Developing global-ready graduates: The CANEU-COOP experience

NORAH McRAE
KARIMA RAMJI
LINGHONG LU
MARY LESPERANCE
University of Victoria, Victoria, Canada

Post-secondary institutions spend considerable resources on programs, such as study abroad and international work-integrated learning, which involve students' participation in international experiences. One significant impetus for these programs is the hope that through exposing students to international settings these students will be better prepared to be successful in global workplaces upon graduation, in essence be more “global-ready”. However, simply having an international experience does not necessarily lead to the development of capabilities that result in global workplace success. In addition to the knowledge, skills and abilities required for any workplace, being successful in these global workplaces also requires intercultural effectiveness. This paper presents the findings of a study that examined the development of cultural intelligence (CQ), the ability to be effective in intercultural encounters, in students participating in a Canadian-European exchange program (CANEU-COOP) where the European students had a study term in Canada and the Canadian students had a co-op work term in Europe. The study found that while both groups of students developed CQ, there were differences between the groups. These findings reaffirm the importance of intentionally structuring international experiences to include curriculum about and assessment of intercultural effectiveness. (Asia-Pacific Journal of Cooperative Education, 2016, 17(4), 377-386)

Keywords: Cultural Intelligence, intercultural effectiveness, international work-integrated learning

The Canadian-European cooperative education program (CANEU-COOP), is a partnership between two Canadian institutions and two European institutions that allows students from the Canadian universities to complete cooperative education (co-op) work terms in Europe and European students to study in Canada. Human Resources and Skills Development Canada (now called Employment and Social Development Canada) and the European Union provided funding for this program in 2009 as part of the Canada-EU Program for Cooperation in Higher Education, Training and Youth’s Transatlantic Exchange Partnerships program.

The CANEU-COOP program included a research component over a four-year period to assess the development of intercultural competence of participating students using the construct of cultural intelligence (Earley & Ang, 2003). The cultural intelligence (CQ) quotient, comprised of four dimensions: motivation, knowledge, strategy and action, was used as the measure of intercultural effectiveness; this has been found to be both a reliable and valid measure (Ang et al., 2007). This paper aims to examine the impact of the CANEU-COOP program on CQ development, and implications of this research on international programming at post-secondary institutions.

THE CANEU-COOP EXPERIENCE

The CANEU-COOP program is a partnership between the University of Victoria (Canada), University of Waterloo (Canada), FH Joanneum University of Applied Sciences (Austria), and Baden-Württemberg Cooperative State University (Germany). The program allows
students from the Canadian universities to take part in a 4-month cooperative education work term, a form of work-integrated learning or WIL, (Sattler, Wiggers, & Arnold, 2011) in Europe while students from the European universities come to Canada for a study term.

A key objective of the program was to measure whether students developed intercultural effectiveness as a result of their participation in the CANEU-COOP program. Given the growing trend toward increased mobility of students through a variety of programs at post-secondary institutions (CBIE, 2014), intercultural effectiveness is a ‘must-have’ rather than a ‘nice to have’. This capability enables students to be more successful during their international experiences where they often encounter intercultural challenges and helps prepare them for culturally diverse workplaces that await them upon graduation.

The research looked to provide evidence to support a strategy for the development of intercultural effectiveness in our students. Such a strategy could help universities involved in international education prepare domestic and international graduates for local and global labor markets. The Canadian Bureau of International Education (2015) estimates that by 2022 there will be 7 million students from across the globe engaged in international mobility worldwide, an increase of 2 million from 2014 (CBIE, 2015). Of the over 339,000 international students coming to Canada, nearly two-thirds plan to stay and work in Canada and as such require intercultural effectiveness in order to successfully realize their goals (CBIE, 2015). It is with these challenges in mind that we embarked upon this research.

CULTURAL INTELLIGENCE

Cultural intelligence (CQ) is defined by Ang and Van Dyne (2008, p. 3) as “an individual’s capability to function and manage effectively in culturally diverse settings” (Ang & Van Dyne, 2008). Interacting effectively in an intercultural setting requires “appropriate knowledge, motivation and behavior” (p. 85); this is best measured looking through a cultural intelligence lens (Kim, Kirkman, & Chen, 2008). CQ, like social intelligence (Thorndike & Stein, 1937) and practical intelligence (Sternberg et al., 2000) is based on a multiple-foci of intelligence model (Sternberg & Detterman, 1986) that identify the motivational, cognitive, meta-cognitive and behavioural factors influencing intelligence (Sternberg & Detterman, 1986). What makes CQ a distinct construct is the way it can explain how people vary in their ability to cope with diversity and their ability to function in cross-cultural settings (Ang & Inkpen, 2008).

Livermore (2011) describes CQ-Drive, the motivational dimension of cultural intelligence, as including intrinsic and extrinsic interest in engaging in intercultural encounters as well as self-efficacy (Bandura, 1986), or the belief that one will be successful in that encounter (Livermore, 2011). CQ-Knowledge is the cognitive dimension, which demonstrates one’s understanding of the differences and similarities between cultures. Rather than focusing on every aspect of a culture, CQ knowledge stresses an understanding of cultural differences and similarities and their impact on one who is engaging with that culture. CQ-Strategy (metacognition) is how one makes sense of culturally diverse experiences and enables one to plan effectively for a successful intercultural encounter. Finally, CQ-Action, the behavioral dimension of cultural intelligence is one’s capability to adapt their behavior appropriately in different cultural situations, using verbal and non-verbal communication.
RESEARCH OBJECTIVES

The goal of this research was to measure the development of cultural intelligence in students participating in the CANEU-COOP program. We hypothesized that:

1) Students will see a growth in their cultural intelligence as a result of their participation in the program
2) There will be a difference in cultural intelligence development in students working and those studying abroad

To test these hypotheses, data was analyzed as follows:

1) Comparing Time: Students’ CQ scores were compared from T1 (before the international experience) to T2 (upon completion of the international experience) in order to determine whether taking part in the program resulted in significant increases in each dimension of cultural intelligence.
2) Comparing Session Type: Students’ scores on each of the four dimensions of cultural intelligence were compared based on the type of session (work abroad or study abroad) to determine whether student scores differed in a particular dimension of CQ before and after the program.
3) Comparing Dimension: Scores on each dimension were compared with each other to determine whether work or study leads to greater increases for certain dimensions.

METHODOLOGY

All students participating in the CANEU-COOP program and workplace supervisors of Canadian students completing co-op work terms in Europe were invited to participate in this research project. Students completed a pre-assessment of their intercultural effectiveness at time 1, prior to the beginning of the term. At the end of the term, time 2, they then completed a post-assessment. In the case of the Canadian students who were on work terms, their work term employer supervisor also completed an assessment of the students’ intercultural effectiveness. Data was collected on 152 students over four years (Table 1). This study focuses on analysis of the data collected from these four years (2011-2014). Ethics approval and relevant permissions for this study was received from all participating institutions.

TABLE 1: The number of student participants by year and time point

<table>
<thead>
<tr>
<th>Year</th>
<th>Test Time</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
<td>36</td>
<td>32</td>
<td>45</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Time 2</td>
<td>36</td>
<td>27</td>
<td>39</td>
<td>37</td>
</tr>
</tbody>
</table>

Participants

Of the 152 students participating in this research, 71 (69% male) participated in a co-op work term abroad (work session) and 81 students (82.7% male) completed academic terms in Canada (study session). The average age of students was 23.1 years for the work session and 24.6 years for the study session. Thirteen participants, 7 work-session and 6 study-session, did not complete the T2 questionnaire, which left 139 students for Time 2.
Measuring Cultural Intelligence

After a thorough literature review to explore the tools available to measure development of intercultural effectiveness (McRae and Ramji, 2011), the “Cultural Intelligence Scale” (CQS), a four-factor, 20 item scale developed by Ang et al (2007) was selected for this study. In subsequent studies, Matsumoto and Hwang (2013) and Leung, Ang, and Tan (2014) provide a synopsis of some of the tools available to measure intercultural effectiveness, and rated cultural intelligence among those recommended (Leung, Ang, & Tan, 2014).

The four dimensions of CQ are the basis for the cultural intelligence scale (CQS), a scale used to measure intercultural competence (Ang, et al., 2007). As reported in McRae and Ramji (2011), CQS has proven to be reliable and valid across samples, time, methods and countries (Ang et al., 2007; McRae & Ramji, 2011; Reibschleger, 2003; Van Dyne, Ang, & Koh, 2008). Van Dyne et al (2008) also demonstrated that CQS “has incremental validity in predicting cultural judgement and decision making, adjustment and well-being” (Van Dyne et al., 2008), and that “self-report CQ predicted peer-report adjustment and peer-report CQ predicted self-report adjustment” (p. 35). The CQS can therefore be used for self-reporting, peer-reporting and supervisor-reporting (Van Dyne et al., 2008). These reports and scores provide the individual with a conceptual frame to support their reflections, learn about their experiences and have the vocabulary to articulate their learning and cultural intelligence to others, such as prospective employers (McRae, 2013).

Students’ cultural intelligence was measured using the 20-question Cultural Intelligence Survey (CQS) developed by Ang et al. (2007). Students completed the online surveys (obtained from the Cultural Intelligence Centre) prior to their departure (Time 1) and after their return (Time 2) from their time abroad. Composite scores were obtained by averaging the responses of each dimension’s questions for pre-test and post-test respectively. This form of measurement is consistent with the method used by the original researchers of cultural intelligence (Ang et al., 2007).

Data Analysis

IBM SPSS Statistics 23.0 (2015) was used to analyze the survey results. SPSS is a statistical software program capable of testing whether scores are statistically significantly different. Pearson chi-square tests were conducted to determine whether variables were statistically associated. A Repeated Measures ANOVA was the initial analysis conducted. After finding that there were significant interactions between time of testing (Time 1 and Time 2), session types (work or study) and the four CQ dimensions, further analyses were conducted to compare student scores between these parameters. Statistical testing was conducted in the form of ANOVA tests, paired t-tests, t-tests and bivariate correlations along with tests for normality (Anderson-Darling test, Shapiro-Wilk test, etc.) to ensure data was normally distributed. When the normality assumption did not hold, nonparametric tests were used to ensure reliable statistical results. These tests were used in four formats: to compare student scores based on change over time, type of session, differences between dimensions, and similarity to supervisor scores.
RESULTS

A demographic comparison was made between the Canadian students who participated in work sessions and the European students who participated in study sessions. Demographic information showed that no Canadian students were originally from European countries, and no European students were originally from Canada. Comparing the two session types, Pearson chi-square tests showed that students had similar experiences of other countries (p-value = 0.156), but experience with other cultures was significantly different (p-value = 0.008) between the two session types (Table 2).

<table>
<thead>
<tr>
<th>Experiences of other countries</th>
<th>Canadian students</th>
<th>EU students</th>
<th>Total</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>No/Little experience</td>
<td>14 (20.0%)</td>
<td>24 (30.8%)</td>
<td>38 (25.7%)</td>
<td></td>
</tr>
<tr>
<td>Moderate experience</td>
<td>18 (25.7%)</td>
<td>19 (24.4%)</td>
<td>37 (25.0%)</td>
<td>0.156</td>
</tr>
<tr>
<td>Experience</td>
<td>34 (48.6%)</td>
<td>26 (33.3%)</td>
<td>60 (40.5%)</td>
<td></td>
</tr>
<tr>
<td>Very experienced</td>
<td>4 (5.7%)</td>
<td>9 (11.5%)</td>
<td>13 (8.8%)</td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td>9 (12.9%)</td>
<td>22 (28.2%)</td>
<td>31 (20.9%)</td>
<td></td>
</tr>
</tbody>
</table>

TABLE 2: Counts and column percentages for students’ experiences of other countries and experience with other cultures by session type, and their respective p-values.

Preliminary testing was also done to calculate scores in a manner that would allow for analysis. This included taking average scores on each dimension based on time and type of session as well as calculating the average change in score from Time 1 to Time 2. SPSS was used to calculate the average, standard deviation, and standard error of each composite score.

Time Comparison

Table 3 compares the change in scores, measuring the differences between the data collected before the students’ participation (Time 1) and after their completion (Time 2) of the program. Higher increases signify a larger benefit in that dimension. Only students who completed both Time 1 and Time 2 surveys were included in the change score analysis. Results show that the change in CQ-Drive was smaller than the change in the other three CQ dimensions, but the change in scores were similar across both the study abroad and the work abroad groups for each CQ dimension.
TABLE 3: Average change T2 versus T1 (standard errors) over the four years for 139 students.

<table>
<thead>
<tr>
<th>Session Type</th>
<th>Drive</th>
<th>Knowledge</th>
<th>Strategy</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work (n=64)</td>
<td>0.17 (0.13)</td>
<td>0.67 (0.13)</td>
<td>0.90 (0.16)</td>
<td>1.02 (0.15)</td>
</tr>
<tr>
<td>Study (n=75)</td>
<td>0.24 (0.09)</td>
<td>0.87 (0.12)</td>
<td>0.67 (0.10)</td>
<td>0.72 (0.14)</td>
</tr>
<tr>
<td>Total (n=139)</td>
<td>0.21 (0.08)</td>
<td>0.78 (0.09)</td>
<td>0.78 (0.09)</td>
<td>0.86 (0.10)</td>
</tr>
</tbody>
</table>

Paired t-tests were conducted to determine if this increase in CQ scores was significant, and if the CANEU-COOP program led to perceivable increases in intercultural effectiveness. All dimension scores except CQ-Drive had significant increases (p-value<0.001) from Time 1 to Time 2. Time results on CQ-Drive, on the other hand were less conclusive, with significant differences only for study session students (p-value=0.012).

Session Type Comparison

Table 4 below, compares average scores with standard errors of study and work session students on all four dimensions of CQ during pre-and post-testing. These results indicate that work and study session students had similar CQ scores in all four dimensions at Time 1 and Time 2. The CQ-Drive scores were higher than the three other CQ dimensions.

TABLE 4: Average scores (standard errors) for each dimension over the four years.

<table>
<thead>
<tr>
<th>Session Type</th>
<th>Pre-Test</th>
<th>Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session Type</td>
<td>Drive</td>
<td>Knowledge</td>
</tr>
<tr>
<td>Work (n=71)</td>
<td>5.71 (0.11)</td>
<td>4.44 (0.11)</td>
</tr>
<tr>
<td>Study (n=81)</td>
<td>5.71 (0.08)</td>
<td>4.28 (0.10)</td>
</tr>
<tr>
<td>Session Type</td>
<td>Drive</td>
<td>Knowledge</td>
</tr>
<tr>
<td>Work (n=64)</td>
<td>5.87 (0.12)</td>
<td>5.13 (0.12)</td>
</tr>
<tr>
<td>Study (n=75)</td>
<td>5.98 (0.08)</td>
<td>5.14 (0.09)</td>
</tr>
</tbody>
</table>

One-Way ANOVA analysis and nonparametric tests of two independent samples revealed that there were no significant differences between students in either session type in terms of overall score (p-values>0.05).

Multi-Rater Comparison

Bivariate correlation comparisons were made between self-report measures and supervisor ratings for work session students’ post-test scores are shown in Table 5. Due to low participation rates, the sample size for this test was reduced to 34. A test of significance
showed that there was significant correlation between student and supervisor scores in CQ-knowledge and CQ-Strategy.

**TABLE 5: Average score (standard errors) of supervisors over the four years; Spearman’s correlation coefficient and the corresponding p-value for test of zero correlation.**

<table>
<thead>
<tr>
<th>Student-Supervisor Ratings</th>
<th>Dimension</th>
<th>Drive</th>
<th>Knowledge</th>
<th>Strategy</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drive</td>
<td>5.93 (0.07)</td>
<td>5.13 (0.07)</td>
<td>5.49 (0.08)</td>
<td>5.33 (0.09)</td>
</tr>
<tr>
<td>Supervisor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drive</td>
<td>6.08 (0.15)</td>
<td>5.06 (0.15)</td>
<td>5.79 (0.14)</td>
<td>5.56 (0.14)</td>
</tr>
<tr>
<td>Spearman’s rho</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spearman’s rho</td>
<td>0.28</td>
<td>0.38</td>
<td>0.37</td>
<td>0.14</td>
</tr>
<tr>
<td>P-value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>P-value</td>
<td>0.112</td>
<td>0.027</td>
<td>0.034</td>
<td>0.448</td>
</tr>
</tbody>
</table>

**DISCUSSION**

Our first hypothesis, that students will see a growth in their cultural intelligence as a result of their participation in the program was tested by comparing CQ scores for students before and after their participation in the CANEU-COOP program. Results confirm that there was an increase in CQ scores for all the students participating in the CANEU-COOP program. CQ-Drive was high for all participants and changed the least from Time 1 to Time 2. This is likely due to a ceiling effect caused by high levels of motivation (to begin with) for students willing to embark on an international program such as CANEU-COOP. Significant increases in CQ-Knowledge, CQ-Strategy, and CQ-Action after the program provided evidence that the students who participated in this CANEU-COOP program did develop intercultural effectiveness.

We had also hypothesized that there would be a difference in CQ development between students working abroad and students studying abroad. Results showed that both groups had similar CQ scores, and as such there was no significant difference in overall CQ scores between those students who had a study abroad term and those who had a work abroad term.

Results for work session students showed that the change in CQ-Action was significantly higher than the change in CQ-Knowledge. Students working abroad may be more focused on adapting to their new workplace, rather than learning about the culture, hence the increased CQ Action.

Interestingly, differences were observed that warrant further investigation: students working abroad (Canadians in Europe) showed a higher increase in CQ-Strategy and CQ Action, while students studying abroad (Europeans in Canada) showed a higher increase in CQ Knowledge (Table 4). This may be attributed to the nature of work-integrated learning as opposed to a study term (Crump & Johnsson, 2011; Dressler & Keeling, 2004, 2011). Further research is required to determine if larger sample sizes would render these findings significant.

Finally, as noted in the introductory sections of this paper, supervisors of students on work sessions were invited to participate in the cultural intelligence research. Supervisors were
asked to provide an assessment of the students’ cultural intelligence development over the
course of their employment with their organization. These supervisor assessments were
conducted to find out whether students may be rating themselves higher than their
supervisors or if students and supervisor ratings match. Our results confirmed that there
was significant correlation between student and supervisor scores in CQ-knowledge and
CQ-Strategy, indicating that student assessments match the supervisor assessments. This is
reassuring despite the small sample size of 34 supervisor ratings.

LIMITATIONS OF THE RESEARCH

The research is limited by the sample size, especially of supervisors, and by the lack of a
control group.

IMPLICATIONS

This research has provided insight into the value of the CANEU-COOP program in enabling
the development of intercultural effectiveness in students. The importance of this cannot be
underestimated, given the value employers place on intercultural skills. This was
demonstrated in the 2013 British Council study where 367 human resources managers in 367
companies and 9 countries indicated that they valued intercultural skills in the workplace
(British Council, 2013).

This places an obligation on post-secondary institutions to adequately prepare students for
working in culturally diverse workplaces, whether domestically or abroad. The CBIE 2015
World of Learning report articulates how important internationalized learning outcomes are
for the success of students working and studying abroad (CBIE, 2015).

This research project served as the springboard for the University of Victoria to develop a
strategy to help develop global-ready graduates using the construct of cultural intelligence.
This strategy includes a framework that supports the needs of inbound international
students, outbound WIL students and all students preparing to work in diverse workplaces.
In addition to developing specific curricula for the above audiences, the framework includes
tools to assess the intercultural effectiveness in students as a result of their WIL experiences,
and strategies to help students’ transition to the workplace with an understanding of their
intercultural effectiveness and its importance to employers.

As indicated, an opportunity exists to further examine the observation that the dimensions
of CQ-Action and CQ-Strategy developed more in Canadian students on work terms, and
CQ-Knowledge developed more in European students on study terms.

Future planned research will add a qualitative component to deepen our understanding of
factors that influence the development of cultural intelligence. This further research also
aims to link cultural intelligence development to career outcomes and employability.

ACKNOWLEDGEMENT

The authors would like to acknowledge additional funding provided by the Centre for
Advancement of Cooperative Education (WatCACE) at the University of Waterloo that
enabled completion of this research project.
REFERENCES


This APJCE Special Issue was sponsored by

Papers stem from presentations\(^1\)

delivered at the

2\(^{nd}\) International Research Symposium on Cooperative and Work-Integrated Education

\(^1\) Papers included in this APJCE Special Issue are based on selected manuscripts from the research symposium’s refereed proceedings. All manuscripts were expanded and modified to meet APJCE requirements, double-blind reviewed by the APJCE editorial board, and amended before being accepted to be published in APJCE.
About the Journal

The Asia-Pacific Journal of Cooperative Education publishes peer-reviewed original research, topical issues, and best practice articles from throughout the world dealing with Cooperative Education (Co-op) and Work-Integrated Learning/Education (WIL).

In this Journal, Co-op/WIL is defined as an educational approach that uses relevant work-based projects that form an integrated and assessed part of an academic program of study (e.g., work placements, internships, practicum). These programs should have clear linkages with, or add to, the knowledge and skill base of the academic program. These programs can be described by a variety of names, such as cooperative and work-integrated education, work-based learning, workplace learning, professional training, industry-based learning, engaged industry learning, career and technical education, internships, experiential education, experiential learning, vocational education and training, fieldwork education, and service learning.

The Journal’s main aim is to allow specialists working in these areas to disseminate their findings and share their knowledge for the benefit of institutions, co-op/WIL practitioners, and researchers. The Journal desires to encourage quality research and explorative critical discussion that will lead to the advancement of effective practices, development of further understanding of co-op/WIL, and promote further research.

Submitting Manuscripts

Before submitting a manuscript, please ensure that the ‘instructions for authors’ has been followed (www.apjce.org/instructions-for-authors). All manuscripts are to be submitted for blind review directly to the Editor-in-Chief (editor@apjce.org) by way of email attachment. All submissions of manuscripts must be in Microsoft Word format, with manuscript word counts between 3,000 and 5,000 words (excluding references).

All manuscripts, if deemed relevant to the Journal’s audience, will be double-blind reviewed by two or more reviewers. Manuscripts submitted to the Journal with authors names included with have the authors’ names removed by the Editor-in-Chief before being reviewed to ensure anonymity.

Typically, authors receive the reviewers’ comments about 1.5 months after the submission of the manuscript. The Journal uses a constructive process for review and preparation of the manuscript, and encourages its reviewers to give supportive and extensive feedback on the requirements for improving the manuscript as well as guidance on how to make the amendments.

If the manuscript is deemed acceptable for publication, and reviewers’ comments have been satisfactorily addressed, the manuscript is prepared for publication by the Copy Editor. The Copy Editor may correspond with the authors to check details, if required. Final publication is by discretion of the Editor-in-Chief. Final published form of the manuscript is via the Journal website (www.apjce.org), authors will be notified and sent a PDF copy of the final manuscript. There is no charge for publishing in APJCE and the Journal allows free open access for its readers.

Types of Manuscripts Sought by the Journal

Types of manuscripts the Journal accepts are primarily of two forms; research reports describing research into aspects of Cooperative Education and Work Integrated Learning/Education, and topical discussion articles that review relevant literature and give critical explorative discussion around a topical issue.

The Journal does also accept best practice papers but only if it present a unique or innovative practice of a Co-op/WIL program that is likely to be of interest to the broader Co-op/WIL community. The Journal also accepts a limited number of Book Reviews of relevant and recently published books.

Research reports should contain; an introduction that describes relevant literature and sets the context of the inquiry, a description and justification for the methodology employed, a description of the research findings-tabulated as appropriate, a discussion of the importance of the findings including their significance for practitioners, and a conclusion preferably incorporating suggestions for further research.

Topical discussion articles should contain a clear statement of the topic or issue under discussion, reference to relevant literature, critical discussion of the importance of the issues, and implications for other researchers and practitioners.