INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY: APPLIED BUSINESS AND EDUCATION RESEARCH
2021, Vol. 2, No. 7, 549 – 556
http://dx.doi.org/10.11594/ijmaber.02.07.02

Research Article

Preferred Learning Styles of Accounting Major Students

Arnold V. Salcedo*

School of Business and Accountacy, Holy Angel University, Angeles City, Philippines

Article history:
Submission July 2021
Revised July 2021
Accepted July 2021

**Corresponding author:*
E-mail:
asalcedo@hau.edu.ph

ABSTRACT

The general objective of this research is to determine the learning style of accounting major students of a university in Central Luzon, Philippines, and the corresponding teaching strategy for the identified learning style. By conducting a cross-sectional descriptive research design on learning styles among three hundred fifty-three (353) accounting major students, the combination of learning styles that best describe the accounting major students using Kolb Learning Style Inventory Model is said to be 'reflector' style using the diverging strategies which are watching and feeling, following a combination of concrete experiences and reflective observation. The proposed teaching strategies will aid teachers in adjusting their teaching methods that suited for the learning style of accounting major students versus the current teaching methods being received by accounting students today.

Keywords*: accounting students, accountancy, accountancy education, learning styles.*

Background

Emma Taylor (2013) described learning as a fundamental skill that everyone possesses. Babies learn how to survive, as well as critical language skills, and movement from the moment they are born. Parents can help to enhance their child's learning process, and help their children develop skills that they will use for a lifetime. Teachers, acting as second parents to students, play a crucial rule in this process since on the average, a college student spend two to three hours studying accounting in school.

As early as the ancient Greece, persons are reputed to learn differently (Wratcher et al., 1997). The diversity of students nowadays and the need to fully understand their aggregate learning style profile, will aid teachers in providing teaching mechanisms that best suited in educating students. According to Grasha (1996) learning styles are personal qualities that influence a student's ability to acquire information, to interact with peers and the teacher, and otherwise, participate in learning experiences.

The inability of teachers to identify the most appropriate teaching style may affect students. According to Montgomery & Groat (2002) the degree of apprehension, lack of interest, or anxiety are some possible effects since an individual student may perceive and

How to cite:
Salcedo, A.V. (2021). Preferred Learning Styles of Accounting Major Students. *International Journal of Multidisciplinary: Applied Business and Education Research*. *2* (7), 549 – 556 doi: 10.11594/ijmaber.02.07.02

process information in different ways because the instructor is not using the learning approach, they most prefer. Knowing the appropriate learning style will aid teachers to capitalize on the strengths of the students, provide opportunities for improvement, identify threats to learnings and aggravate current weaknesses of students in this area.

Divergers, fall under the combination of concrete experience and reflective observer. These are hands-on explorers or logical learners, like to receive constructive feedback and are affected by other people. The way they interpret experience may start from building smaller blocks working their way up to the bigger idea or picture. Working with teams and participation are important for these learners although conflicts easily affect them. They love to reason out on things and work out on the 'whys' (Kolb 1976, 1984). Divergers are also known as reflectors and can be simply described with the words 'feel & watch' (Honey & Peter, 2006).

Convergers fall under the combination of abstract conceptualization and active experimenter. These are pragmatics and are very practical learners. Testing is a common word for convergers as they try out ideas if they really work in reality. Answering the question 'how' in a case, problem or situation, for them, are considered as facts. They adapt and learn well with computers than any other methods; ensuring that things work efficiently while practically making small adjustments is also important. Careful thinkers and being independent are the best way to describe them (Kolb 1976, 1984). Convergers are also called pragmatists and can be simply described with the words 'think & do' (Honey & Peter, 2006).

Accommodators fall under the combination of concrete experiencer and active experimenter. They have a hard take on being hands on and very practical learners and are creative risk takers. The questions 'what ifs' and 'why not' justify the way they act since routinary and repetitive activities bore them. Their approach to complexity is to attack it by direct interaction. Accommodators sometimes are known for being self-learners and do not rely much on other people (Kolb 1976, 1984). Accommodators are also known as activists and can be simply described with the words 'feel & watch' (Honey & Peter, 2006).

Assimilators fall under the combination of an abstract conceptualizer and reflective observer. Assimilators have the most cognitive or conceptualized approach; these are thinkers and it is the best word to describe them. Structured teaching, lectures, demonstrations from experts motivate them. 'What is there to learn?' typically is the question they aim to answer.

Logical and thoughtful conversations are perfect avenues for learning. Clean, simple and organized internal models are perfect for them. Deductive reasoning can be a best strategy during lectures. Academic materials and handouts are strong learning instruments for them. They are considered as serious learners than mediocre learners through play (Kolb 1976, 1984). Assimilators are also called theorists and can be simply described with the words think & watch (Honey & Peter, 2006).

This study is focused on Kolb Learning Style Inventory per Mc Leo (2017) as an assessment tool to determine learning preferences and needs of an individual. Allowing the students to designate how they like to learn, will be determined by how consistent their responses are. The student's preferred learning style is based on the computed results would serve a foundation and guide for methods of teaching. Strategies may be generated that will encourage student participation and involvement. Most important, is the grouping together of students with similar learning styles. Prime to achieving these outcomes are the very basic foundations of teachings which will start by knowing the learning capacity of students. The purpose, therefore, of the research is to identify the learning style(s) fitted for accounting major students in this case in a university in Central Luzon Philippines.

Methods

Research Design and Sampling

The researcher used the cross-sectional research design. In Kohlmann (2008) cross-sectional studies is also known as cross-sectional analysis. Respondents are randomly chosen from the population. The researchers used the primary and secondary data gathering strategy. The participants of this study are the three

hundred fifty-three (353) accounting major students of under the from first year to fifth year in a university in Central Luzon, Philippines.

Data Collection and Instrument

This section describes in great detail the data-collection procedures. The primary sources of information are original documents which include official records on the number of enrollees and per year level. Through an informed consent, survey questionnaires from recruited participants, were provided in order to accomplish a survey questionnaire. The self-administered survey already provides the results because each respondent is required to tally the answers.

Secondary sources of information quotes from learning styles publications, such sources include comments on, interpretations of, or discussions about the original research conducted abroad where permission was acquired thru email correspondence. An academic research work was also used as a related study.

The research instrument has two parts. The first part contains personal information course, year description, age & gender. The second part is the survey, where the researcher adapted the survey called Kolb's Learning Styles Questionnaire (2017) containing forty questions. These questionnaires were randomly distributed for each year level based on the allocation, to be answered by the respondents in a short period of time. The survey questionnaire was intended to draw the profile of the respondents to determine which is the most dominant, if not, which are the most dominant learning styles being manifested by accounting students today.

Data Analysis

Frequency distribution was also used to measure the frequency of identified responses of the respondents. Frequency distribution, as stated by Manikandan (2011), is used to summarize into an organized tabulation or graphical representation of the number of individuals responses per scale of measurement. Chi-square was also used to determine significant difference in the responses.

Ethical Considerations

Permission to conduct a survey was obtained from the administrators of the college while the consent of the participants was obtained prior to participating in the study. Authors were cited and the study underwent plagiarism scan.

Results and Discussions

It was found out that the two most dominant learning styles for accounting major students are the reflector and theorist styles. Garnering 2,921 affirmative responses from accounting major students, theorist style accounted for 30.43% of the total, closely in second is the theorist style which accounted for 26.92% with a total of 2,593 affirmative responses. The pattern is also consistent per year level. Reflector and theorists' styles have been dominant from First Year to Fifth Year regardless of gender.

For students who were included in the Dean's List or President's List of the College, the study revealed the same pattern. The reflector and theorists' styles are consistent from First Year to Fourth, except for Fifth Year where the activist style started to manifest. Among the forty statements, what appeared to be the strongest statement to the respondents is "*I like to find out how things work."* with 336 affirmative responses for theorist learners followed by "*I like to make decisions very carefully and preferably after weighing up all the other possibilities first."* with 322 affirmative responses for reflector learners. The top ten is made up of four reflector, three theorist, three pragmatist and one activist statement in spite of having reflector and learning styles as the most dominant.

Table 1. Chi-Square Test for Significant Difference of Learning Styles According to Gender

Results						
	Activist	Pragmatist	Reflector	Theorist		***Row Totals***
Female	1225 (1286.61) [2.95]	1515 (1507.74) [0.03]	2019 (1987.41) [0.50]	1787 (1764.24) [0.29]		6546
Male	666 (604.39) [6.28]	701 (708.26) [0.07]	902 (933.59) [1.07]	806 (828.76) [0.62]		3075
Column Totals	1891	2216	2921	2593		**9621 (Grand Total)**

The chi-square statistic is 11.83. The P-Value is 0.007989. The result is significant at p < 0.05.

Using the chi-square calculator, results determined that there is a significant difference on the learning styles of accounting major students according to gender. Therefore, for Ho1, the null hypothesis must be rejected.

Table 2. Chi-Square Test for Significant Difference of Learning Styles According to Year Level

Results						
	Activist	Pragmatist	Reflector	Theorist		***Row Totals***
First Year	609 (592.99) [0.43]	658 (694.90) [1.96]	925 (915.98) [0.09]	825 (813.13) [0.17]		3017
Second Year	403 (421.20) [0.79]	524 (493.60) [1.87]	639 (650.63) [0.21]	577 (577.57) [0.00]		2143
Third Year	365 (382.88) [0.83]	462 (448.68) [0.40]	593 (591.43) [0.00]	528 (525.01) [0.02]		1948
Fourth Year	437 (416.29) [1.03]	484 (487.84) [0.03]	629 (643.04) [0.31]	568 (570.83) [0.01]		2118
Fifth Yer	77 (77.64) [0.01]	88 (90.98) [0.10]	135 (119.92) [1.90]	95 (106.46) [1.23]		395
Column Totals	1891	2216	2921	2593		**9621 (Grand Total)**

The chi-square statistic is 11.3858. The P-Value is 0.496178. The result is *not* significant at p < 0.05.

Again, by using the chi-square calculator, results of the chi-square determined that there is no significant difference on the learning styles of accounting major students according to gender. Therefore, for Ho2, the null hypothesis must be accepted.

Table 3. Chi-Square Test for Significant Difference of Learning Styles According to Gender for President's / Dean's Listers

Results						
	Activist	Pragmatist	Reflector	Theorist		***Row Totals***
Female	780 (793.24) [0.22]	900 (904.18) [0.02]	1240 (1227.15) [0.13]	1061 (1056.42) [0.02]		3981
Male	507 (493.76) [0.36]	567 (562.82) [0.03]	751 (763.85) [0.22]	653 (657.58) [0.03]		2478
Column Totals	1287	1467	1991	1714		**6459 (Grand Total)**

The chi-square statistic is 1.029. The P-Value is 0.794242. The result is *not* significant at p < 0.05.

Among President's / Dean's Lister respondents, shown on Table 3 below revealed that there is no significant difference on the learning styles of accounting major students according to gender. Therefore, for Ho3, the null hypothesis must be accepted.

Table 4. Chi-Square Test for Significant Difference of Learning Styles According to Gender for President's / Dean's Listers

Results						
	Activist	Pragmatist	Reflector	Theorist		***Row Totals***
First Year	308 (317.02) [0.26]	345 (361.36) [0.74]	494 (490.43) [0.03]	444 (422.20) [1.13]		1591
Second Year	426 (439.76) [0.43]	511 (501.26) [0.19]	686 (680.31) [0.05]	584 (585.66) [0.00]		2207
Third Year	230 (244.69) [0.88]	288 (278.91) [0.30]	380 (378.53) [0.01]	330 (325.87) [0.05]		1228
Fourth Year	224 (218.19) [0.15]	247 (248.70) [0.01]	335 (337.54) [0.02]	289 (290.58) [0.01]		1095
Fifth Year	99 (67.35) [14.87]	76 (76.77) [0.01]	96 (104.19) [0.64]	67 (89.69) [5.74]		338
Column Totals	1287	1467	1991	1714		**6459 (Grand Total)**

The chi-square statistic is 25.5186. The P-Value is 0.012548. The result is significant at $p < 0.05$.

Again, among President's / Dean's Lister respondents, shown on Table 4 revealed that there is a significant difference on the learning styles of accounting major students according to year level. Therefore, for Ho4, the null hypothesis must be rejected.

Similar with other research, the results of this study must only be confined and analyzed within the boundaries of the study's limitations. Firstly, the chosen respondents were only limited to university accounting major students and the results would have been different if samples came from another college or university. Second, the results of the survey are only based on how the learners have evaluated or assessed themselves, which means the data are self-reported and do not measure exact or actual behavior.

Although there is an apparent mix of learning styles for a university's accounting major students, using Kolb's Learning Styles Questionnaire as adapted by Honey & Mumford containing forty statements, the reflector style came in at first and theorist at second, and are the two most dominant learning styles for HAU Accounting major students regardless of age, gender and academic performance (for Dean's List and President's List).

According to Novin, Arjomand and Jourdan (2003), reflectors like knowing the reason behind specific information and further analyze what a system has to provide; while lecture methods focusing on strengths and weaknesses, hands-on exploration mingling with students, entertaining questions and providing suggestions are some teaching techniques.

One of the recommended teaching strategies for reflectors, is by providing them self-analysis questionnaires as a teaching and reflection tool every after-classroom discussion to be facilitated by the instructor. For example, a quick seat work or a short case study followed by the discussion of answers. After the experience, student's queries and concerns for clarifications must be addressed immediately by the instructor as a form of feedback. These will fortify the student's ability to absorb and reason out concepts and skills. These learners are thinkers before doers. They love to reason out on things and work out on the 'whys' (Mobbs, 2003).

Another recommended teaching strategy for reflectors is one on one coaching with the student for assessment and feedback. The student will be able to reflect on the classroom and learning experiences through open communication with the teacher. Paired discussions with an instructor or a fellow student may assist in validating the learnings assimilated by the student. Moreover, holding of special review classes and knowledge sharing sessions facilitated by other instructors or fellow students with an advanced learning pace, is another recommendation. Assigning paired or

group works such projects and case studies help reflectors enhance their learnings by listening to the ideas and sharing their ideas with other students. Assigning research work on provided topics will allow students to reflect in advance on the assigned topics. Reviewing, verifying and looking for meaning behind outcomes or final results boost the student ability to reflect on concepts and skills acquired. Helping these learners grasp the bigger picture should be one of the teaching objectives.

Reflectors have the tendency to forget important details and are easily distracted (Mobbs, 2003), which means the teaching strategy for reflector learners, should involve a flawless and consistent discussion of processes supported with lectures putting much emphasis on the whys. During discussions, quick validating questions are very important, for example, conducting recitations by asking back or challenging the student's response with phrases, "Again, why?" or "Are you sure?" for concepts or problems just discussed. This will help the students remember the most important details and to keep them focused since reflectors, again, are easily diverted. Reflectors learn by looking at various perspectives in order to grasp the bigger picture (FEDA, 1995). Getting involved directly on the experience and reflecting on it is a coping mechanism. These learners are more concerned with the processes. Reflectors are also interested in people and are very observant with how people behave and feel, so the teaching personality and teaching strategies of the instructors or teachers could be contributing factors on how these learners get motivated with learning (FEDA, 1995).

Theorists, however, are more focused on precision and organized delivery of information, with a strong respect in an established system of knowledge, may rely on lecture methods - video or audio, are less instructor intensive and carefully follow prepared exercises (Novin et al., 1993).

For theorists, details, accuracy of facts and quality of information are imperative; being taught in a didactic way drives them in learning (FEDA, 1995). The teaching strategy that must aid these types of learners is by developing theoretical models or formula which for them will serve as a guide. Problem solving during classroom discussions is a teaching tool to enhance the personal learning effectiveness of a student. Since theorists are very keen on details and accuracy of facts, instructors or teachers assigned to these types of learners must be considered as experts or practitioners in their own field may it be accounting, law, taxation, research, finance or its equivalent.

Theorists enjoy reading, collecting data and performing deductive reasoning (FEDA, 1995). Since these learners have the firm grasp of the bigger picture, the way to possibly enhance the learning capacity of these learners is by assigning individual case studies and critical analysis on individual projects for each student.

Critical thinking, reading and collecting data while working individually are very strengths for these types of learners (Mobbs, 2003). Because of this, a teaching strategy may include careful and logical methods of discussion of topics which will help these learners establish links between and among ideas. For example, providing a quick recap of the previous chapter and determining how it is inter-related with the new topic, creates logic among topics of a book or subject. In addition, using deductive reasoning can also be a teaching approach for these learners who work their way from the big picture down to the facts (FEDA, 1995). Although information overload might hamper the student learning capacity with too much information to absorb, a teacher must be able to channel only relevant information. The teaching tone of the teacher must be didactic and modest (FEDA, 1995) which supports instructive and informative approach in discussing lessons.

'What is there to learn?' typically describes the question these learners aim to answer (FEDA, 1995). Applying theories and models during problem solving demonstration strengthens the student's ability to analyze and synthesize theories, could be another teaching strategy. A perfect example is assigning students to do board works, where after a series of step by step demonstration, the student's discussion of the theories and concepts behind the outcome or final answer must be underscored by the student. This is opposed to that of the

reflective style, where the focus is much on the processes.

The expert's views are very important for theorists to be able to work on solving problems (FEDA, 1995). Too much reliance on experts, might mean going too much by the book without considering other views. Thus, a teacher's strategy must be able to introduce to the student other views from other experts or sources; by encouraging the student to keep an open mind. However, the teacher must be careful to explain which one is being currently applied in practice and which one must be followed for examination purposes.

Theorist's strengths are the qualities of patience, industriousness, articulateness and thoroughness, these learners are too cautious which means all of their decisions must have sound theoretical and logical bases (FEDA, 1995). It can be inferred that these qualities must be also strongly possessed by the teacher or instructor. Although the pragmatist and activist learners may rank the lowest in terms based on the survey, some suggested teaching strategies may be applicable for these types of learners. Pragmatists are considered practical, interactive and objective learners using factual data to solve problems and make decisions (Novin et al., 1993). Problem solving, case studies and real-world case discussions for these students are recommended as teaching strategies (FEDA, 1995). Another teaching strategy for these types of learners is by highlighting first, the objectives of a topic for a subject, before proceeding with discussion. These objectives will later be revisited and checked if everything is met. Incorporating and discussing the impact of the most recent accounting standard updates in the practice of profession can be approaches in problem solving. Providing comprehensive pen and paper case studies and problem solving will challenge these types of learners. On the job training may reinforce conceptual skills acquired in a classroom setting.

Activists are active participants in learning and can find ways to independently explore the system and the best teaching style is one that encourages independent discovery or learning through activities (Novin et al., 1993). One strategy for teaching is by giving advance problems and questions to answer prior to discussion. Assigning group work, brainstorming, learning through games and puzzles, role playing, competition and debates are examples of activities for activist learners (Mobbs, 2003). Exposing these students with these types of activities enhance their ability of learning through independent discovery. One strategy is by conducting a quiz bee instead of a quiz before discussion. Another is by assigning lessons for power point or role-playing presentations followed by question and portion.

The five implications that can be drawn from this study may help improve the current teaching strategies for instructors teaching accounting major students. First, the results of the survey demonstrated that the four preferences of learning styles are present among accounting majors. It can be implied that the current mix of teaching strategies can still be applied. However, this brings us to the second implication that a little adjustment on these teaching strategies for accounting, taxation, law, business, finance, and general education subjects may be required. These modifications should lean towards the reflector and theorist learning styles since these are how the accounting major students are described in the results. Third implication is distinguishing accounting major students among other students in the university with unique preferences in learning styles. This study may not reveal the actual behavior of learners within the college, but will serve as a documented study for future reference, should this research be executed in other colleges of the same university The fifth implication, generally there is no significant difference among the learning styles per year level except for students who belong at the cream of the crop, that a particular learning may fit this group. Final implication is that, there is no single learning style that will describe accounting major students; thus, differences may exist between and among universities.

Conclusions

Accounting major students possess various learning styles, but it appeared that the reflector and theorist styles are the most dominant. However, the success of the student in the course he or she has undertaken will still depend on other factors not solely on the

learning style. Teachers must also be made aware of these learning styles, which is preferred by whom and must also be prepared on how to adjust to needs of their customers, the students. Teachers are encouraged to consider this study most especially for new hires, so they maybe oriented with effective teaching before becoming fully immersed in the academe. Profiling the students, by conducting and tallying the results of the forty-question survey at the start of every semester in order to help the teachers adjust to the preferred learning styles of the students is another suggested activity. After identifying the learning style, teachers may bank on the recommended teaching strategies to fortify the strengths of the students in their approach to learning as the semester runs.

Albeit globalization and the challenges of the currently implemented K-12 program for Philippine schools, the university will still need teachers who will complement the learning style of their students, and not students who will always adjust to the teaching methods of their teachers.

Acknowledgement

The author would like to thank all students who participated in this study and the institution for allowing him to conduct his research. The author also would like to extend its deepest gratitude to his wife Shane, family and loved ones for their support on this endeavor.

.

References

Adel M. Novin, Lari H. Arjomand, and Louis Jourdan (2003). *An Investigation into the Preferred Learning Styles of Accounting, Management, Marketing, and General Business Major*. Ehd Journal. http://und.edu/dept/ehd/journal/Fall2003/novin.pdf

Arquero & Rioja, 2011. *How well adapted are accounting students for Bologna?* Universidad de Huelva (España).

Further Education Development Agency (1995). *The Manual of Learning Styles by Honey and Mumford,* 1992

Grasha, A. F. (1996). *Teaching with style*. Retrieved from Pittsburgh, PA: Alliance database.

Holy Angel University (2010). History of Holy Angel University. http://www.hau.edu.ph/academics/cba/history.php

Honey & Peter, 2006. Learning Styles Questionnaire, 80 item, July 2006 edition; Maidenhead, UK; ISBN-10: 1-902899-6; ISBN-13: 978-1902899-29-9. www.peterhoney.com

Kolb, D. (1984). Experiential learning: Experience as the source of learning and development. *In Learning Styles*. Englewood Cliffs, NJ: Prentice-Hall.

Lee, J. (1994). Odds Ratio or Relative Risk for Cross-Sectional Data? International Journal of Epidemiology 23. Retrieved from http://www.springer.com/public+health/journal/38

Montgomery, S. M. and Groat, L. N. (2002). Student Learning Styles and Their Implications For Teaching. CRLT. 1-11. http://www.centerforresearchonlearningandteaching.htm

Mc Leod, S. (2017) Kolb's Learning Styles and Experiential Learning https://www.simplypsychology.org/learning-kolb.html

Mobbs, R. (2003). *Honey* Mobbs, R. (2003). *Honey and Mumford Learning Styles*. Retrieved from http://www.le.ac.uk. Mobbs, R. (2003). Schmidt, Co; Kohlmann, T (2008). When to use the odds ratio or the relative risk? *International journal of public health* http://www.springer.com/public+health/journal/38

Straker, D. (2011). *Kolb's Learning Styles*. Retrieved from http://changingminds.org/explanations/learning/kolb_learning.html

Taylor, E. (2013). Five (5) Ways to Find A Student's Optimal Learning. http://www.edudemic.com/find-a-students-optimal-learning-style/

Wratcher, M. A., Morrison, E. E., Riley, V. L., & Scheirton, L. S. (1997). *Curriculum and program planning: A study guide for the core seminar*. Programs for higher education: Nova Southeastern University.

Yutuc, Rio G, (2013). *Learning Sytles (LSI): Are Korean and Filipino Business Student Groups Disimmilar?* Department of Management, College of Business & Accountancy, Holy Angel University.