

An Inquiry Based Learning Experience Using K-W-L in Business Communication Presentations: The Student Perspective

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ABSTRACT

Technological advancement, particularly in terms of scientific knowledge within the various fields of subject, is an important feature of the twenty-first century. In line with such technological advancement, teaching learning strategies and methods used for teaching students are not discounted (Alsalhi, 2020). The creativity of educators is even more pronounced during the pandemic (Barber, 2020) where all educators have to resort to online teaching. In such online platforms, student engagement poses a challenge for educators to gain student attention and engagement. Educators need to resort various approaches to gain student engagement. The inquiry-based-learning approach using the “K-W-L” strategy or “Know-What-Learnt” chart organizer encourages all students to take ownership and experience learning beyond the classroom context. The Business Communication students used the “K-W-L” as part of the inquiry-based learning experience to question, research, analyze, sort, and present their answers according to what they know, learn and learnt about a topic. Findings suggest student’s receptivity to the using the organizer as a learning tool. Learning occurs both outside and within the classroom whether online or offline. Learning becomes student-centered, discussing discoveries and experiences, and reflecting on new-found knowledge. Learning is not mere regurgitation of contents but is actively acquired through independent questioning.

Keywords: Action research, inquiry based learning, K-W-L strategy, student centered, questioning skills, business communication

INTRODUCTION

The rapid and astonishing development of knowledge and technology, particularly in terms of scientific knowledge within the various fields of subject, is one of the most important features of the twenty-first century in which we live today. In line with such technological advancement, teaching learning strategies and methods used for teaching students are not discounted (Alsalihi, 2020). The creativity of educators is even more pronounced during the pandemic (Barber, 2020) where all educators had to resort to online teaching using both asynchronous and synchronous mode as part of teaching (Miller, Sellnow, & Strawser, 2020). Teaching in such online settings presented educators with still another issue, as the phenomenon of students engaging at their best is more prominent when students are left to spend long periods of time online (Kaup, Jain, Shivalli, Pandey & Kaup, 2020). Getting students to participate in class, whether online or in person, is always a struggle (Shenoy, Mahendra & Vijay, 2020). Educators were forced to teach online due to a lack of pedagogical content knowledge of such platforms (Rapanta, Botturi, Goodyear et al., 2020). If the online class and setting are face with lack of facilities and infrastructure, this can lead to less active learning (Husni, 2020). The use of the learning model is thought to be a crucial component for learning to occur.

Students might be encouraged to be more active and passionate by using appropriate learning approaches. Learning activities which use the correct learning model can motivate students to be more active while also creating a creative, effective, and enjoyable learning process (DePorter & Hernacki, 2007). The educator can establish an environment in which students actively ask questions, question, and voice ideas during the learning process, or otherwise known as active learning (Mehrotra, 2009). This is so as learning is an active process where learners construct knowledge actively rather than in a passive approach where learners merely absorb input from lectures. If students are not given the opportunity to participate actively in their learning, this can negatively impact the nature of learning (Husni, Azis, Tantowie & Rizal, 2020). Students' active participation is critical in the formation of a creative generation capable of producing knowledge for the benefit of themselves and others. Within such digital settings, educators need to change from traditional teacher-centered techniques to more student-centered ways (Lasry, Charles & Whittaker, 2014).

Student centered learning with interactive learning environments empowers students to take ownership of their learning both inside and out of the classroom learning in various fields (Thongkoo, Panjaburee & Daungcharone, 2019). One such method to promote self empowerment of students own learning is by the inquiry based learning approach (Pedaste, Maeots, Leijien & Sarapuu, 2012). The inquiry based learning approach is ranked as one of the approaches in teaching learning approaches which are more student-centered focus rather than the traditional teacher centered approach.

LITERATURE REVIEW

Inquiry-Based Learning

Savery (2006) describes inquiry-based learning as “a student-centered, active learning approach focused on questioning, critical thinking, and problem solving. Inquiry-based learning activities begin with a question followed by investigating solutions, creating new knowledge as information is gathered and understood, discussing discoveries and experiences, and reflecting on new-found knowledge” (p. 16). Inquiry-based learning first was used commonly in the science classroom, but it has since expanded to other content areas (Lacina, 2007; Shriner, Clark, Nail, Schelle, & Libler, 2010; Chu, Reynolds, Tavares, Notari & Lee, 2021).

Inquiry-based learning prompts students in learning and to make learning more meaningful with a problem or task related to specific knowledge domains. Inquiry-based learning is also useful to encourage students communication and collaborative teamwork (Chen, 2021). For inquiry-based learning approach to be successfully developed and well managed, effective strategies should be included in the approach. Many strategies have been used by the educators to help the students in learning process (Shintia, 2021). One of the best strategies is via the “Know-Want-Learn” (K-W-L) chart strategy (Ogle, 1986).

K-W-L Strategy

What does the "K-W-L" strategy entail? The acronym "K-W-L" stands for "What I Know?" followed by "What I Want to Learn?" The letter "L" stands for "What I Learned?" This means that when students are given an assignment, they must also respond to the “K-W-L” chart method, which was popularized by Ogle (1986). The K-W-L chart strategy functions as a link among new and old knowledge. Students are asked what they already know about the issue, then what they want to know and learn about it, and finally, after reading the content, they share what they have learned (Ogle, 1989; Youniss, 2013).

This method with specific knowledge domains, although created separately, works effectively when all elements (K-W-L) are used together. The K-W-L chart technique can be applied to both individuals and groups (Sinambela, Manik & Pangaribuan, 2015). This means that the learning technique can be used by individuals or groups when learning. This technique is also highly recommended as it is one of the many graphic organizers that can assist students organized and it adopts material before, during, and after a lesson or unit. The K-W-L chart technique has been utilized as an instructional reading technique since its inception (Alsalhi, 2020). According to Ogle (2009), using K-W-L charts stimulates students' curiosity. In a similar vein, Martorella, Beal, and Bolick (2005) claimed that the K-W-L chart aids students in drawing attention to their prior knowledge.

The K-W-L chart method has a number of advantages, as specified by Daniel (2011) which states three advantages mainly, (a) Promoting Active Learning: Studies demonstrate that active learning, which may be achieved through the K-W-L technique, is critical to educational achievement; (b) Promoting Academic Success: Academic success is impossible to achieve unless students learn to connect to their classes and the themes or subject matter they are studying, and (c) Improving Learning: It is common information that there is a strong link

between student performance and past information that can be awakened through understanding (Daniel, 2011).

According to Kadem and Bouaziz (2020), K-W-L is a very effective method that may be used in a variety of subjects. There are many ways to illustrate the K-W-L chart. The following Figure 1: The example of K-W-L chart, shows the arrangement of the “K-W-L” chart strategy illustration.

K- What I Know	W- What I Want to Learn	L- What I learned
Categories of information we expect to use: 1. 2. 3. 4. 5. 6. 7.		

Figure 1. K-W-L Chart (Ogle, 1986)

In line with the introduction of such a learning activity in the Business Communication class, the two research questions posed are:

- 1) What are students learning experiences of participating in the inquiry-based learning by using K-W-L chart strategy?
- 2) What are students learning experiences of participating in using K-W-L chart strategy in the Business Communication classroom?

METHODOLOGY

This study utilized the action research approach where inquiry-based learning formed the basis of the action research conducted in the class. Mills (2011) stated that action research is a systematic procedure conducted by educators to collect information about, and subsequently improve, the ways their educational setting operates, their teaching, and their student learning. Action based research comprises several stages in its cycle namely, Planning, Action, Analysis and Conclusion. If the desired improvement is not yet realized, the updated plan is utilized to carry out the second cycle, which includes the same four steps as the first (Aidinopoulou & Sampson, 2017).

Action research commences with teachers (and possibly students) determining the inquiry focus, deciding the intended improvement, and devising a plan to observe and record their classroom activities (Plan). The classroom activities are then applied (Action) and relevant observations are recorded (Observe) which are then critically reflected upon individually and collaboratively (Reflect) leading to revising classroom activities based on the results or what has been learned (Revised Plan). This is illustrated in Figure 2 on The 4 Stages Action Research Cycle.

Action research sparks innovation and boosts creativity in the classroom. In such research, a question or problem is identified, a strategy is tested, data is gathered, and determined if the strategy works. The result is something dynamic, innovative, and tied directly to the classroom activity (Spencer & Molina, 2018). The research enables teachers and students to collaboratively explore solutions to real problems they encounter in their classroom or attempt to develop classroom practices for improving their students' achievement (Gogus, 2012).

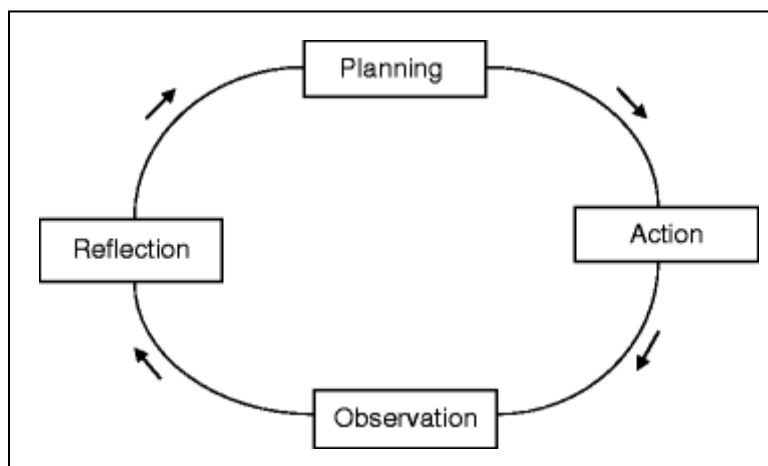


Figure 2. The 4 Stages Action Research Cycle (Gogus, 2012)

To carry out the action research, the Inquiry-Based Learning (IBL) approach was used to encourage student self-discovery and higher order thinking This approach has been viewed as

one that involves the application of problem-solving approaches and problem-solving skills (Pedaste & Sarappu, 2006; Rooney, 2012). Inquiry-based learning is an educational paradigm in which students generate knowledge using methods and procedures comparable to those used by professional scientists (Keselman, 2003). Pedaste, Maeots, Leijen, & Sarapuu (2012) defines Inquiry-based learning as a process of discovering novel causal relationships in which the learner formulates hypotheses and tests them through experiments and/or observations.

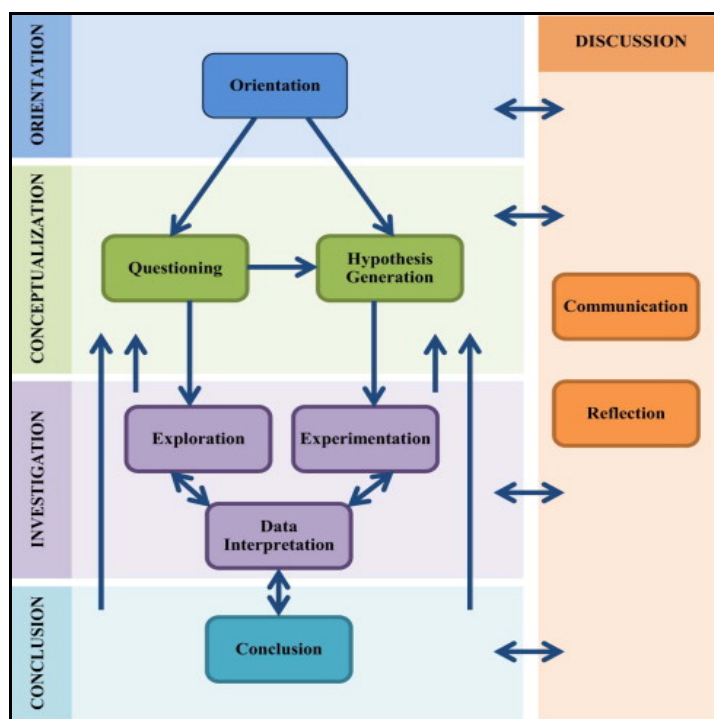


Figure 3. Inquiry-based learning framework (general phases, sub-phases, and their relations) (Pedaste et al., 2015)

Inquiry based learning also stresses on active participation and learner’s ownership to discovering new knowledge (de Jong & van Joolingen, 1998). In inquiry-based learning, learning is often organized into inquiry phases that together form an inquiry cycle. An inquiry-based cycle as indicated by Pedaste et al (2012) suggests 5 phases including Orientation, Questioning or Hypothesis Generation, Exploration or Experimentation, Data Interpretation and Conclusion (see Figure 3: Inquiry- Based Learning Framework). In Pedaste’s (2012) search phases in IBL, emphasis is placed on discussing, communication, questioning and reflection. To assist students in discovering new knowledge, students need to go through a process of posing inquiry questions, gathering and assessing evidence, validating findings and engaging in informed debate or discussion on topic themes.

For this inquiry learning process to occur, the K-W-L chart strategy was implemented in the inquiry-based learning. The K-W-L strategy approach provides students the ability to learn and develop business skills through the medium of meaningful learning by going through seven

stages which includes:

1. Distribute the KWL chart activity sheet.
2. Determine the topic.
3. Ask the students to list in the “K” column all the information that they know (it is may not be correct) about the topic before read, research, and observe.
4. Encourage the students to think of interesting pertinent question.
5. Ask the students to review their charts.
6. Guide the students by having them look at the “K” column to see the information they listed as prior knowledge was correct.
7. Guide the students to look at the “W” column to see all the questions, if the students may need to find an alternate source to answer the question and write in the “L” column on what they learnt.

Thus, in a lesson on use of “Visuals used in Foreign Language”, students are given an instruction where they are required to find out information of any Visual of a preferred choice of a language. They were required to comment on the layout, color, size of the font, pattern the way the message is relayed in a visual based on the topic on “Common Text layout Methods of Messages” in Visuals. The task also required students to comment on the use of pattern layout used in visuals for relaying messages which discussed on the “Gutenberg Diagram; Z pattern and Grid Pattern”. The students were required to find patterns in visuals of other foreign languages to be able to gain exposure and understanding of different patterns used in different cultural communities. Students were required to find out information if there were differences in the layout used in other foreign languages as compared to the usual patterns discussed in the class. The students were to question, research and reflect on the similarities and differences learnt in the visuals that they have.

DATA ANALYSIS AND FINDINGS

Demographic Profile

This study was conducted at a technical private university situated in the state of Perak Darul Ridzuan, Malaysia during the January semester in the academic year 2021. There were a total number of 7 responses received by students who were registered for the Business Communication course. The lecturer was involved in teaching the said class. Out of a total of 7 students, 71.4% were male and 28.6% were female. The students involved were from different courses which are Engineering and Information Technology/Business Information systems programme. The students were from different cohorts of the degree programme. These students were either in the second, third or final year of their degree programme.

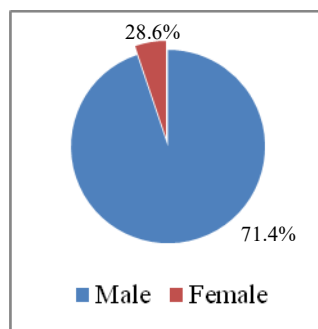


Figure 4. Gender of Respondent

This study was a qualitative research design. The primary source of data were the students' discussion inputs provided in the class presentations in the class and through students' responses to the semi-structured questions. Data was analysed using Creswell's (2013) six-step generic process of data analysis for analysing qualitative data. Three themes emerged for Research question 1 which centred on students' experiences in inquiry-based learning and understanding of K-W-L chart strategy.

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Thematic 1: Useful and Knowledgeable Learning out of the Classroom

Based on the qualitative feedback provided by the students, it is indicated that students found the activity useful as it created opportunities for students to view the problem in various contexts. Student A reiterates, "It is interesting and knowledgeable". Student B adds, "This made me question my activities so I can understand my knowledge better". Student C reinforces that "They (friends in the class) did a great job in developing the K-W-L techniques". These responses reflect that with the use of the K-W-L chart, student learning is enhanced on a topic as they are more focused in searching for information and relating the information to the task. There is learning outside the classroom. There are differences and similarities made in comparison to the types of patterns and layout in Visuals used in different languages used in countries like Germany, Japan, and China. The inquiry learning approach allowed students to explore, investigate and critically analyze the new knowledge acquired through their search. Through this method, students are required to learn and explore and make independent conclusions based on the information they have researched on by posing questions, gathering and assessing evidence, validating findings and engaging in informed debate or discussion on topic themes. They need to ask themselves questions related to the topic by use of the approach. This finding on positive responses and experiences in Inquiry Based Learning classes is similarly evident in other studies (Chang, Chang, & Shih, 2016; Phurikultong, & Tuntiwongwanich, 2021).

Theme 2: Effective Strategy in Discovering New Knowledge

The experience in the inquiry-based learning and while learning activities enabled the students to be more active. When trying to explain a viewpoint, the students needed to ensure that they were answering the questions that they posed as part of the inquiry in discovering new knowledge. Student D exemplifies, “The inquiry-based learning via the use of the K-W-L is a simple yet effective way in describing and researching visual be it a logo or an advertisement”. Student E adds that the learning activity has also assisted the students because “K-W-L was effective in organising and it was informative”. Student F said, “Very good and great way to learn”. These feedback from the students indicate that K-W-L chart strategy is the effective strategy applied in inquiry-based learning. It is an effective strategy to “capture students learning” as evidenced by Student F. Through IBL, students also learn from each other and this approach allows students to ask each other questions during the classroom session. Similar finding is also mirrored in other language classroom research (Levy, Thomas, Drago & Rex, 2013).

Theme 3: Organised and Structured Layout

In searching for information related to the task, the students need to categorize and structure their information via the said inquiry-based learning approach. They had to ask themselves questions and find solutions to the task or questions of inquiry. They were required to process their information in a sequential and organised manner. K-W-L chart strategy will make the task given would be organised. Student G stated “Organise thought processes”. Student B adds, “It’s very organised and easy to understand”. Student A mentioned that “The K-W-L organiser allows simple yet effective organizing and analyzing to be done”. This shown that this strategy allows students to organise their feedback and learning processes in an organised and structured layout. The students are able to share their feedback learnt out of the classroom. This feedback is similarly reflected in other studies where the use of the K-W-L chart strategy has been deemed to create organised and structured way of learning subject contents among learners (Lismayanti, 2014).

Theme 4: Optimized Understanding

As mentioned by Student E, “This chart is good to make us understand more about the topic”. This shows that K-W-L chart strategy will allow students to list out whatever they want to know. Thus, they will understand more about the topic. Student G adds, “I can understand the subject better based on the questioning and validating of information.” When they know about the issue that has been discussed, they can improve heir academic success which is in line with studies by Daniel (2011), K-W-L chart strategy has its benefit which one of it is promoting academic success. An understanding of the topic that has been discussed will influence academic success (Daniel, 2011)

For Research question 2, two themes were developed as a result of students’ experiences participating in using K-W-L chart strategy in the Business Communication classroom.

Theme 1: Confidence in Presentation

Student C mentioned that K-W-L chart strategy should be practiced when presentation as the K-W-L strategy is motivating in the statement, “It motivates students to be more confident with presentation. Student A reinforces that “K-W-L chart strategy will make the presentation well structured”. Student E adds, “It is easy to understand and to present”. Students are motivated

and confident to present when such learning organizers are used in inquiry based learning (Azman & Shin, 2012). With these feedback, it shows that K-W-L chart strategy will help students in presenting their work or task that has been provided to them. The effectiveness of the K-W-L strategy is similarly mirrored in boosting the confidence of learners (Lismayanti, 2014; Dieu, 2015).

Theme 2: Active Learning

The experience in using K-W-L chart strategy in the Business Communication classroom will enhance active learning. Student F said “This strategy is good for active learning”. Student G adds, “It is engaging and active”. Other than that, Student D stated “It opens up a wider solution or things to really look at and think about”. These responses support the assumption that this strategy will enhance to active learning and can attract students participation to focus on a variety of ways of solving a particular task. The finding concurs on the importance of greater participation through such strategy (Steele & Dyer, 2014).

Theme 3: Improving soft skills

Student A mentioned that K-W-L chart strategy should be implemented in students learning because this can improving their soft skills, as the student said, “it is good to improve our speaking skills”. They will express what they know, what they want to know and after the discussion part, they will explained what they have learnt. Student D stated that, “I saw the way my classmate explain the topic during the task presentation”. This also can be related with communication skills. Other than that, Student E said, “I learnt on how to write better” and Student F mentioned, “I saw my friends have different ways in writing the report after they learnt and listen during the lectures”. This shows that students can improve their writing skills after they learnt and listen to the lectures as they already list out what they want to know about the topics (Barkley & Major, 2018).

CONCLUSION

A salient feature evolved from this study is the increased learning obtained from the inquiry-based learning which is based on he students own initiatives and learning out of the classroom. The study also indicates that the said teaching tool or K-W-L organizer is an effective way in enhancing the inquiry-based learning of both the students and the lecturer as new learning experiences are obtained when the students reflect on their findings in the classroom. Students also gain confidence as they are more structured in their feedback during the reflection or discussions in the classroom. The findings suggest that K-W-L chart strategy should be implemented in various field of education as students learn from each other and become more confident and motivated in their presentations and discussions. It can be suggested that by applying inquiry-based learning in using K-W-L chart strategy as a new way forward for teaching various themes in the business communication or language related courses in the classrooms.

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