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KNOWLEDGE CAFÉ AS A NEW EMERGING TECHNIQUE IN DATA COLLECTION FOR HIGHER EDUCATIONAL RESEARCH

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Abstract:

This conceptual article highlights topics related to knowledge café that have made a new impact in research in higher learning institutions. Although the number of publications on this topic is limited, it does give the impression that knowledge café has the potential to be one of the new techniques in research. Hence, this article describes higher education research in Malaysia, research on knowledge café as a new technique in higher education, and research process based on knowledge café for higher learning institutions. This article is significant in helping more researchers use the knowledge café method in research in higher learning institutions.

Keywords:

Knowledge Cafe, Collaborative Learning, Data Collection Technique, Research Methodology, Higher Education

Introduction

Knowledge café is a discussion session among a group of people who have the same interest in the topics being discussed. It was initiated by David Gurteen. Gurteen has run many sessions

of knowledge café through a face-to-face approach. Due to the volatility and trends, the knowledge café nowadays can be run through the online platform with the same objectives and purposes. Normally the conversation that occurs in a knowledge café among the participants is open and creative on the same topics that attract the same interest in disclosing collective knowledge and sharing ideas to enhance a deeper understanding of relevant issues. Finally, the conversation leads to critical thinking and reformation.

Literature Review

Knowledge Café

Knowledge café is a knowledge-sharing session that falls under the umbrella of Knowledge Management. “The aims of the Café include the surfacing of the group’s collective knowledge; learning from each other; sharing ideas and insights; gaining a deeper understanding of a topic and the issues involved and exploring possibilities. It can also be used to help connect people, improve interpersonal relationships, break down organisational silos, and improve trust and engagement” (Gurteen, n.d). It's all about connecting people from diverse backgrounds all around the world to sit together and learn from each other.

To conduct a knowledge café, you are required to comply with the to-do list. The six items on the to-do list as suggested by the Gurteen are as follows;

The organiser must provide a comfortable and relaxing place, as well as there are tables and chairs for 4-5 people. A table, with food, and soft drinks is also provided.

The organiser also must invite a group of participants by number is best between 16-32 people.

Choose a facilitator to monitor the knowledge café and make things easier – facilitators are not necessarily experts. What's important is he must be a listener who is good with the skills to handle an occasion.

Prepare an effective question to spark a conversation.

Allowable time between 1.5 to -2.0 Hours

A flip chart is not required in the room.

Once the organiser complies with the to-do list, the organiser can conduct the knowledge café session.

1. It will start with the facilitator. The facilitator takes 10-20 minutes to introduce the knowledge cafe, explain its purpose, and throw a query (the amount of time spent is highly dependent on whether the same participant has ever joined a café like this or not).
2. Invitation speakers can be used to introduce the knowledge cafe theme and give queries, but the time allotted to them should be limited.
3. Participants are divided into small groups of 4 or 5 to discuss questions within 30-60 minutes.
4. At the request of the facilitator, participants will switch groups usually three times with each participant undergoing three conversations approximately over 10-20 minutes.
5. After a conversation in a small group, the whole group is regrouped in a circle to exchange thoughts within 15-30 minutes.

Higher Education: Teaching and Learning

The learning style in higher learning centres has changed from teacher-centred learning to students-centred learning. It is “increasingly commonplace at institutions around the world and

becoming a full-fledged alternative to traditional teaching”(Abdigapbarova and Zhiyenbayeva, 2023). In this approach, the students need to be responsible for their learning (Slunt & Giancarlo, 2004; Wright, 2011; Overby 2011; Abdigapbarova and Zhiyenbayeva, 2023). Apart from that, teachers need to encourage creativity (Peralta and Segura, 2023) in carrying out the task of ensuring that student-centred learning can go well. To make student-centred learning a success, collaborative learning with friends in discussions is seen as more effective and able to encourage “elaborative talk and stimulate students to participate” (Boxtel, , Linden, & Kanselaar, 2000). In fact, collaborative learning is one of the intervention tools for student-centred learning (Creswell, 2012; Luu 2010) as students are responsible for their learning (Nagata and Ronkowski (1998). Therefore, one of the creative learning techniques that can be applied to university students is the discussion in the knowledge café. This is because the knowledge café is a knowledge-sharing medium (Lefika and Mearns, 2015) that allows participants to share ideas, information, and knowledge uniquely. In fact, Knowledge Café has also been accepted as a new research technique in higher education institutions.

Therefore, the higher education research landscape needs to go through a transformational process which is the acceptance of new techniques in research. New ideas and inspirations need to be highlighted to honour research among researchers in higher education institutions. To see the development of research on the world of education in Malaysia, researchers reviewed the Jurnal Penyelidikan Pendidikan published by the Ministry of Education Malaysia for the years 2021 to 2023. In this review, there are several research methods used by researchers in the journals. The summary is included in the table below.

Table 1: Educational Research Methodology Trends in Malaysia 2021-2023

<i>Journal Name</i>	<i>Year</i>	<i>Publisher</i>	<i>Research Methodology used by researchers by Category</i>		
			<i>Quantitative</i>	<i>Qualitative</i>	<i>Mix-method</i>
Jurnal Penyelidikan Pendidikan	2021	Ministry of Education	10	1	1
Jurnal Penyelidikan Pendidikan	2022	Ministry of Education	9	1	1
Jurnal Penyelidikan Pendidikan	2023	Ministry of Education	13	7	2
Total			32	9	4

Source: (Jurnal Penyelidikan Pendidikan)

Table 1 indicates that quantitative is a leading research methodology in educational research compared to qualitative and mixed method approaches. Research conducted over the last 3 years shows that more research in education uses quantitative techniques rather than qualitative and mixed methods. A total of 32 quantitative research has been produced over the past 3 years. Then it was followed by qualitative research of 9 research and a mix-method of 4 research.

This gives the impression that the potential of new research such as knowledge café can be highlighted as a new research method in education that provides variation in the research field of education. This is because too many researchers have used quantitative methods in research. Therefore, to make the research more interesting, researchers proposed to try this knowledge café method that gives different results to not only the facilitator but to the participants of the knowledge café itself.

What makes the knowledge café differ from others is that the knowledge café itself provides collaborative learning elements. Which helps people get more ideas, exchange their opinions, transfer their knowledge, and share experiences. That is the thing that they learn through the discussion that can be brought home when they leave the discussion session.

Knowledge Cafe and Collaborative Learning: realising the connection.

There is a connection between knowledge café and collaborative learning. People are connected in collaborative learning through knowledge café. It seems that knowledge café enables collaborative learning to happen in small group discussions. “The Knowledge Café is a conversational process that brings a group of people together to share experiences, learn from each other, build relationships, and make a better sense of a rapidly changing, complex, less predictable world to improve decision-making, innovation and how we work together”(Gurteen, n.d.).

This pertinence gives the idea to the instructor to use the knowledge café method as an approach to establish collaborative learning in teaching and learning at the University. It is interesting to be applied among university students. In addition, knowledge café is also become a unique research data collection method for educational research.

“Collaborative learning is an educational approach to teaching and learning that involves groups of learners working together to solve a problem, complete a task, or create a product” (Laal and Ghodsi, 2011; Laal & Laal, 2012). Even this group of students will work together in small groups towards the same goal (Laal & Laal, 2012). In this regard, students are given group assignments to solve an issue or problem posed by the instructor to the students. Through this session, students work together to complete the tasks in groups. This involves discussion and exchange of ideas among students from various backgrounds that positively impact solving a problem. In fact, collaborative learning also stimulates students' thinking to be more critical and become respectful to each other in giving ideas or opinions.

There are five basic elements involved in CL: “Positive interdependence, Individual and group accountability, Interpersonal and small group skills, Face-to-face promotive interaction, and Group processing” (Laal & Laal, 2012). “Students involved with collaborative learning have a higher level of thinking and store information for a longer time than students who work individually” (Rao, 2019). This will lead to the improvement of student performance in the classroom.

Practically both collaborative learning and knowledge café have benefits and provide a high impact on education. Among the objectives of a knowledge café is to share knowledge and learn from each other. This can improve the relationship with each other. The sharing of knowledge and learning from each other also provides an in-depth understanding of the complex issues in the group. In addition, it also helps Identify risks or unintended consequences associated with a project, indirectly surface hidden problems, and from this, it leads to surface opportunities.

The same goes for collaborative learning, it benefits in many ways. The benefits of the collaborative learning and knowledge café are also significant for all participants. It adds knowledge among participants and increases self-confidence and courage in giving opinions, evaluating an opinion, and discussing it in an atmosphere of cooperation and harmony.

Significance Of Collaborative Learning

Laal and Ghodsi (2011) have summarised the significance of collaborative learning into four categories. The categories are illustrated in the figure below.

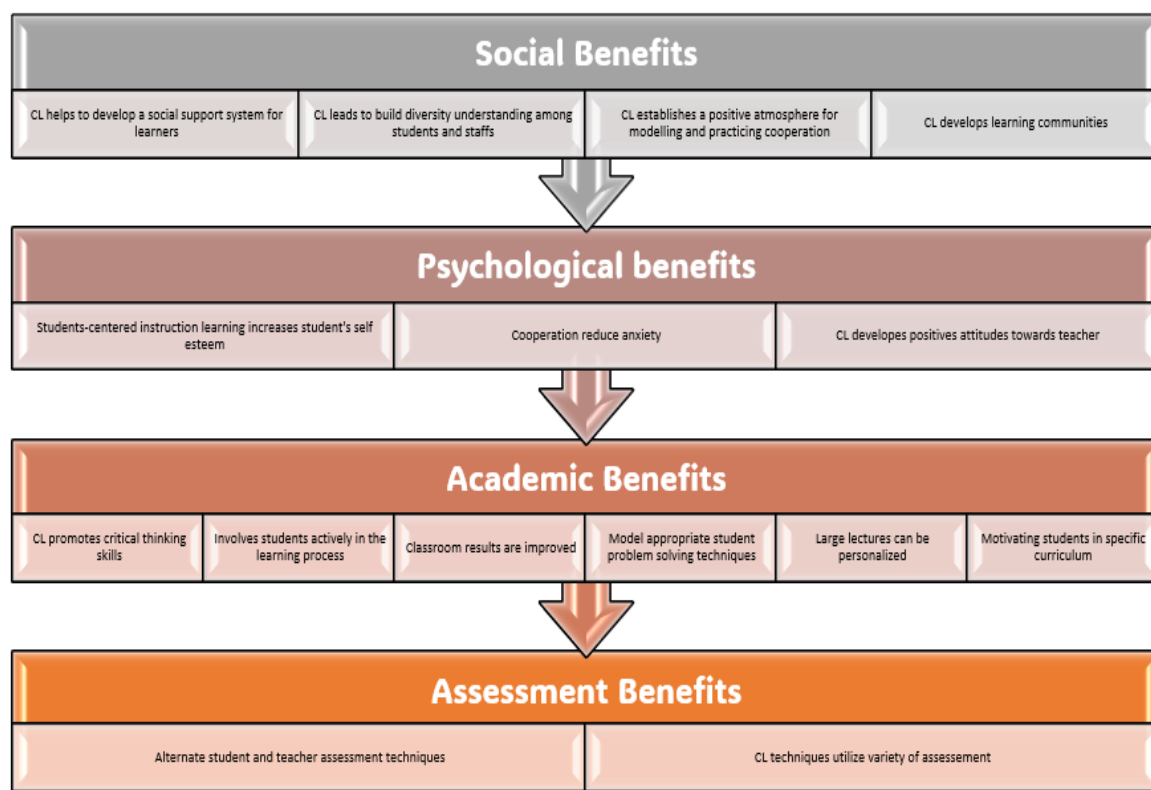


Figure 1: Benefits of Collaborative Learning by Laal and Ghodsi (2011)

Source: (Laal and Ghodsi)

Social benefits, psychological benefits, academic benefits, and assessment benefits are four categories of collaborative learning benefits. On the social benefits aspect, collaborative learning creates a social atmosphere among participants, and a social support system among students, enhances a deep understanding among students and instructors, and builds a learning community.

Meanwhile, in terms of psychological impact, collaborative learning can enhance self-esteem, reduce anxiety, and build positive relationships between students and instructors.

Whereas, in terms of academic benefits, collaborative learning helps students participate actively in learning, improves critical thinking skills among students, and enhances classroom performance. Collaborative learning also can be modelled as problem-solving techniques, personalised large lecture classes, and motivating students in a specific curriculum.

While, for the benefit of the assessment, it gives a new lease of life in the assessment using a student student-centred approach.

Application of knowledge cafe in Educational Research

The concept of knowledge café has been borrowed by some researchers to be used as the data collection technique in research at higher learning institutions. The researchers who borrowed and used this technique were Brijlall (2014), Baim (2016), Singh (2017) and Khusaini, Daud, Asari and Selamat (2020).

Brijlall uses Knowledge café, a learning approach to encourage collaborative learning in a first-year Mathematics module. Brijlall (2014) highlighted that “the rationale for carrying out this exploration was to empower students to become active, responsible, and critical learners”. There are thirty-two (32) numbers of first-year Electrical Engineering students at a South African University have participated in the study. They were divided into five groups and involved in mathematics tasks. “Findings emanating from the data analysis indicated that this approach to collaborative learning provided positive attributes that aided effective Mathematics learning and learning in general” (Brijlall, 2014).

Meanwhile, Baim (2016) in his article explains “the application of Knowledge Cafe which involves the local community and the regional campus of a major university to provide business owners with advanced knowledge of professional social media technology. Details of how this smart agreement was established are also clarified along with the teaching insights from the inaugural year of operation. Future work and activity proposals provide an overview of how The Knowledge Café can evolve as campus-community partnerships continue to grow”.

On the other hand, Singh (2017) wrote an article entitled The Knowledge Café as a Research Technique. In this article, Singh highlights that the purpose of the article is to describe the application of a Knowledge Café as an academic research technique. The research process was described in detail from the start to the end. It is a very interesting article to learn about the research process carried out using the knowledge cafe technique.

Khusaini, Daud, Asari and Selamat (2020) also carried out a research using knowledge cafe technique using an article written by Singh as a guideline for the research process. They conduct research at Higher Learning Institution to investigate the effectiveness of the knowledge cafe approach in teaching and learning among Information Management graduates. The findings of the study showed “knowledge café help enhance students' knowledge and soft skills. It also can be utilised as a feasible tool in improving student knowledge and soft skills at the university. During the small group discussion through the knowledge café, respondents learn how to work with other people and respect other people's opinions, this can help improve their communication skills. These findings are significant to information management

academics to integrate knowledge café approaches in their class” (Khusaini, Daud, Asari and Selamat, 2020).

Besides the articles written by the researchers, the writing about Knowledge café is based on the information shared by the founder of Knowledge café himself through his website and through questions posed by the researchers to the founders of the Knowledge café itself. Gurteen on his website describes in detail the knowledge café for the reader’s reference. In addition, based on the website and the experience of joining the knowledge café organised by Gurteen makes researchers interested in participating and doing research on the knowledge café.

Other researchers in 2015 namely Lefika and Mearns wrote an article related to knowledge café. In the article, They describe the knowledge café as a fairly new technique to facilitate knowledge sharing and be able to enhance knowledge transfer. They investigate and discuss various aspects of the knowledge café used for knowledge sharing through the Delphi study. The results of the study provide guidelines for conducting knowledge café, some insight into the advantages and disadvantages of knowledge café, and choices on similar techniques to knowledge café.

Singh (2017) has written an article to help highlight knowledge café as an academic research method as this method has been ignored in academic literature as asserted by Gurteen (n.d.); Remenyi (2004) and Lefika and Mearns (2015). The advent of writing on this method can help narrow the gap in literature and the limitations of the amount of writing in this topic (Lefika and Mearns, 2015), and it is not well understood by academic researchers (Singh 2017).

Therefore, a clear explanation on knowledge café writing is needed to provide a good understanding among readers and researchers who wish to use this method as a method in their research. The following are the references that can be referred to conduct the knowledge café research method. A summary of the references can be found in the table below.

Table 2: The Evolutionary Applications of Knowledge Cafe as a Research Method

Name	Role	Year	Title	Research Scope	Type of Publication
Gurteen	Knowledge Cafe Founder	n.d.	Knowledge Cafe	Methodology	Website
Remenyi	Researcher	2004	Knowledge Sharing and Collaboration Knowledge Cafes– Do it Yourself Knowledge Sharing	Knowledge Management	Conference Paper

Brijlall	Researcher	2014	Exploring the Gurteen Knowledge Café approach as an innovative teaching for learning strategy with first-year engineering students	Higher Educational Research	Journal
Lefika and Mearns	Researchers	2015	Adding knowledge cafés to the repertoire of knowledge sharing techniques	Knowledge Management	Journal
Baim	Researcher	2016	The Knowledge Cafe: A Unique Teaching Experience	Higher Educational Research	Journal
Singh	Researcher	2017	The Knowledge Café as a Research Technique	Higher Educational Research	Journal
Khusaini, Daud, Asari and Selamat	Researchers	2020	Knowledge Cafe: New Approach to Teaching and Learning in Higher Learning Institution	Higher Educational Research	Conference Paper

Source: (Gurteen, Remenyi, Brijlall, Lefika and Mearns, Baim, Singh and Khusaini, Daud, Asari and Selamat)

A Proposed Knowledge Cafe Educational Research Process

In order to conduct academic research using the knowledge café technique, the researchers have to follow these steps.

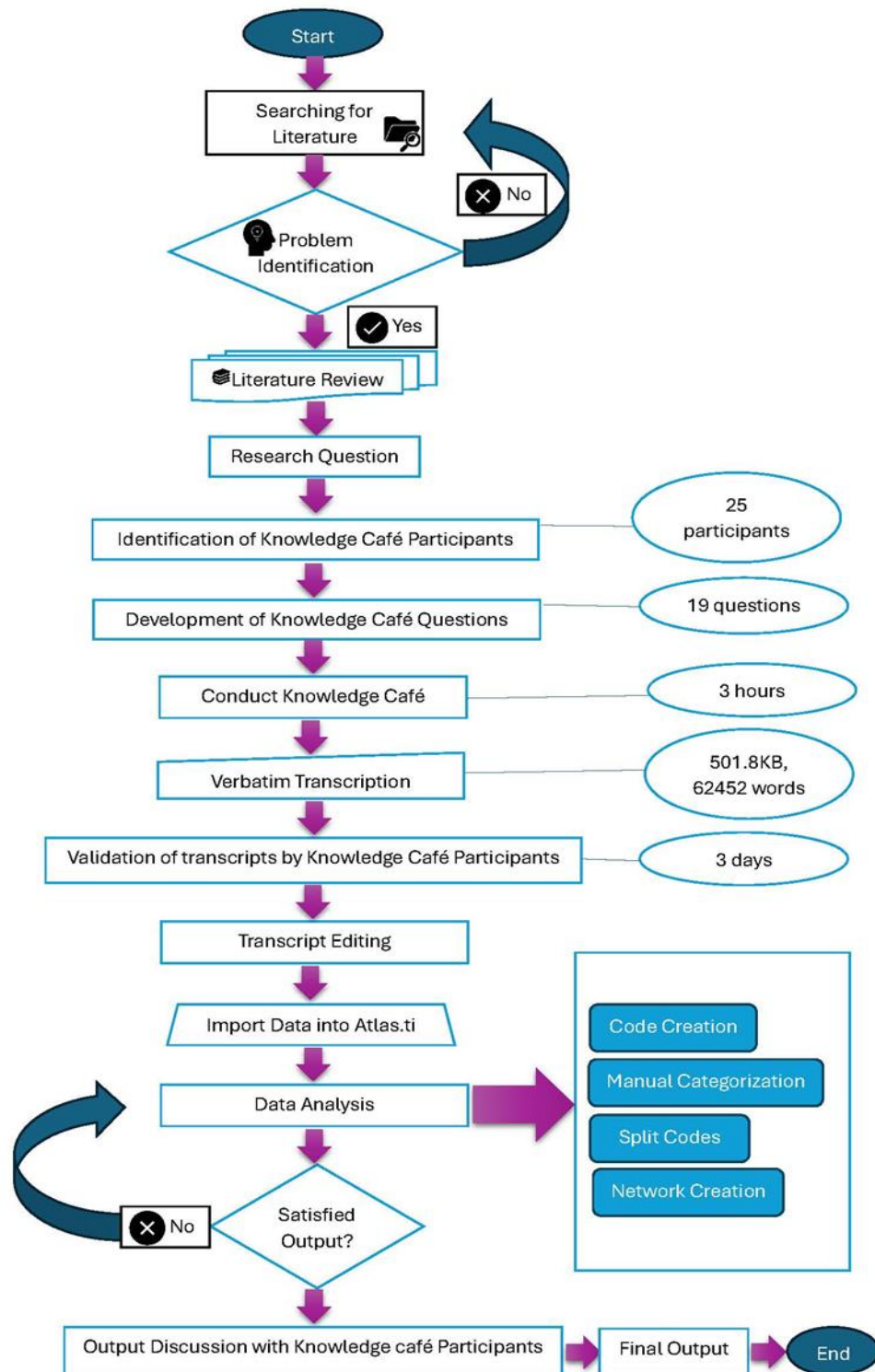


Figure 2: Research Process Using The Knowledge Café Adapted From Singla And Agrawal, 2024.

The first step in the research process is searching for the literature on the topic being studied by the researchers. The preliminary literature search is undertaken to identify problem statements on the topic being studied. If the problem is not identified, the researcher needs to perform a literature search again. If the problem persists then the researcher can carry out the literature review. From the literature review, the researchers can formulate research questions. Once the research questions are ready, the researcher can identify the knowledge café participants and develop knowledge café questions based on the main research questions. Once the knowledge café participants have been identified, the researchers send the invitation to the participants. Once the invitation confirmation is received by the researchers including date, venue, and time. The researchers can conduct the knowledge café according to the time set up by the researchers. The conversations between the participants were tape-recorded. The records were transcribed. Once the transcription is completed, the transcription is validated by knowledge café participants. The transcripts are then edited according to the comments from the knowledge café participants. Once ready, the transcripts were imported to Atlas.ti software and after that the data analysis was carried out. During the data analysis codes were created and categorised, and some codes were split and networks for codes were created to become an output. If the output is not satisfied the data analysis needs to be done again. If it is satisfied the output will be discussed with the knowledge café participants. If the participants agree with the output, the final output will be produced, and the research process will end.

Conclusion

In conclusion, the availability of this article that guides the application of knowledge café in research can help more researchers to use this method in educational research. It also can provide a positive impact in cultivating knowledge-sharing practices not only for researchers but also for respondents or participants.

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