Evaluating an established team-teaching artefact: An innovative self-study methodology

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In this study, I explore my lived experience to evaluate an established team-teaching artefact. I achieve this by implementing an adapted meta-synthesis of retrospective, published individualised and co-authored autoethnography (MICA) methodology. The MICA framework was first penned by Hughes and Pennington (2021), which I adapt to determine the efficacy of a teacher-scholarship artefact, which was created to advance team-teaching practice. In this paper, I display how I evaluated the artefact's usefulness, highlighting particular areas for improvement. While MICA is known as an innovative research methodology, applying it to inform teacher-scholarship artefact making remains modest. The study's findings expand innovative methodological approaches in the scholarship of teaching and learning through autoethnography.

Introduction

Meta-synthesis of individualised and co-authored autoethnography (MICA) was first penned by Hughes and Pennington (2021) as an innovative qualitative research method that involves the synthesis of multiple auto-ethnographical accounts of individual and collective experiences. It has been employed to produce a rich understanding of complex phenomena across a variety of fields, including academic professional development in the domain of the scholarship of teaching and learning (Holman Jones & Harris, 2019; Hughes & Pennington, 2021). It is a qualitative inquiry and process, involving authors who collaboratively reflect on personal experiences, writing a shared narrative to highlight key themes and insights.

The procedure of MICA involves several steps, including gathering auto-ethnographic data from multiple sources, analysing the data for common themes and patterns, and synthesising the data into a cohesive narrative to represent collective experiences. Overall, it is a unique approach to autoethnography that is rooted in the principles of individual and collaborative self-reflective critical inquiry. Further, such a methodology helps to meet the call to address knowledge production in higher education that is innovative "deliberate, intentioned, and planned action" (Olivas Castellanos & De Gunther Delgado, 2022, p. 856) to solve a problem or improve a process or outcome" (p. 873). I achieve this by adapting Hughes and Pennington's (2021) original MICA criteria to include the use of retrospective individual and collaborative published self-study works, informing improvement areas about an artefact creation I developed to support team-teaching practice, gauging its usefulness and efficacy.

The term *artefact* in this study refers to a tangible or intangible resource, tool, or document (Bader et al., 2021) that is created or used to assist teachers in their instructional work, improving student learning outcomes. These artefacts (Walton et al., 2019) are designed to enhance teaching and learning, facilitate effective classroom management, or provide

guidance on various aspects of education by teachers for teachers. Researchers have also termed such artefacts as "instructional research and development (IRD)" (Spuches & Coufal, 2000, p. 183), which centres on an evidence-based approach to unpack process in artefact creation, including evaluation. In terms of this study, it is important to note that the process around the creation of my artefact has been reported in detail elsewhere and I will not be revisiting it here in its entirety (Hains-Wesson, 2022a, 2022b). Rather, in this study, I pay attention to evaluating the artefact, pinpointing areas to critique and improve upon. I achieve this by revisiting a selection of individual self-study and co-authored published articles that concentrate on teacher scholarship. The set of retrospective published works influenced the artefact creation in its original form. However, to help contextualise the previous study's findings, which this study builds upon, the following brief synopsis is provided.

In the article "A philosophy of practice to inform team-teaching: A blended auto-ethnographical account" (Hains-Wesson, 2022a; 2022b), I explored the development and implementation of a philosophy of practice (PoP) to guide team-teaching in higher education. Through a blended auto-ethnographical approach, I purposely reflected on my experiences in team-teaching, proposing a four-stage model and toolkit to support the establishment and evaluation of team-teaching practices. The model addresses the complexities and dynamics of team-teaching, including group-based responsibilities, opportunities, and limitations. It was this study that emphasised the importance of intentionally designing a PoP in team-teaching to create a framework for effective collaboration and continuous improvement in teaching practices.

Thus, it is from this viewpoint that I now build upon this work, utilising an innovative methodology, which is a MICA framework. This is achieved by purposely and systematically revisiting several published articles that were used to create the initial PoP. Then, use the findings to influence the uncovering of additional *markers of discovery,* revealing new ideas to improve the PoP framework. This evaluation process has informed an innovative use of a proven method to undertake artefact evaluation in the domain of the scholarship of teaching and learning. I further posit that it is an innovative approach because MICA has been noted (Hughes & Pennington, 2021) as a type of autoethnography that should not be constrained "within the qualitative tradition" due to "…ranges of expression and methods" (p.184), with notable researchers making similar statements (Ellis, 1999; Ellis, 2000; Ellis, 2002; Ellis, 2004; Ellis, 2007; Lasky, 2005; Lee, 2018; Tolich, 2010). Such an innovative methodological choice provides researchers with an avenue to reposition artefact evaluation as "professional knowledge," based on self-reflective critical inquiry and meaning making (Tour, 2012, p.72).

This approach to explore teacher-scholarship through research is also timely because there is less mention about individual teachers implementing autoethnography to create artefacts, nor evaluate them (Spuches & Coufal, 2000). There is even less work that firmly situates such processes in the scholarship of teaching and learning, which is "often marginalized in terms of institutional practice…[and] value" (Culver, 2023, p. 1). To help bridge this gap, I first offer an adapted MICA approach as a blueprint for others to use, such as evaluating and critiquing individual, group-devised or self-created artefact

creations, testing for efficacy. Second, through the study, I highlight the importance of academic development support roles via the framing of the scholarship of teaching and learning as a site of valuable research, which have been around since the 1970s, and throughout the higher education sector (Lee et at., 2010). Finally, I uncover and shed light on teacher-centric, self-created artefact creation and a process to evaluate it, mitigating personal bias, which is not universally celebrated nor well understood (Ayers, 1992; Boud & Brew, 2013; Franssen, 2009; Kaufmann, 2005; Miettinen & Virkkunen, 2005; Slade et al., 2020).

Context

To briefly recapitulate, I established the team-teaching artefact in 2022 (Hains-Wesson, 2022a; 2022b). I achieved this by benchmarking each stage of the artefact development and its content to good practice in the scholarship of teaching and learning, undertaking individual and collective self-study research experiments that led to co-authored publications (Hains-Wesson & Tytler, 2015; Hains-Wesson, McKenzie & Bangay, 2015; Hains-Wesson, Pollard, Kaider & Young, 2020; McKenzie et al., 2022). I then used the results from each study, employing a four-stage team-teaching model, which was a key element in my PhD in Education (Hains-Wesson, 2022a; 2022b). The goal of the endeavour was to build a set of tested criteria, providing a blueprint for others to follow.[1] Therefore, the artefact design, process and outcome began with the writing of the four articles, which consisted of undertaking a variety of self-study methods, such as journal writing, field notes, observations, and group-based round table discussions, helping to "unveil untapped perspectives" in team-teaching practice (Hughes & Pennington, 2021, p. xvii).

Consequently, I completed a deep analysis of the published findings to produce a collective understanding, assisting me to "enlighten" (Humphreys, 2005, p. 849) my preferred position around setting up a team-teaching philosophy of practice that was later presented in an artefact. For instance, I selected key moments of discovery from each article, which led to "high spontaneity-high intuition…[and] genuine creative improvization" (Hatch, 1997 cited in Humphreys, 2005, p. 849). Through this evidence-based artefact formation process, I manifested four distinct stages, pushing methodological boundaries (Denzin & Lincoln, 2005), producing a teacher-practitioner guide in team-teaching philosophy set up and design (Hains-Wesson, 2022b).

It is, therefore, fitting that I now revisit the four published works to evaluate the artefact's efficacy, exploring further areas of improvement, because as others have noted, evaluation should not be separate from design (Spuches & Coufal, 2000). Therefore, in this study, I move from creating an artefact to evaluating its usefulness. To accomplish this, I chose a suitable qualitative methodology that aligned to my creative process in artefact creation. Thereby, the MICA framework fits nicely with such a brief because it requires multiple

[1]I received Human Research Ethics Committee approvals (HREC): HAE-14-120 & 2021/902 to undertake the creation and evaluation of the artefact in team-teaching.

individualised and co-authored autoethnography data within a cultural context, leading to data clusters through metaphor analysis, steering the researcher towards markers of discovery (Hughes & Pennington, 2021; Denzin & Lincoln, 2005). It is, therefore, in the following sections that I focus solely on using an adapted MICA as a framework to assess the efficacy of my artefact, which focuses on team-teaching practice.

Methodology

The decision to adapt Hughes and Pennington's MICA framework (2021) to undertake the study was due to several reasons. First, I required a method that would allow me to re-analyse multiple, published, individual and co-authored self-studies that occurred retrospectively. Self-study methods often involve the researcher exploring and reflecting on their experiences, enabling the researcher to synthesise their auto-ethnographical accounts alongside the experiences from others, creating a rich and more nuanced understanding of the phenomenon being studied (Loughran, 2018). MICA was, therefore, most suitable because it also emphasises the co-construction of knowledge and the collaborative interpretation of collective self-study data. An approach that can be particularly valuable for self-study researchers, such as myself, providing the space where the researcher is both the subject and the object of a study.

Table 1: MICA dataset

Authors	Title summary	Journal	Methodology	Method	Self-study types
Hains-Wesson & Tytler, 2015	A perspective on supporting academics with blended learning at an Aust. university	*IIER*	Design-based research and autoethnography	Self-reflection through journaling, including a systematic review of the literature and peer observation	1 co-author, and a community of inquiry (N=6).
Hains-Wesson, et al., 2015	Anytime and Anywhere: A case study for blended learning	*Educause Review*	Mixed methods and self-study	Self- and group reflection through journaling, critical friends' meetings, critiquing of teacher practice and systematic review of the lit.	2 co-authors, observation of students and an online survey (N=5)
Hains-Wesson, et al., 2017	Academic teachers' experiences of undertaking authentic assessment-led reform	*Studies in Higher Education*	Mixed methods	Critical friends' meetings, critique of teacher practice and a systematic review of the literature	3 co-authors, online survey (N=26) and individual teacher interviews (N=9)
McKenzie, et al., 2022	A team-teaching approach for blended learning: An experiment	*Studies in Higher Education*	Mixed methods and self-reporting	Individual and collaborative self-reflections, observations, and a systematic review of the literature	3 co-authors, 33 individual journal entries, 8 collaborative reflections and online survey (N=15)

Further, several other researchers have used innovative autoethnography frameworks to explore teacher identity (Austin & Hickey, 2007; Lavina & Lawson, 2019), focusing on analysis and interpretation of data to undertake reflexivity and critical reflection. Helping researchers to gain new insights into their own experiences. This is in despite that artefact creation and its evaluation in the scholarship of teaching and learning is less noted in the self-study literature (Hutchings & Shulman, 1999; LaBoskey, 2004; Trigwell et al., 2000). MICA can, therefore, assist to advance the development of a coherent and comprehensive narrative when evaluating a teacher's artefact and its usefulness.

For example, MICA provides a proven framework to organise and synthesise experiences that are published retrospectively. This is conducted through the review and cluster of themes, which are then used as markers to critique a narrative (Table 1). In Table 1, I highlight the selected published articles which I co-authored with others, forming the MICA data set. By revisiting the published works here, I am able to evaluate the artefact through a MICA lens, influencing the decisions I need to make to improve the artefact while answering the question – *what is the artefact missing and why?*

MICA: An adapted version

I use retrospective, self-study published works as my data within a MICA framework. Thus, I focus less on the socio-cultural or emotive encounters, which are more commonly referred to in traditional types of individual and collaborative auto-ethnographies (Hamilton, Smith & Worthington, 2008). Instead, I use an adapted MICA framework that is based on self-study research (see Figure 1), which will "appeal… to teachers and teacher educators who share and learn from one another through exchanges about knowledge, skills, practices, and evolving understandings" (Hamilton et al., 2008, p.19). Further, through the use of a structured and repeatable MICA method, I am able to minimise gut instinct, which is noted in the literature as a common concern to be resisted in teacher scholarship and practice (Buchanan & Mooney, 2022). As Ayers (1992) explained, "…becoming a teacher is complex and idiosyncratic process, reflecting on that process can allow teachers to become more thoughtful and more intentional in their teaching choices" (p. 36).

Data collection

I utilised an adapted MICA framework to suit my self-study researcher preference, situating my findings in teacher scholarship. I used MICA to evaluate key elements within the established team-teaching artefact. Without academic developers and teachers undertaking systematic evaluations of their artefacts, they may create increased chances of imbalance, which can negatively influence the key decisions of those creating the artefacts and for those who will use them. This is especially the case when artefact decisions are being made, which are based on the creator's recommendations alone (Bassett, 2012; McVey, 2008), which is "intimately tied to human experience" (Kerdeman, 2009, p. 523). With this in mind, and to better mitigate personal bias, I filtered my retrospective lived experience/s through the adapted MICA framework to benefit "looking back from the conclusion to the episodes leading up to it [i.e., artefact creation]" (Ricoeur, 1980, p.170).

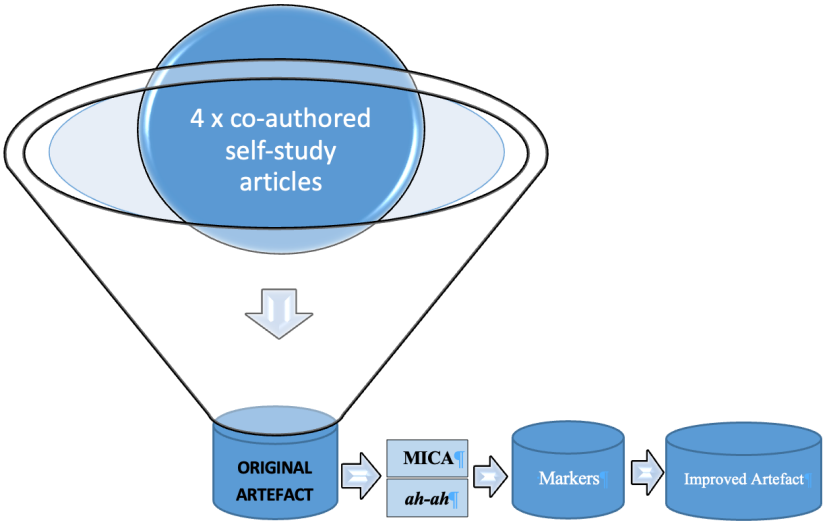

Figure 1: An artefact evaluation process (adapted from Hughes & Pennington, 2021)

Thus, the selected self-study articles (see Table 1) became essential MICA data, which I pored over line-by-line, coding, and clustering markers of discovery similar to *ah-ah* moments in reflective story making (Denzin, 1989). I was able to locate "markers" (Convery, 1999, p.145), which were then used to critique the original decisions I had made, and when I first created the artefact in the first place. Alongside rechecking its validity, the MICA process was instrumental in allowing me to systematically re-review my creative process, idea formation and decision-making while locating areas to enhance, ensuring change was based on sound purpose (see Figure 1).

In the next section, I concentrate on the adapted MICA mechanism that I implemented to undertake the memory fact checking process, re-assembling the findings to create a new perspective, which informed the improvement outcomes of the team-teaching artefact for future iterations.

Data analysis

I undertook a re-analysis of the individual and collective self-study accounts by reading each published article, using a line-by-line reading technique, highlighting the key topics and discoveries made, and through the lens of the original artefact creation. The clustering of key topics via the MICA process aligned to the original themes, which were published (Hains-Wesson, 2022a; 2022b), these were: (1) context of operation; (2) communities of practice; (3) communication; and (4) team-teaching. I then reviewed each cluster and documented them as page numbers, allowing for the grouping of the data points to come together, visually (see Table 2). I then re-analysed the clusters to identify key insights, such as looking for patterns within each cluster, comparing and contrasting clusters to identify similarities and differences, keeping in mind the scope of the investigation, which was to

improve the artefact by checking its validity. Finally, I synthesised the findings across all of the clusters to develop a broader understanding of whether I had originally met the requirements of the set task while drawing new conclusions and confirming original decisions. This, in turn, aided in gaining a deeper understanding of the choices I originally made, and the content I had chosen to omit or include.

In the following section, I display how the MICA data was clustered for each article as well as the key findings that surfaced.

Results

Article #1: Hains-Wesson & Tytler (2015)

To ascertain the efficacy of the first phase of the original team-teaching artefact, which was titled *context of operation,* I completed a re-synthesis of the key words, elements, and main findings within the first co-authored paper, using the theme "context of operation". I accomplished this task for each page of the article. For example, where the theme was perceived as being reconfirmed in the paper, I systematically clustered these data points, keeping note of the corresponding page number. I ensured that each step of the data collection was in line with the adapted MICA framework (Table 2).

Table 2: Article #1: Hains-Wesson & Tytler, (2015)

Hains-Wesson, R. & Tytler, R. (2015). A perspective on supporting academics with blended learning at an Australian University. *Issues in Educational Research*, 25(4), 460-479. http://www.iier.org.au/iier25/hains-wesson.pdf	
Key ideas re-identified and aligned to the first stage of the team-teaching artefact: Context of operation	Pages
Perspective (teacher)	460-469 and 474
Support (teacher and student)	460, 462-463, 467, 472 and 473-474
Personal insights (researchers)	460-468 and 474
Learning experiences (researchers)	461, 472 and 474
Self-reflection (researchers and students)	460, 462, 464-468, 471 and 473-474
Change agent (students and teachers)	460, 462-463, 466, 468, 471 and 473-474
Strategies and constructs	461, 463 and 473-474
Tools (ICT)	461, 472 and 474
Harmoniously	460-461
Blended learning	460-474

Mirroring the MICA textual analysis procedure, I re-analysed the key words and themes that originally led to the artefact creation in its original formation (Hains-Wesson, 2022a; 2022b). This was achieved in accordance with Hughes & Pennington's (2021) clustering of MICA data, whereby they "identified a large number of potential metaphors in each piece and then determined what set of metaphors seemed to adequately represent the account offered by the authors" (p.123).

In conducting a MICA-centric data collection and analysis process, I found that my initial decisions in the first stage of the original team-teaching artefact were sound, focusing on the "context of operation". However, a new sub-theme emerged from my review of "context of operation" as I reflected on each paragraph of the article through textual analysis. This occurred by visually reviewing the two largest data clusters in Table 1, noting a new emphasis on teacher-student and student-teacher relationship building. The new discovery led me to re-think the advantages of involving students in the development of role clarity and expectation setting alongside teachers. This came about because the article under review highlighted the importance of students' perspectives in identifying areas for improvement, however, teachers did not always formally involve students in the team-teaching decision-making processes prior to classroom learning. The discovery also aligns with literature that stresses the benefits of including students in team-teaching procedures (Yanamandram & Noble, 2006). Students, who are purposely involved in how the learning takes place, and as key community members within a teaching team, report a greater sense of engagement and ownership in their learning experiences (Yanamandram & Noble, 2006).

Article #2: Hains-Wesson, McKenzie & Bangay (2015)

Table 3: Article #2: Hains-Wesson, McKenzie & Bangay (2015)

Hains-Wesson, R., McKenzie, S. & Bangay, S. (2015). Anytime and anywhere: A case study for blended learning. *Educause Review,* 19 July. http://er.educause.edu/articles/2015/7/anytime-and-anywhere-a-case-study-for-blended-learning	
Key ideas re-identified and aligned to the second stage of the team-teaching artefact: Communities of practice	Pages
Struggle (teachers)	1
Perspectives (students)	2 and 14
Support (teachers and students)	2
Collaboration (teachers and students)	2, 4 and 12-14
Learning behaviour (students and teachers)	3, 6 and 14
Learning experiences (researchers)	11 and 14
Self-reflection (researchers)	6 and 13
Communication (students and teachers)	6-11 and 12-14
Diverse roles and role clarity	7-8
Tools (ICT)	1-6, 9-11 and 14
Harmoniously	4 and 5
Blended learning	1-7, 10-14

To evaluate the second stage of the initial artefact, which was *communities of practices*, I undertook the same method as outlined in "Article #1". I memory checked the decisions I made using the adapted MICA framework. I accomplished this by undertaking a re-synthesis of the key words, elements, and highlighting the main findings, leading me towards more data clustering (Table 3). In so doing, I discovered that the initial decisions I made were still meaningful because the main data clusters mirrored the previous metaphors published (Hains-Wesson, 2022a; 2022b), which were: (1) collaboration; (2) communication; and (3) ICT tools. Therefore, no recommended changes were required,

allowing me to feel confident that the work I had undertaken was sound. It also confirmed that the retrospective MICA process was beneficial in mitigating the use of gut instinct alone.

Article #3: Hains-Wesson, Pollard, Kaider & Young (2017)

When memory checking the initial artefact's third stage, which was *communication*, I was also able to re-confirm its meaningfulness because teachers continue to struggle and require additional support when they are team-teaching due to differences of opinion, diversity, diverse cultures, and power imbalances (Table 4). However, through the MICA data cluster analysis a new emerging idea arose. Students can also play an important role in the establishment and normalising of when a teaching team desires to bring an inquiry mindset to help mitigate diverse opinions and cultures. For example, McKenzie et al, (2010) proposed that effective team teaching requires careful planning and communication, a shared understanding of roles and responsibilities, and a commitment to addressing and resolving conflicts that may arise. Thus, students' roles within a team-teaching philosophy of practice re-emphasises the normalising of bringing an enquiry mindset to the overall learning experience. This in turn, can help to promote active learning and engagement, enhancing students' learning outcomes.

Table 4: Article #3: Hains-Wesson, Pollard, Kaider & Young (2017)

Hains-Wesson, R., Pollard, V., Kaider, K. & Young, K. (2020). STEM academic teachers' experiences of undertaking authentic assessment-led reform: A mixed method approach, *Studies in Higher Education,* 45(9), 1797-1808. https://doi.org/10.1080/03075079.2019.1593350	
Key ideas re-identified and aligned to the third stage of the team-teaching artefact: Communication	Pages
Struggles (teachers and students)	2, 4-6 and 9
Perspectives (teachers and students)	5-6, 9-10
Perspectives (students)	3
Lack of support (teachers and students)	2, 6 and 9
Collaboration (teachers and students)	1-2, 5, 7-8 and 9
Learning behaviour (students and teachers)	9
Learning experience (researchers)	9
Self-Reflection (researchers)	4
Dis-engagement (teachers)	2
Dis-engagement (students)	3
Communication (students and teachers)	9

Article #4: McKenzie, Hains-Wesson, Bangay & Bowtell (2022)

The final memory check included a review of the fourth article that influenced the creation of the final stage of the original team-teaching artefact. This stage of the process focused on reviewing and evaluating *team-teaching* mechanisms and delivery standards that arose from the textual re-analysis of the article under review (McKenzie et al., 2022). It was during this part of the MICA analysis that I reconfirmed the usefulness of the final stage within the artefact, but it was also a time where I discovered a new sub-metaphor

data cluster, which was also focused on the benefits of students' input into team-teaching design. The new idea focused on the significance of student input into team-teaching preparation and expectation setting, helping to create positive learning outcomes for both teachers and students, and as a community of learners (Table 5).

Table 5: Article #4: McKenzie, Hains-Wesson, Bangay & Bowtell (2022)

McKenzie, S., Hains-Wesson, R., Bangay, S. & Bowtell, G. (2022). A team-teaching approach for blended learning: An experiment. *Studies in Higher Education*, 47(4), 860-874. https://doi.org/10.1080/03075079.2020.1817887	
Key ideas re-identified and aligned to the fourth stage of the team-teaching artefact: Team-teaching	Pages
Struggles (teacher)	863-864
Perspectives (student)	860, 865 and 872
Support (teachers and student)	864
Collaboration (teachers and students)	860-866 and 872
Learning behaviour (students and teachers)	864
Learning experiences (researchers)	863 and 865
Self-reflections (researchers)	860, 864-865 & 872
Communication (students and teachers)	863 and 871
Diverse roles and role clarity	861, 866, 869 and 871
Teaching team skills	866-869
Tools (ICT)	860-863, 869-870 and 872
Harmoniously	863
Blended learning	860-872

For instance, Katzenmeyer and Moller (2009) described how team teaching that involves students in the planning and evaluation of team-teaching practice enhances their learning because it promotes engagement and collaboration. By including students' perspectives in the development and evaluation of team-teaching practices can aid in the building of student-focused approaches to learning, valuing different perspectives and experiences. In sum, the MICA data collection and analysis (for this part of the artefact) aligned to the research, but what was noticeably missing in my original artefact was the importance of including and engaging students as co-partners in the team-teaching philosophy, including setup and delivery processes. This was the same for all other articles with the exception of "Article #2".

Discussion

I employed an adapted version of a MICA framework as a mechanism to undertake artefact evaluation in the domain of an academic developer's support role, in a higher education context, to improve team-teaching practice through self-study methodology. The results show missed opportunities that can be rectified, providing teachers with a way to improve practice in artefact creation and design, helping to remove gut-instinct, mitigating bias. It has also confirmed areas of the artefact that were based on sound notions of practitioner-based evidence, and research. Additionally, I was able to undertake a systematic approach to investigate my understanding of diverse perspectives that

included both teachers and students. I was also able to utilise an adapted version of a MICA framework to further understand the key elements that I chose to omit and to ask myself – what was missing and why?

The process of reviewing known themes via a retrospective self-study of published works, which led to visual clusters of data that assisted the locating of missed information, including the emergence of new concepts. This in turn, resulted in helping to answer the question using evidence rather than gut instinct alone. For example, I identified some common themes and patterns around the importance of ensuring that students participated in the setup, structure, delivery design and communication processes via joint-partnership arrangements with teachers. I, therefore, discovered that I was able to renew the initial team-teaching artefact, interpreting clusters of data through the lens of a MICA framework to include students as key partners in team-teaching practice.

Conclusion

The aim of the study was to focus on evaluating an established team-teaching artefact to improve teacher scholarship, influencing positive student learning outcomes. I undertook an adapted MICA methodology where I used a self-study method to locate key omitted areas of an established self-created artefact, and to incorporate these into a renewed product. This aim was achieved because the findings have assisted me to pinpoint areas of value and weaknesses, minimising personal bias. Further, the study highlights a step-by-step procedure that I undertook to systematically discover new ideas to improve the artefact via a backward design, fact checking exploration. The activities included a line-by-line metaphor analysis of individualised and collaborative self-study published articles that I co-authored with others. I then created a collection of data clusters, making visible what was hidden.

Most importantly, the MICA procedure helped me to pinpoint why I had omitted student involvement in the first place. For example, at times teachers might instigate more one-way communication models and where the teacher is the expert, and the student is the passive recipient of knowledge. Thus, the original artefact creation may have unintentionally focused on this model, which does not prioritise student involvement in curriculum design and delivery. Other reasons for this omission may include time constraints. Teachers often have heavy teaching loads and limited time to plan and deliver courses. Thus, student involvement in team-teaching can be time-consuming, requiring additional planning, which most teachers struggle with, including myself. Or teachers may simply not be aware of the benefit around student involvement in team-teaching in terms of setup, processes and delivery, despite the research suggesting otherwise (Healey et al., 2014; Mercer-Mapstone et al., 2017). Finally, teachers may see the role of students as predominately sitting outside a teaching team's responsibilities and, therefore, unintentionally (or intentionally) avoid student inclusion completely.

Key take aways

The findings from the adapted MICA data analysis influenced three future additions to be made to the original team-teaching artefact. These are: (1) students should be involved in the team-teaching establishment, especially around a shared understanding and its articulation to include students; and (2) students should be viewed as authentic co-partners and co-agents alongside teachers, providing opportunities to bring the teaching team and students together, especially via discussions on areas of improvement, weaknesses and success.

Limitations and future directions

This study has several limitations. For one, I do not evaluate the improvements made to the original artefact with users. This limitation will be revisited in a future study. Another limitation is that my account is highly domestic compared to other emotive types of autoethnographical accounts (Broeckerhoff & Lopes, 2020; Tripp, 1993). It is also important to note that the MICA method documented here does not completely align to a traditional MICA framework as proposed by Hughes and Pennington (2021). Despite these limitations, the payoff is that I have been able to integrate an innovative way to use MICA to analyse a collection of self-study research outputs that were pivotal to creating a team-teaching artefact to improve practice. This in turn, assisted me to critically self-appraise my original team-teaching artefact, highlighting areas of sound practice and improvement while displaying a blueprint for others to expand upon.

MICA is a relatively unexplored self-study and autoethnography research methodology in education artefact evaluation. There is still much to further explore and in terms of its potential application in various areas of scholarship of teaching and learning. For instance, cross-cultural and global perspectives within educational contexts would be an ideal area. Therefore, future studies might examine how MICA can be used to explore the experiences of teachers, students, and other education stakeholders across different cultures and countries, and how these experiences might vary due to factors such as race, ethnicity, and socioeconomic status, for instance. Other research areas might include how to introduce MICA to explore the complex intersections within diverse education contexts such as early childhood, secondary and vocational.

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