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Using a modified version of the reflective approach to teaching practicum debriefing in assessing learning outcomes in a university module

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ABSTRACT

This action research study aimed to ascertain the usefulness of a modified version of the reflective approach to teaching practicum debriefing (MVRATPD) strategy in ascertaining the degree to which students in a United Kingdom university faculty of education achieved module learning outcomes (LOCs). Using purposeful convenient sampling, twenty-seven ($n = 27$) students on the education studies pathway at the university, studying the module entitled international and comparative education, participated. The usefulness of the MVRATPD is revealed in several ways. It is primarily a reflective assessment instrument as purported by Minott. It revealed a direct fulfilment of several module objectives linked to several LOCs. However, for this study, it was not useful in capturing data about all 4 LOCs. Specifically, it captured no data related to LOC 2. The conclusion is that the MVRATPD, in its present form should not be the sole determinant of the degree to which LOCs are achieved. It is however, a complementary indirect reflective instrument for assessing LOCs and a user-friendly, practical and uncomplicated data collection tool i.e. using three reflective questions.

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Assess; learning outcomes; reflection; students; university; Higher education

Introduction and rationale

This action research study aimed to ascertain the usefulness of a modified version of the reflective approach to teaching practicum debriefing (MVRATPD) strategy in assessing the degree to which students achieved learning outcomes (LOCs) in a module. Later in this paper, this aim is reformulated into the main research question; also discussed are the MVRATPD and LOCs.

Methodologically, and as indicated above, the study uses an action research framework. According to Denscombe (1998), this framework allows me to address an issue relevant to my practice and effect changes. For example, I now use the MVRATPD as one of several LOCs assessment instruments and I have actively involved research participants in the research process. Additionally, the action research framework facilitates using

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qualitative data and the type of data collection and analysis methods utilized in this study (Beaumont et al., 1997).

The importance of this study is evident in three ways. One, it contributes to the existing body of knowledge regarding assessing LOCs in Higher Education. Two, it provides teachers at the Higher Education level with a useful, practical, user-friendly reflective tool for assessing LOCs and three, it helps to show a connection between reflection and reflective teaching and assessment in Higher Education.

This paper commences with a review of current literature (2012–2022), then outlines and discusses the university module LOCs used in the study and the reflective approach to teaching practicum debriefing (RATPD) and the MVRATPD. Presented finally is the research supporting this paper and the findings and conclusions.

Review of current literature (2012–2022)

The purpose of this review of the current literature is three-fold. One is to ascertain how LOCs in Higher Education are understood and used generally. Doing so provides background and the ‘state of play’ in LOCs in higher education. Two, how LOCs in Higher Education are assessed, and three, what instruments are used to assess the degree to which students achieved LOCs. Achieving purposes two and three will aid in identifying the degree to which strategies used to assess LOCs generally are similar to, or different from, the MVRATPD, thus lending potential support for or against the usefulness of the MVRATPD in assessing LOCs in the module involved in this investigation. Similarities and differences are discussed later in this paper.

Given the purpose of the review – including the overall aim of the study—three questions drove it:

- (1) How are LOCs in Higher Education understood and used?
- (2) How are LOCs in Higher Education assessed?
- (3) What instruments are used to assess the degree to which students achieved LOCs?

Below, these questions are used as a template to guide the discussion. However, before discussing these, I briefly describe the literature selection process and the theoretical underpinnings of this paper.

Literature selection process

I carried out a single search using the advanced features of the university library browser. The search terms were: (Evaluating) OR (Assessing) AND (learning outcomes) AND (learning objectives) OR (Aims) AND (Higher Education) AND (University). The search included only peer-reviewed articles written in English between 2012–2022 (10 years) to ensure the use of only current articles. The search returned 41 articles. I took the following steps to arrive at the final number of papers used in the review, which was 33.

Step 1, I read through the 41 titles of the papers selecting only those directly addressing the assessment of LOCs in higher education, thus reducing the number of articles to 23. Step 2, I read the 23 abstracts and selected those that address how LOCs are understood, used, and assessed, and assessment instruments for LOCs in Higher Education.

Doing this further reduced the number of articles to 13. These 13 were then downloaded and retained for further analysis. Step 3, I examined the reference lists of the 13 articles checking for other relevant articles. Including these brought the total number of papers used in this review to 33.

Theoretical underpinnings of this paper

A theoretical underpinning that guides this paper and my thinking is discussed by Cole (1997) and Hyrkas et al. (2001). The writers highlight that reflective teachers need to develop and use self-directed critical thinking and ongoing critical inquiry in their practice, initiated by them and not administratively decreed. This results in the development of contextualized knowledge.

Firstly, this study uses self-directed critical thinking. Elder and Paul (1994) and Halpern and Halpern (2003) state, among many things, that reflective teachers think critically, which involves the willingness to question and try out new strategies and ideas. In this study, I questioned the extent to which the MVRATPD strategy could be used to assess the degree to which students achieved learning outcomes (LOCs) in a university module and tried out the idea.

Secondly, this research is an enquiry into an aspect of my practice, self-initiated, not administratively decreed and examines the degree to which LOCs can be assessed. It has also allowed me to develop contextualized knowledge of this area. I now know and have concluded that, given my context, the MVRATPD, in its present form, should not be the sole determinant of the degree to which LOCs are achieved. It is, however, a complementary indirect reflective instrument for assessing LOCs and a user-friendly, practical and uncomplicated data collection tool i.e. using three reflective questions.

The idea of reflection-on-action Schön (1983, 1987) also influenced the study because it emerges from my 'reflection-on-assessment' and how I have assessed LOC in modules taught. A key component of reflection-on-action and the reflective teaching process is the ability to frame a problem (Schön, 1983, 1987). Schön (1987) states that, in framing a problem, teachers select in a qualified and circumscribed sense what to treat as the problem. I framed how I assessed LOCs as the problem, then set out to try the MVRATPD, concluding that it is a complementary indirect reflective instrument for assessing LOCs and a user-friendly, practical and uncomplicated data collection tool i.e. using three reflective questions.

In answering question one below, the literature revealed: a common yet contested understanding of the term LOCs; LOCs linked to several areas; its usefulness at the teaching and learning and institutional or programme levels, and their characteristics.

1. How are LOCs in higher education understood and used?

There seems to be a commonly used and contested definition and understanding among writers that LOCs are indicators of competencies, i.e. that which students should be able to 'do' with what is learned (Caspersen et al., 2017; Cervai et al., 2013; Hay, 2012; Holmes, 2019; Ibrahim et al., 2022; Ndoye, 2013; Stanley, 2015; Savic & Kashef, 2013). For example, competencies, say Savic and Kashef (2013) in their article on learning outcomes in affective domain within contemporary architectural curricula, are indicators that learning

outcomes have been achieved, and competencies are also key learning outcomes of Higher Education programmes (Zlatkin-Troitschanskaia et al., 2016).

In contesting the definition, Savic and Kashef (2013) pointed out that it should not be confined to demonstrating cognitive and psychomotor skills, but include values, assumptions and beliefs. Doing so is especially relevant when an element of an architectural module or course is to build learners' personalised value systems.

While among writers, defining the term LOCs may be contested, their consensus and understanding is that LOCs should be linked to several areas: overall programme goals or focus or core ideas and skills and external stakeholder (Industries) (Cervai et al., 2013; El Marsafawy et al., 2022; Ibrahim et al., 2022; Martin & Mahat, 2017; Savic & Kashef, 2013).

Savic and Kashef (2013) argue that learning outcomes should be clearly written to enable students to map or see how LOCs link with programmes in the same knowledge area and between programmes in the same academic department. Ibrahim et al. (2022), in their study of an online management system for streamlining and enhancing the quality of learning outcomes assessment, links LOCs and external stakeholders (Industries). They state that one aim of clearly defined LOCs is to communicate expectations to prospective employers and not just potential learners.

There is also a variety of uses of LOCs discussed in the literature. These are summarised as usefulness at the teaching and learning and institutional or programme levels. Souto-Outero (2012), in the study entitled 'Learning outcomes: good, irrelevant, bad or none of the above?' made the point that learning outcomes are important because they are instruments to be used to identify whether or not students learned an idea or concept. Additionally, teachers or school leaders can use them to make clear what competencies are desired and the degree to which these competencies are evident, and to hold themselves accountable for what is to be delivered. Ibrahim et al. (2022) made the point that LOCs are used to determine lesson content and the depth and nature of that content, classroom teaching methods and the method used to evaluate student learning. Abuaiadah et al. (2019), support these ideas in their study of assessing learning outcomes of course descriptors. The writers state that LOCs should focus on student learning, thus helping teachers to plan teaching and learning activities that are student centred. The work of Dobbins et al., (2014) on understanding and enacting learning outcomes from the perspective of academics is also supportive of Ibrahim et al. (2022). Dobbins et al state that academics in their study primarily use learning outcomes to focus their thinking around module design or teaching.

An area of interest in the literature on LOCs is its use at the institution and, by extension, the programme level to determine 'work-ready' students (El Marsafawy et al., 2022). The writers state that measuring LOCs is now an integral practice of higher education institutions. Doing so seeks to ensure work-ready graduates. There is a growing debate around this practice, the logic behind doing so, what exactly doing so will achieve, and the quality assurance system to use in the process. Carter (2014), in the study of doctoral programs outcomes assessment, made the point that LOCs help faculty determine whether or not their programmes are meeting set goals and, if not, what aspects need to be changed. LOCs are also seen as forming a contractual arrangement between students/learners and course providers (Abuaiadah et al., 2019), that which students should be able to 'do' with what is learned at the end of the course. Stanley (2015), in his article, learning outcomes – from policy discourse to practice, while agreeing in

principle about the need for work-ready graduates, argued that to achieve this, 'LOCs as tools' must be directly linked to the needs of industries or the market.

Regarding the characteristics of LOCs, there seems to be agreement among writers that they should be specific, not open to various interpretations and understanding, clear and accessible to users, measurable and focussed so as to facilitate assessment and teaching and learning (Abuaiadah et al., 2019; Stanley, 2015). They should contain verbs such as: to examine, to synthesize, to appreciate, to analyse, to integrate, to estimate, to create, to develop, to facilitate the assessment and identification of behaviours that show required competencies (Savic & Kashef, 2013; Abuaiadah et al., 2019; Stanley, 2015). A careful examination of these characteristics, with some variations, will reveal they are akin to the SMART criteria used to assess the quality of LOCs, i.e. specific, measurable, achievable, relevant and time-bound (Abuaiadah et al., 2019).

The literature highlights that assessing LOCs occurs at the conceptual level – including various taxonomies – and the operational or practical levels with direct and indirect types of assessments. These are discussed below in response to Question 2.

2. How are LOCs in higher education assessed?

At the conceptual level, frameworks used to guide the assessment of LOCs permeate the literature and are mainly about making changes. Ndoye (2013), writing about promoting learning outcomes assessment in higher education, sees the assessment of LOCs as a means to an end, that is, to facilitate change, not just instructional change but changes to a programme of study. Ndoye concludes that it is necessary to approach the assessment of LOCs through a change management framework. Respondents in Ndoye's study reported that using such a framework ensures that programme assessment activities are based on programme expectations and not on the expectations of individual instructors.

Martin and Mahat (2017), writing about the assessment of learning outcomes in Australia, is also indirectly concerned with change. The writers proposed the assessment transparency framework or model (ATM) that highlights and gives insight into the current 'as-is' situation in Australia, as well as an indication of what is needed to move LOCs assessment in the higher education sector to the 'ideal'. The framework also pulls on the field of management. For a full explanation of the ATM, see page 2 of the authors' work. El Marsafawy et al. (2022) argue for a bottom-up framework for assessing LOCs in their article 'Measuring learning outcomes: bridging accreditation requirements and learning management computer systems (LMS) functionalities'. Doing so includes starting with a direct assessment of course or module LOCs, followed by programme LOCs, where both are interlinked and further linked to sector or industrial competences and standards.

Also, at the conceptual level, some writers highlight the use of taxonomies and models as a means of assessing LOCs. While there are several, the most popular is Benjamin Samuel Bloom's taxonomy (Carter, 2014). His taxonomy includes levels of learning, ranging from knowledge, comprehension, application, analysis, and synthesis to evaluation. These can then be the focus of appropriate LOCs assessment instruments.

At the practical or operational level, assessing LOCs takes several forms. A typical approach, says Caspersen et al. (2017) in their study on measuring learning outcomes, is

to ask students to assess their learning outcome, knowledge gained, general competencies and skills. This is called 'self-reporting', and El Marsafawy et al. (2022) refer to the process as indirect assessment that include surveys and interviews. El Marsafawy also introduces the idea of direct assessment of LOCs, which includes standardized testing of disciplinary knowledge and skills and student portfolios. Examples of nationally used direct assessments of LOCs are those highlighted by Campbell and Cabrera (2014), who wrote 'Making the Mark: Are Grades and Deep Learning Related?' The writers highlighted the Collegiate Assessment of Academic Proficiency and Progress and the National Survey of Students, which is qualitative, quantitative and web-based.

There are a variety of instruments for assessing the degree to which students achieved LOCs. These are classified as direct and indirect instruments and discussed in response to Question 3 below.

3. What instruments are used to assess the degree to which students achieve LOCs?

There are direct and indirect assessment instruments used to ascertain the degree to which students achieved LOCs (El Marsafawy et al., 2022). Some writers seem to suggest combining both. For example, a recommendation from Alquraan (2014), writing about a cross-cultural study of students' perceptions of assessment practices in higher education, is that higher education institutions should encourage the use of both types of LOCs assessment instruments. Whatever assessment instruments or combination of instruments are used, Scholl and Olsen (2014), in their work on measuring student learning outcomes using the SALG instrument (discussed later in this paper), warn that for busy academics, assessment may become a low priority if the data-collection process used to assess LOCs is too complex and time-consuming. With this in mind, let us discuss examples of assessment instruments.

Direct assessment instruments

The following are some direct assessment instruments used to assess the degree to which students achieved LOCs. Scoring rubrics and students' grades, students' work produced – such as paper and pencil tests, group work, reflections and presentations and web-based portfolios (Alquraan, 2014; Brunton et al., 2016; Caspersen et al., 2014; Carr et al., 2014; Lile & Bran, 2014; Ndoye, 2013).

Indirect assessment instruments

Current indirect instruments used to assess the degree to which students achieved LOCs include questionnaires and surveys administered at the end of a course or module (Cervai et al., 2013; Johnson & Envick, 2014). Cervai et al. (2013) in their article on assessing the quality of the learning outcome in vocational education, highlight the National Survey of Student Engagement NSSE, which is a self-reporting questionnaire. Campbell and Cabrera (2014), in their study 'Making the Mark: Are Grades and Deep Learning Related?' discussed the 'Satisfaction of Results' (SR box) Questionnaire in which students are invited to answer questions about their perception of the teaching processes.

Technology and the Internet have been widely discussed in the literature, becoming both an instrument for assessing the degree to which students achieved LOCs and a

conduit for direct and indirect assessment. El Marsafawy et al. (2022) state that learning management systems (LMS), for example, Canvas, Blackboard and Moodle, are used to assess LOCs. Writers such as Rani (2020) also used LMS in assessing LOCs. Ibrahim et al. (2022) highlight the online Learning Outcomes Assessment Management System (LOAMS) recently developed and deployed at the United Arab Emirates University (UAEU). Demchuk et al. (2015), in their study of competencies and learning outcomes and forms of assessment, proposed a competency-based algorithm that handles learning outcomes, assessment methods and educational technologies in a highly effective way. Scholl and Olsen (2014) put forward the Student Assessment of Learning Gains (SALG) instrument, a free online instrument mentioned earlier in this section.

The use of direct assessment instruments, for example, tests and students' work produced, and indirect assessment, for example, surveys and questionnaires (self-reporting instruments), including those facilitated by technology, is not without debate. The main issue is that indirect assessment instruments such as questionnaires, reflections and surveys are considered somewhat biased and, technically, do not measure LOCs but students' perceptions and attitudes. The conclusion reached – and hinted at the beginning of this third section of this review is worth repeating – is to combine both to arrive at a picture of what students learned (Caspersen et al., 2017).

The university module learning outcomes (LOCs) used in this study

Table 1 below displays information and the LOCs for the university module, international and comparative education.

How do the module international and comparative education LOCs relate to the literature?

As can be seen in Table 1, the LOCs of the module reveal they are specific – not open to various interpretations and understanding. They are clear and open to users, measurable and focussed – to facilitate assessment and teaching and learning – and contain verbs such as develop, demonstrate, articulate, communicate orally and in writing, highlighting

Table 1. EDUC1501: International and comparative education.

Learning Outcomes: (LOCs)

The learning outcomes of this module are that, by the end of the module students should know, understand or be able to do the following:

Subject-specific Knowledge:

- (1) Develop a critical understanding of the contexts and factors relating to international and comparative education in the 21st century.
- (2) Demonstrate critical understanding of the theories, approaches, and practices of interculturality in the contemporary world and how they impact education.

Subject-specific Skills:

- (3) Articulate and employ key concepts and terminology in the field of International and comparative education, including, but not limited to, intercultural education, global citizenship education, multilingualism and the study of diversity in education.
 - (4) Communicate effectively orally and in writing on issues related to International and Comparative Education.
-

competencies, i.e. that which students should be able to 'do' (Savic & Kashef, 2013; Abuaiadah et al., 2019; Stanley, 2015).

The reflective approach to teaching practice debriefing (RATPD) and modified version of the reflective approach to teaching practice debriefing (MVRATPD)

At its core, the reflective approach to teaching practicum debriefing (RATPD), as it is originally titled, is a student-centred evaluation strategy aimed at encouraging student teachers to reflect on their learning. The approach is grounded in Schön's (1983) reflection-on-action and the idea of Zeichner and Liston (1996), which states that reflective learning and teaching must involve the use of questions. The approach is utilised during student teachers' practicum debriefing tutorials.

As indicated in the foregoing discussion, questions are a central tenet of the RATPD. Three reflective questions make up the approach. These are:

- (1) What have you learned about teaching?
- (2) To what extent has the observation or teaching episode caused changes in your beliefs, values, and assumptions about teaching?
- (3) What have you learned about 'self' as a teacher?

For this study, the questions were changed to fit the context and participants, i.e. students studying the module international and comparative education at the university.

For the module the questions used were:

- (1) What have you learned about international and comparative education?
- (2) To what extent has the module caused changes to your belief, values, and assumptions about international and comparative education?
- (3) What have you learned about 'yourself' as a teacher or educator?

Minott claimed it is through these reflective questions that the RATPD strategy is enacted and used to guide discussions during teaching practice debriefing sessions. He refers to the three questions as 'reflective' because they emerge from his understanding of reflective teaching and, importantly, they helped to encourage student teachers to critically think about what they had observed in schools during their practicum and their learning and behaviours as potential teachers.

The modified questions utilised in this study are akin to the original questions in that they encouraged the students to examine not just the cognitive and the affective aspects of their learning, but to reflect on the 'self' as an educator.

MVRATPD and instruments used to assess LOCs (similarities and differences)

Connecting the MVRATPD with the nature of instruments used to assess LOCs in the literature reveals that the use of questions packaged in the forms of tests, questionnaires and surveys are used to directly and indirectly assess students' achievement of LOCs (Cervai et al., 2013; Johnson & Envick, 2014). The MVRATPD uses three questions and could

be referred to as an uncomplicated reflective questionnaire. Similar to the finding in the literature that at the conceptual level, frameworks are used to guide the assessment of LOCs, the MVRATP also acts as a framework guiding students' thoughts about the recently completed modules.

However, while the original RATPD strategy is a useful way to encourage teacher education students' deep reflection-on-learning, what was still unknown was its usefulness as a strategy to ascertain the degree to which student teachers in a United Kingdom university faculty of education achieved module LOCs. Therefore, a study was launched.

Research methodology

As discussed in the introduction section of this paper, this study utilised an action research framework which allows the teacher to study their teaching and students' learning. Firstly, as a research framework, action research was used because it is an extension of reflective practice since critical reflection-on-practice feeds research findings and the interpretation of findings (Schön, 1983). The success of this study rest on my ability to reflect and draw conclusions from the findings. An action research framework facilitates this endeavour.

Secondly, an action research framework allows researchers to address issues relevant to their practice, effect change in practice, and actively involve research participants in the research process (Denscombe, 1998). Addressing the issue of assessing learning outcomes and the degree to which students achieved these, effecting change in my practice and actively involving my students is central to this study.

Research question

A broad research question guided this study: 'To what extent is a modified version of the reflective approach to teaching practicum debriefing strategy (MVRATPD) useful in ascertaining the degree to which students in a United Kingdom university achieved module learning outcomes?'

Research environment and participants

The university in which the study was carried out is located in the north of England, and a member of the Russell Group of institutions. As the teacher-researcher, I co-taught several units of lessons on the international and comparative education module designed to run for the 2021–2022 academic year. The module ran during semester 2, January to March 2022. The objectives of the module were to have students critically reflect on:

- how diversity impacts education in local and global contexts and what inequalities might emerge as a result.
- the relationship between education, intercultural issues, and key concepts such as identity, citizenship, and social justice.
- forms of communication and engagement in contexts of diversity and their implications for education.

- and develop a critical understanding of multiple identities and attitudes towards others.

Twenty-seven ($n = 27$) first-year undergraduate students in the second semester of their programme participated in this study. They were males and females who were late teens and early 20s projected to become teachers. Purposeful convenient sampling was used, and participants were considered 'information-rich' (Guba & Lincoln, 1998). In other words, I taught on the module, and the students were able to provide the data necessary for the success of the study and to answer the research question. An examination of students' responses revealed that they provided relevant data, allowing me to draw conclusions based on the information they supplied, thus contributing to determining the usefulness of the MRATPD as a strategy to ascertain the degree to which they achieved module LOCs.

Data collection

The data collection method used was a questionnaire (a modified version of the original RATPD) containing three questions. The questions used are listed on page 13 of this paper. During the penultimate week of the module, a colleague and I administered and collected the paper-based questionnaire from students in both our classes. The questionnaires were placed on a table in a corner of the rooms and time given near the end of the session for those wishing to complete a questionnaire to do so. As indicated above, 27 students chose to complete questionnaires. The students were also told not to sign their names on the questionnaire and all complied. They were also told their names would not be associated with the research report and that participating did not contribute anything to their final grade. The questions primarily solicited their views on their learning.

Data analysis process

At the start of the analysis process, the questionnaires were randomly assigned the letters and numbers ST1–27, meaning students 1, 2, 3 to 27. Here too, this action also helped to ensure the promised anonymity. The writers Powell and Renner (2003) support using pre-set categories or themes, stating that they provide direction for what to look for in the data. In light of this, I discarded the three reflective questions making up the questionnaire, and analysed the student responses using the module's LOCs as themes or categories. Using the NVivo software and through careful analysis, which involved reading and rereading, I matched responses with the LOCs. From this analysis process, I created an understanding of the usefulness of the MVRATPD strategy in determining the degree to which students achieved module LOCs. To reduce researcher's bias, a professor at the university was asked to read the analysis and final report. He was unable to identify any researcher's bias.

The usefulness of the MVRATPD in determining the degree to which students achieved module LOCs (results and discussion)

Firstly, the analysis of the data collected reinforced the idea that the MVRATPD is primarily a reflective assessment instrument as purported by Minott. For example, the results proved that the MVRATPD strategy aids in encouraging students to reflect or think about the whole module. Students highlighted gaining vast knowledge and the breadth of the subjects or topics included in the module. These are reflected in the following direct quotations: 'It is difficult to answer what I have learned in this module because the knowledge I have gained is too vast!' (ST4). "International and comparative education is a broad module. There are different themes including social justice, identity, diversity, globalisation, internationalisation, etc (ST12).

I have learnt that international and comparative education is a very broad topic that comprises many areas I had not previously considered, e.g. Identity and communication. I have also learnt that there are many practical difficulties in the lives of many students that I was not previously aware of due to my lack of international education experience. (ST22)

A close examination of the quotation from ST22 directly above reveals that, via the MVRATPD the student became mindful that the module brought an awareness of practical difficulties existing in the lives of students all over the world and an understanding of educational challenges in various countries. This was also echoed by ST11 when the student stated, '[The module brought] an understanding of education in other countries and the challenges/implications they face' (ST11).

Secondly, the MVRATPD revealed cognitive skills developed by students. i.e. the ability to highlight and outline the impact of various topics studied, on education, children, and world education systems, especially in China and Hong Kong. This is a direct fulfilment of the module objective which is to have students critically reflect on the impact of various issues on education in local and global contexts and connected to LOC 1, which is to develop a critical understanding of the contexts and factors relating to international and comparative education in the 21st century. These are displayed in the following direct quotations: 'I have learned that the educational context massively impacts on the education a child receives and therefore, affects their life chances' (ST27). 'I now understand about different social issues across the globe, for example how students from mainland China are often discriminated against within Hong Kong Universities' (ST19).

I now know how globalisation is linked to colonisation; rural and urban migration and its impact on education; discrimination and perhaps subconscious bias; barriers to, and ways to achieve justice; impact on belonging, identity, and the potential of alienation-'the other'. (ST13)

Thirdly, LOC 3 involves students being able to articulate and employ key concepts in the field of international and comparative education and this is connected to the module objective to have student reflect on the relationship between education, intercultural issues, and key concepts. Via the MVRATPD students expressed opinions or ways of thinking (attitudes) about various topics or subjects studied. For example, the need to avoid microaggression, respect and think fairly about various education systems and tackle issues carefully and in a collective manner. '... how to conduct intercultural communication and avoid microaggression as much as I can' (ST5). 'The different

education [systems] between different countries, and every kind of education system have their benefits. We need to respect and think about [them] fairly' (ST23).

I have learnt that issues in education are not limited to one education system but [to] all of them. Tackling these issues must be approached in a careful and collective manner. Moreover, to some extent, the perfect education system is impossible to achieve in today's society. (ST25)

Finally, LOC 4 involves students being able to communicate effectively orally and in writing on issues related to international and comparative education. Using the MVRATPD, students communicated about identity and self which is connected to the module objective which is to reflect on key concepts including, among several, identity. For example,

I have learnt that my identity will affect how [I behave as a teacher] and the education and values I implement in the classroom. I also believe that [as an educator] I am important in changing beliefs and assumptions about international education, based on my own beliefs and values, which are likely to influence my teaching. (ST22)

I have learned to think more critically and have learnt about lots of topical issues surrounding education. I can carry the language and understanding I've learned and gained during this module with me as I become a teacher which will be very beneficial as I will be more aware. (ST26)

As an educator, I learned more about Chinese higher education and the Chinese context. In addition, I realise that I have many drawbacks because I did not have too much experience, staying on one model of education system, so, sometimes I did not have many ideas and have much critical thinking. (ST23)

To what extent is a modified version of the reflective approach to teaching practicum debriefing (MVRATPD) strategy useful in ascertaining the degree to which students achieved learning outcomes? (Summary and conclusion)

The analysis of the LOCs of the module reveals they are specific, clear, and open to users. They are measurable and focussed so as to facilitate assessment, teaching and learning, contain verbs such as develop, demonstrate, articulate, communicate orally and in writing, highlighting competencies, i.e. that which students should be able to 'do' (Savic & Kashef, 2013; Abuaiadah et al., 2019; Stanley, 2015).

The study also reveals that the MVRATPD used questions similarly to indirect instruments, for example questionnaire and surveys used to assess LOCs (Cervai et al., 2013; Johnson & Envick, 2014). The MVRATPD uses three questions and can be easily referred to as an uncomplicated reflective questionnaire. Also, similar to the finding in the literature that at the conceptual level, frameworks are used to guide the assessment of LOCs, the MVRATPD can also act as a framework guiding students' thoughts about the recently completed module. This is evident in the foregoing discussion.

The analysis and discussion of the data collected reinforced the idea that firstly, the MVRATPD is primarily a reflective assessment instrument as purported by Minott. For example, the results proved that the MVRATPD strategy aids in encouraging students to reflect or think about the whole module. Secondly, the MVRATPD revealed a direct fulfilment of the module objective which is to have students critically reflect on the impact of various issues on education in local and global contexts and connected to LOC 1, which is to develop a critical understanding of the contexts and factors relating to international and comparative education in the 21st century. Thirdly, the MVRATPD

revealed students' ability to articulate and employ key concepts in the field of international and comparative education (LOC 3) and connected to the module objective to have student reflect on the relationship between education, intercultural issues, and key concepts. Finally, LOC 4 involves students being able to communicate effectively orally and in writing on issues related to international and comparative education. Using the MVRATPD, students communicated about identity and self which is connected to the module objective which is to reflect on key concepts including, among several, identity.

Having said this, there are several warnings about the MVRATPD as a tool for assessing learning outcomes in a university module. For this study, it was not useful in capturing data about all 4 LOCs. Specifically, it captured no data related to LOC2 which is to demonstrate critical understanding of the theories, approaches, and practices of interculturality in the contemporary world and how they impact education. Therefore, it should not be used as a sole determinant of the degree to which LOCs are achieved. In its present form, it is best as a complementary indirect instrument for assessing the degree to which students achieved LOCs in a module. Alquraan (2014) encouraged the use of both types of LOCs assessment instruments direct [test, essays] and indirect [questionnaire and reflections].

The MVRATPD is however, a user-friendly, practical and uncomplicated data collection tool i.e. using three reflective questions. Scholl and Olsen (2014) warn that busy academics assessing LOCs appreciate data collection tools that are uncomplicated and less time-consuming.

Limitation

In considering this study and its contribution, there are limitations to be borne in mind. The study examines the use of the MVRATPD from a narrow perspective, that is, education studies students in a single university engaged in a single module. While this narrow perspective made the study both manageable and achievable, it precludes large-scale generalisation of the findings. However, readers are left to make their own judgement regarding generalisation.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Notes on contributor

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