evaluation methods employed by professors in their classes. Here are the five open-ended questions:

1. Describe the teaching methodologies of your professors in English/Language, Science and Mathematics, Social Science, Professional Education Courses.
2. Which among these methods of teaching do you prefer? Why?
3. How else do you want to be taught? What other teaching methodologies do you prefer? Why?
4. How does your professor evaluate your class performance?
5. How do you want to be evaluated/rated?

For the first question, the students were asked to describe the actual instructional methods of their professors in four subject

areas- English/Language, Science and Mathematics, Social Science, and the Professional Education Courses.

As a footnote to this study, the Physical Education subject area included in the freshmen study was replaced by Professional Education Courses, because the latter subject area is a core component in the education curriculum to be taken up from third year to fourth year in College. There, too, seniors are done with the Professional Education requirements.

As to the second question, the respondents were asked to identify their preferred instructional methodologies based on what their professors employed. For the third question, the students would cite their preferred instructional methods which were not observed from those employed by their professors.

On evaluation/rating methods, the fourth and fifth questions asked the respondents about their observed and preferred evaluation/rating methods. The analysis of the responses would be discussed in another study.

Data Gathering

Assistance from the Office of the Student Affairs and Social Services in administering the instrument to the selected respondents was requested and employed. Thus, an administrative staff handled the administration of the instrument to the respondents. This was necessary to eliminate any influence on the students' responses that might arise, if the instrument would be handled by a faculty. By doing so, the respondents would probably be freed from any psychological pressure that might adversely affect writing the composition. To reinforce this intent, the students were informed that it would not be necessary to cite the professor/s' name, and to write their names and specialization.

The respondents were not given a limit for answering the questions; although, the average consumed time for answering the five questions was 25 minutes. The respondents in this study had a lower average time for answering the questions as compared with the 40 minutes average time consumed by first year college students in the Ochave and Suatengco (2005a) study for obvious reason.

RESULTS AND DISCUSSION

Instructional methodologies employed by professors were categorized according to the type of participation. The two categories are: group or individual.

Individual participation means only one student performs an activity or task, while group participation means two or more students are working together to perform a specific task/activity.

Exhibit 1 shows a balance in the number of employed teaching methodologies under group and individual categories. The instructional methodologies under the group and individual categories are almost equal in number.

In the English/Language subject area, the professors employed ten instructional methods under the group category and eleven instructional methods under the individual category, respectively.

For the group category, the observed methods were group works, demonstration, discussions, group socialization, group presentation, debates, role playing, play production, round-robin discussion, and group activity. As for the individual category, the employed methods were book reporting, oral presentation, project, essay writing, tell-and-do, film analysis, vocabulary development

using context clues, recitation, declamation, assignment, and book review.

With the Science/Mathematics subject area, there were nine methodologies identified under the group category compared with the twelve methodologies under the individual category. The methodologies under the group category were discussion, experiment, fishbowl, fieldtrip, demonstration, game, research, and project. As to the individual category, the methodologies were reporting, jigsaw, POE, concrete examples, tell-and-do, inquiry method, constructivism, computation, problem solving, exercise, drill, discovery process, and assignment.

Most of the ten methodologies employed by Social Science professors under the group category were discussion-related. The methods employed were small and peer discussion, panel discussion, debate, info-sharing, oral discussion, group learning, reporting, research, and field trip. There were, however, fewer instructional methodologies under the individual category utilized by professors. These were reporting, inquiry, problem solving, recitation, tell-and-do, article reading, memorization, and paper work.

As to the Professional Education Courses, professors employed eight instructional methodologies each for the group and individual categories. Oral discussion, group activity, small group discussion, simulation, role playing, class discussion, socialized discussion, and peer teaching were listed under the group category, while demonstration, micro-teaching, reporting, situational example, research, direct and iconic experience, individual activity, and reporting instructional methodologies were noted under the individual category.

However, some of the instructional methodologies identified by the students could either fall under group and individual categories, but as practiced by most professors,

instructional methodologies such as book reporting, oral presentation, project, film analysis, assignments, book review, concrete examples, drill, practice exercises, and research are performed individually by students.

All subject areas like Science/Mathematics, Language/English, Social Science, Professional Education Courses used individual and group instructional methods. What is common to all are reporting and discussion. "Tell and do" in the Language/English, Science/Mathematics, and Social Science. The "Peer teaching" method is unique to Professional Education Courses.

EXHIBIT 1. INSTRUCTION METHODS ACCORDING TO TYPE OF PARTICIPATION

SUBJECT AREA	GROUP	INDIVIDUAL
LANGUAGE/ ENGLISH	Group work, Debate Demonstration Discussions Group socialization Group presentation Role Playing, Play production Round-robin discussion Group activity	Book reporting Oral presentation, Project Essay, Oral recitation Tell-and-do, Film analysis Vocabulary development using context clues Declamation, Assignment Book review
SCIENCE/ MATHEMATICS	Discussion, Fishbowl Experiment, Field trip Demonstration Games, Research Projects, Group activity	Oral presentation, Jigsaw, POE Concrete example Tell-and-do, Inquiry Constructivism, Assignment Computation Problem solving Exercise/Drill Discovery process

SOCIAL SCIENCE	Small and peer group discussion Panel discussion Fieldtrip, Reporting Oral discussion, Debate, Info-sharing, Group learning Research	Oral presentation, Recitation Inquiry, Paper work Problem-solving Tell-and-do, Memorization Article reading
PROFESSIONAL EDUCATION COURSES	Oral discussion Group activity Small group discussion Simulation, Role playing Class discussion Socialized discussion Peer teaching	Demonstration teaching Micro teaching Reporting Situational example Research Direct and iconic experience Individual activity Oral presentation

Instructional methodologies of professors were also categorized according to the extent of student participation. Exhibit 2 presents student participation which could be passive, interactive, or reflective.

The Passive category pertains to instructional methodologies that would likely require receptive and observation skills. Under this category, physical and social interactions are limited, if not required of the students. As to the role of the professor, they could either stand in the forefront of the interaction and content delivery or could act as both participant and observer in a classroom activity.

Next, the interactive category. Interactive methodologies paved the way for a spontaneous exchange of ideas, thoughts, and experiences, among the students. Under this category, the active involvement of the students both mentally and physically is necessary in accomplishing a task. As to the professors' participation, their role is to set the tone and atmosphere for a free-flowing and open interaction between and among the

students. Thereafter, the students themselves lead the classroom undertakings.

Finally, the reflective category. This pertains to instructional methodologies which would enable the students to become field-independent. This means that the students would perform activities without the direct and indirect intervention of their professors, while focusing on developing the analytical, critical, and higher order thinking skills of the students.

Exhibit 2 further shows that professors handling the English/Language Courses utilized instructional methodologies under the passive, interactive, and reflective categories. The passive methodologies employed were lecture, oral presentation, reading, giving of examples, topic-based, syllabus-based, declamation, chalkboard, project, and checklist. With interactive methodologies, the employed methods were cooperative learning, simulations, discussions, activity-based method, group socialization, tell-and-do, integrated learning, collaborative learning, debate, oral presentation, role playing, language based experience, and group activity. On reflective methodologies, the employed methods were book reporting, expository, discovery learning, "KWL", written output, essay, reaction papers, film analysis, book review, semantic webbing, analysis, and exposition writing.

Although there appeared to be a balance in the number of methodologies under each type, Language professors tended to employ methodologies geared towards interactive, followed by reflective, then passive. In terms of the number of instructional methodologies, thirteen methods were listed under interactive, eleven for reflective, and ten for passive.

EXHIBIT 2. INSTRUCTIONAL METHODS: EXTENT OF PARTICIPATION FOR ENGLISH/LANGUAGE

SUBJECT AREA	PASSIVE	INTERACTIVE	REFLECTIVE
Language/ English	Lecture, Oral presentation Reading Giving of examples Topic-based Syllabus-based Declamation Chalkboard Project Checklist	Language-based experience Role Playing Cooperative learning Simulation Discussion Activity-based method Group socialization Tell-and-do Integrated learning Collaborative learning Debate, Group activity Oral presentation	Book reporting Expository Discovery learning KWL, Essay Written output Reaction papers Film analysis Book review Semantic webbing Exposition writing

Exhibit 3 presents the instructional methodologies employed by Science/Mathematics professors. Science/Mathematics professors employed sixteen instructional methodologies under the passive category, thirteen for interactive, and eleven for reflective. The passive methodologies employed were giving of examples, lecture, reporting or oral presentation, experiment, laboratory, project, practical exercises, demonstration, field trip, computer laboratory activities, drill, deductive, boardwork, show and tell, workbook, and observation.

As regards interactive methodologies, professors utilized cooperative, jigsaw, "TGT", discussion, fishbowl, simulation, learning station, team-games tournament, practical method, tell-and-do, experiential, motivational activities, and group presentation. Finally, the reflective methods mentioned by

respondents were discovery, problem-based, inquiry, problem analysis, reflective essay, predict-observe-explain (POE), process learning, problem-solution, inductive, and computation.

EXHIBIT 3. INSTRUCTIONAL METHODS: EXTENT OF PARTICIPATION FOR SCIENCE/MATHEMATICS

SUBJECT AREA	PASSIVE	INTERACTIVE	REFLECTIVE
Science/ Mathematics	Examples, Lecture Reporting Laboratory activities Experiments, Project Practical Exercises Demonstration Fieldtrip, Workbook Computer laboratory Drill, Observation Deductive, boardwork Show and tell	Cooperative Jigsaw, "TGT" Discussion Fishbowl Simulations Learning stations Team-games tournament Practical method Tell-and-do Experiential Motivational activities Group presentation	Discovery Problem-based Inquiry Analysis of problems Reflective essay Predict-observe- explain Process learning Problem-solution Inductive, Inquiry Computation

Exhibit 4 reveals that Social Science professors tended to utilize interactive methodologies more than the passive or reflective instructional methodologies; nevertheless, there appeared to be a balance in the number of passive and reflective methods employed by Social Science professors.

The interactive methods employed were small and peer group discussion, panel discussion, role playing, group learning, cooperative learning, recitation, tell-and-do, experiential learning, collaborative, application method, class discussion, debate, and Info-sharing, and immersion.

For the passive category, the observed methodologies were reporting, lecture, field trips, article reading, memorization, attending symposia/seminars. As for the reflective, the methodologies identified were problem solving, inquiry, expository,

reflective essay, “LEA”, discovery, inductive, journal writing, paper works, and research.

EXHIBIT 4. INSTRUCTIONAL: EXTENT OF PARTICIPATION FOR SOCIAL SCIENCE

SUBJECT AREA	PASSIVE	INTERACTIVE	REFLECTIVE
Social Science	Reporting Lecture, Field trip Article reading Memorization Attending Symposia/ Seminars	Small and peer group discussion Panel discussion Role playing Group learning Cooperative learning Recitation, Tell-and-do Experiential learning Collaborative Application method Class discussion, Debate Info sharing, Immersion	Problem-solving Inquiry , Expository Reflective essay LEA, Discovery Inductive, Journal writing Paper works, Research

Exhibit 5 details the instructional methodologies utilized by Professional Education Courses professors. The number of passive methodologies almost equals that of the interactive methodologies. There were eight methods listed under passive and eleven under interactive; however, only five instructional methods were listed under reflective category.

The passive methodologies were deductive, demonstration, peer teaching, reporting, project, lecture, reading, deductive, and individual activities. For the interactive, the methodologies observed were discussion, group activity, dramatization, small group discussion, simulations, role playing, group learning, tell-and-do, cooperative, experiential, and

socialized discussion. Lastly, reflective methods were reflective essay, inductive, situational questions, research, and film analysis.

EXHIBIT 5 INSTRUCTIONAL METHODS: EXTENT OF PARTICIPATION FOR PROFESSIONAL EDUCATION COURSES

SUBJECT AREA	PASSIVE	INTERACTIVE	REFLECTIVE
Professional Education Courses	Demonstration Peer teaching Reporting Project, Lecture Reading, Deductive Individual Activities	Discussion Group activity Dramatization Small group discussion Simulations Role playing Group learning Tell-and-do Cooperative "Experiential" Socialized discussion	Reflective essay Inductive Situational questions Research Film analysis

Exhibit 6 shows the instructional methodologies unique to a subject area. Uniqueness means that the instructional methodology is employed solely by professors of either English/Language, Science/Mathematics, Social Science, or Professional Education Courses. There were eighteen teaching methods unique to Language/English subject area; sixteen fell under Science/Mathematics; ten methods were peculiar to Social Science; and six methods were identified unique to Professional Education Courses.

Language experience, book reporting, drawing, representation of story, "genre approach", "text type", "KWL", socialization, communicative language approach, topic-based activities, declamation, semantic webbing, play production, checklist, round-robin discussion, task-oriented, group

socialization, and output-focused were the instructional methodologies employed by English/Language professors

The instructional methods peculiar to Science/Mathematics subject area were Predict-Observe-Explain (POE), drill, learning station, problem-based method, TGT, jigsaw, experiment, laboratory, and fishbowl, constructivism, workbook, observation, practical method, process learning, computer laboratory, and team-game tournament.

For Social Science, the methods unique to this subject area were panel discussion, peer group discussion, debate, LEA, issue-based, recitation, journal writing, giving of comments, memorization, attending symposium and seminars, and immersion.

Finally, the instructional methodologies employed only by Professional Education Courses professors were peer teaching, “developmental”, macro teaching, situational examples, “direct and ionic experience”, and forum.

The professors’ employment of methodologies peculiar to a subject area may speak of their thorough understanding of the subject area they handle. It also shows that the professors knew very well the content and competencies to be learned by the students. This further proves that there are distinct requirements for studying and learning a subject area. These methodologies are by products of years of research on the learners’ needs and nature of the subject area.

EXHIBIT 6. INSTRUCTIONAL METHODS: PECULIAR TO THE SUBJECT AREA

SUBJECT AREA	METHODS UNIQUE TO SUBJECT AREA	
Language/ English	Language experience Drawing Representation of story "Text type" Communicative language approach Declamation Play production Round-robin discussion Group socialization	Book reporting "KWL" "Genre approach" Socialization Topic-based activities Semantic webbing Checklist Task-oriented Output-focused
Science/Math ematics	Predict-Observe-Explain (POE) Learning stations "TGT", Jigsaw Experiments "Constructivism" Observation Process learning Team-Games tournament	Drills Problem-based methods Fishbowl Laboratory Workbook Practical Method Computer laboratory
Social Science	Panel discussion Debate, "LEA" Issue-based Giving of comments Attending symposium and seminars	Peer group discussion Memorization Recitation, Journal writing Immersion
Professional Education Courses	Peer teaching Macro teaching Direct and ionic experience	Developmental Situational examples Forum

Exhibit 7 shows the instructional methodologies shared by professors of two or more subject areas. There were thirty-two employed instructional methodologies common to professors of two, three, or four subject areas. Included in the list are inductive, deductive, reporting, lectures, integrated, teacher-centered, student-centered methods, traditional, chalkboard, presentation of

examples, giving of examples, film showing, reading, group works/activities, cooperative learning, activity-based methods, problem-solving method, inquiry, tell and do, oral discussion, syllabus-based, expository, demonstration, reflective paper, essays, paper works, projects, discovery, experiential learning, field trip, research, and simulations instructional methodologies.

The common methods combine of both “usual” and “beyond” usual instructional methodologies. However, most of these methods leaned towards “classics”, that is, these methods have continuously been used by professors since the institutionalization of education in the society. Some of these methods are lecture, reporting or oral presentation, essays, and chalk board.

EXHIBIT 7. INSTRUCTIONAL METHODS: COMMONALTY

Methods of Instruction Common to two or more Subject Area		
Inductive Deductive Reporting Lectures Integrated Teacher-centered Student-centered Traditional Chalkboard method Presentation of examples Film showing	Group works/activities Cooperative learning Activity-based methods Problem-solving method Inquiry Tell and do Oral discussion Syllabus-based Expository Giving of examples Reading	Demonstration Reflective paper Essays Paper works Projects Discovery Experiential learning Field trip Research Simulations

Exhibit 8 shows that of all the instructional methodologies employed by professors, the students liked 36 of them. Three of these methods had the highest incidence of occurrence, discovery, demonstration, and laboratory methods, mentioned 10 times each followed by discussion and collaboration methods

mentioned 5 times each . Other methods liked by students were POE, “jigsaw”, reading laboratory, debate, expository, experiential, paper works, alternative classes, among others.

Some students, however, did not specify which among the methodologies employed by their professors they liked. Instead, they mentioned that they liked the methodologies utilized by English/Language and the Professional Education Courses professors.

The reasons mentioned by the respondents for their preference were focused on what the methodology could do to bring about learning, develop critical thinking, learn concepts, enhance skills, gain new knowledge, discover how things could be done, apply concepts, retain information, motivate students, and make learning easier.

Other respondents believed that their preferred methodologies could be useful for their specialization. That is, the concepts to be learned and skills to be developed under their specialization would mostly be achieved through these preferred instructional methodologies.

Some respondents also acknowledged that there is no perfect method. For this reason, they preferred all the methodologies, because they recognized the contribution of each methodology in effecting learning. Others would prefer methodologies which they think would best suit their needs as learners, while some were focused on the long-term effect of the methodology on their learning. For example, some respondents mentioned reading and discovery, because they believed that these instructional methodologies could enhance the students’ learning habits.

Discussion-type instructional methodologies were liked by some students because these allowed them to have a

spontaneous and free conversation about societal issues and concerns with their professors and fellow students. Some students also liked those methods which could pave the way for the integration of additional information, knowledge and other concepts. On the role of the teacher, some students would still prefer that their professors take the initiative and be the center of the learning processes, while others would prefer to see their professors acting as guide in the learning processes. This would be accounted for citing both teacher-centered and student-centered instructional methodologies as students' preference.

EXHIBIT 8. FREQUENCY OF INSTRUCTIONAL METHODOLOGIES LIKED BY STUDENTS

Discovery	10	Inductive	3
Demonstration	10	Deductive	3
Laboratory	10	Constructivism	3
Methods used by Lang.	7	Cooperative	3
Profs.	5	Simulation	2
Discussion	5	Socratic	2
Collaboration	4	Problem-Solving	2
Fieldtrip	4		
Student-centered	3		
Inductive			

Exhibit 9 presents the instructional methodologies preferred by the students. Preference refers to the instructional methods not observed from those employed by professors. These preferences were categorized according to Orientation- written, oral, or performance. Under written, there were three instructional methodologies cited by the students; twenty-one methods mentioned under Oral category; and sixteen identified under Performance category.

Under the writing category, the methods preferred by the student-respondents veered towards paper work, showing of examples, and research. For the Oral category, the preferences

included discussion, lecture, Socratic method, micro teaching, small group discussion, demonstration, POE, inquiry, interaction, debates, reporting, round-robin discussion, group activities, integrated, expository, application of personal experiences, giving of examples, drama, role playing, sharing of examples, and individual presentation.

Preferred methodologies such as problem-based, cooperative learning, experiment, laboratory activity, problem solving, laboratory, discovery, collaborative learning, learning stations, constructivism, project, group works, jigsaw, actual manipulation, puzzle, games, and activity-based were categorized under Performance.

Exhibit 9 further shows that the students' preferences leaned towards performance category than the oral category. As a proof, the students mentioned twenty-one methods under oral category and nineteen methods under performance category, respectively; nevertheless, a new set of students appeared to prefer research.

EXHIBIT 9 PREFERRED INSTRUCTIONAL METHODOLOGIES
ACCORDING TO ORIENTATION

WRITTEN	ORAL	PERFORMANCE
Paper works Showing of examples Research	Discussions, Lectures Socratic Method, Demonstration Macro teaching, Group activities Small group discussion POE, Inquiry, Interaction Debate, Reporting Round-robin discussion Integrated, Expository Application of personal experiences Giving of examples Drama, Role playing Sharing of examples Individual presentation	Problem-based methods Cooperative learning Experiment Laboratory activities Problem-solving Discovery Collaborative Learning station Constructivism Projects, Group work Jigsaw, Actual manipulation Puzzle, Simulations Activity-based methods

The students also preferred methods which could expose them to 'real-life' experiences. These are usually done outside the regular classroom and straight to the field - observation outside the campus, excursion, field trip, hands-on methods, actual job, and experiential. This may also be an evidence that the students now recognize that learning may also take place in other settings apart from the usual classroom ambience. This may also speak of the students' exposure to different modes of learning which may have contributed in broadening their' views on learning and where learning should take place.

The students also appeared to be looking for innovative or creative teaching methodologies. They also preferred that their professors use modern technology and be "eclectic" in employing instructional methodologies. Nevertheless, there were also preferred traditional and teacher-centered methodologies.

To explain their preferences, the fourth year students, generally based their choices on what the methodology could do to facilitate learning, to enhance and develop skills, and to generate knowledge. Other reasons would be related to the issue, how useful a methodology would be in the field.

Some respondents preferred methodologies that promote student interaction. On the other hand, others wanted their capabilities and attitudes to be tested; hence, their preference for oral presentation. Still others acknowledged the contribution of the instructional methodologies for self-development-personally and otherwise. Therefore, they tended to prefer methodologies which they believed could help them gain self-confidence and become independent learners. Other reasons cited by the students why they preferred some methods over the others are as follows: they were able to discover new concepts on their own, students and teachers helped one another to achieve the same goal, students will be able to observe and monitor their own learning, motivation is properly provided to the students, concepts

would be explained clearly, and the students are allowed to engage in classroom activities.

On the incidence of matching between actualities and preferences, Exhibit 10 shows that thirty-five of the 87 respondents preferred the teaching methodologies employed by the English/Language professors. Twenty-three incidence of matching occurred in the Social Science subject area; fourth four for the Science/Mathematics subjects area, and twenty for Professional Education Courses subject area.

The highest incidence of matching between the actualities and preferences was in the Science and Mathematics subject area with 51%, followed by English/Language with 40%; then, Social Science with 26%; and finally, the Professional Education Courses subject area with 23 %.

Frequency refers to the number of students who preferred any of the instructional methodologies employed by professors of a particular subject area.

**EXHIBIT 10. INCIDENCE OF MATCHING BETWEEN THE ACTUAL
AND THE PREFERENCES**

SUBJECT AREA	F	% *
English/Language	35	40
Science/Mathematics	44	51
Social Science	23	26
Professional Education Courses	20	23

*** F/N N = 87**

Summary

Student preferences of their professors' Instructional Methodologies were known by first, asking eight-seven senior students to describe their professors' actual instructional methodologies employed in the following subject areas – Language/English, Science/Mathematics, Social Science and Professional Education Courses.

Subsequent to the writing of the descriptions of their professors' actual methodologies, the students responded to the question on what they like in the professors' instructional methodologies and their preferences. In this study, the term **likes** is defined as the instructional methodologies selected by the students from those employed by their professors, while **preference** refers to the methodologies beyond what is employed by their professors.

Findings reveal that professors utilize various methodologies. It appears that the subject area is an important factor in the choice of methodology. Mathematics is lecture, Science is experiment, Language/English is task-based, Social Science is group discussion, and Professional Education Courses is observation.

Students like almost all the methodologies and do not openly resent what they dislike, if ever there are. They only have one resentment, and this is the field trip, not because of the method per se, but the expenditures it entails.

Students particularly like discovery, demonstration, and laboratory. Their preferences are role playing, research, "jigsaw", simulations, actual manipulation, and learning station, among others. While they like individual work, they seem to enjoy more learning as a group.

CONCLUSION

Four subject areas were studied in terms of instructional methodologies employed by the professors. The subject areas are Language/English, Science/Mathematics, Social Science and Professional Education Courses. In addition to description of instructional methodologies, the students were asked to identify their preferred instructional methodologies just like their freshman cohort study.

Senior students's description of the professors methodologies could be categorized according to type of participation – group or individual, and extent of participation – passive, interactive, and reflective.

The University professors referred to by the students-respondents evidently utilized a wider range of instructional methodologies, as compared with the professors referred to in the cohort study of Ochave and Suatengco (2005a). This is probably so since the fourth year students had taken up more academic courses and had been under the tutelage of more professors compared with the first year college students. In addition, some of the professors referred to by fourth year college students may also be the same professors referred to by the first year cohort students.

The professors referred to in the study also tended to utilize the same instructional methodologies (e.g. lecture, reporting, etc.) mentioned in the Ochave and Suatengco (2005a) study. While there are commonalities across subject area, some of the instructional methodologies employed by the professors appeared to be unique to a subject area. For example, text type is one instructional methodologies which only the English/Language professors used; for Science and Mathematics subject area, computer laboratory method; Social Science, immersion; and Professional Education Courses, micro teaching.

The respondents also appeared to prefer methodologies which they believe could facilitate learning of concepts and acquisition of skills. They also tended to like those methods which would be most useful during the “field practice”; hence, the usefulness of a methodology was viewed in the context of field experience. Such view might have been influenced by the students’s on and off campus teaching experiences.

An emerging preference is the customization of methodologies to suit the learners’ preferences. The respondents recognized and were aware of their needs as students and future teachers. Because of this, they preferred those methodologies which they believe could meet their needs.

Evidence also showed that the fourth year students no longer perceive the classroom as a venue for self gratification and self-enjoyment (although some still want discussions to be lively and enjoyable), as compared with the first year college students in the Ochave and Suatengco (2005a) study. They seemed to be clear about their preference/s and the reason/s for such. They do not associate their preference for a methodology with their professors’ behavior in class or interpersonal relation with the students. Thus, their general outlook towards an instructional methodology seemed to be independent from the personal styles and classroom behavior of the professor.

On personological factors, the first year students were more particularly concerned about the personal styles, traits, and general behavior in class of the teacher, as opposed to the fourth year students who rarely mentioned the teachers general behavior in class and their professors’ personality. Evidences also showed that the first year students tended to be more attached to their professors – for academics and personal concerns than the fourth year students.

The cohort of first year and fourth year students also seemed to prefer teaching methodologies which they called “more creative and innovative.” This preference is, however, more pronounced with the fourth year college students than with the first year college students.

Generally, for senior cohort , there is a match between instructional methodologies employed by their professors and their preferences. The match is relatively most visible for Science/Mathematics subject area followed by English/Language, Social Science, and Professional Education Courses subject areas.

RECOMMENDATION

The study may be replicated in other universities to find out the preferences of students from other disciplines. The need to replicate is more underscored because of non-teaching training of their professors. Examples are Law, Medicine, Commerce, and Engineering. Another purpose is to determine if these conditions affect the students’ interest, motivation, achievement, and performance.

Professors in College and University may find it useful in planning their instruction when they consider the preference in instructional methodologies of their students.

It would also be necessary to include in the design of future studies the learning styles of the students vis-a-vis their preferred teaching methodologies and its effects on the students’ over-all achievement and performance. This may provide substantial data for planning, programming, and general assessment of the University instruction.

References

- Diaz, D. P., & Cartnal, R.B. (1999). *Students' learning styles in two classes: Online distance learning and equivalent on-campus*. College Teaching 47(4), pp. 130-135.
- Ng, R.Y.K. (2000). *Students' preferred mode of learning for web-based teaching*. <http://www.flexiblelearning.net.au/rw2000/talkback/html>
- Ochave, J.A. and Suatengco, R.T., *An approximation of University Students Preferred Teaching Methodologies: A Qualitative Study*. Research Series, Vol. 80.