The dynamic nature of flow in the EFL classroom: Learners’ perceptions of inter-cultural task-based interaction.

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Flow
(Csikszentmihalyi, 1975, 1990)

“The optimal task experience” (Dörnyei & Ushioda, 2011)

Students feel in control and have interest in a challenging task.

Psychological state (focus, interest and enjoyment)

Improved performance produce feelings of satisfaction.

Skill level is elevated to match task difficulty.

Model of Flow in the language classroom (Egbert, 2003)
Flow, tasks, and WTC

- A flow state occurs when learners are productive—not passive—resulting in “higher levels of performance” (Csikszentmihalyi, 1999, p. 74)

- During a communicative task, a readiness to enter into communication (WTC) is facilitated by the following flow-facilitating conditions:
  - A balance of task challenges and learner skills – e.g. preparation time; appropriate task difficulty.
  - Control over the task design/implementation – e.g. learner-generated content; choice over interlocutor
  - Clear task objectives that focuses learners’ attention
  - Personal interest in the task topic
Inter-cultural contact

- Studies in naturalistic settings have linked intercultural contact to increased self confidence (Clément, Dörnyei, Noels, 1994; Labrie & Clément, 1986; Noels & Clément, 1996)
- Computer-mediated inter-cultural tasks in the ESL classroom generate elevated flow levels (Egbert, 2003)
- Computer-mediated Japanese-Taiwanese interactions produce heightened curiosity and self confidence (Freiermuth & Huang, 2012)
- Inter-cultural contact can lead to increased anxiety due to lack of familiarity (Spencer-Rodgers & McGovern, 2002)
Research questions

1. Does intercultural contact affect flow during the performance of oral tasks?

2. Does inter-cultural contact affect language production during the performance of oral tasks?

3. What dimensions of flow emerge during the performance of oral tasks?

4. How do the dimensions of flow change in strength over over five tasks?
<table>
<thead>
<tr>
<th>Intra-cultural group (EFL class)</th>
<th>Inter-cultural group (EFL class)</th>
<th>International student volunteers</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 Japanese learners of English</td>
<td>21 Japanese learners of English</td>
<td>21 international students (10 nationalities)</td>
</tr>
<tr>
<td>1st year</td>
<td>1st year</td>
<td>Short-term study abroad students</td>
</tr>
<tr>
<td>TOEFL: 430-470</td>
<td>TOEFL: 430-470</td>
<td>13 native-English speakers &amp; 8 non-native English speakers</td>
</tr>
</tbody>
</table>
Research design

Intra-cultural group, N=21

Inter-cultural group, N=21

Phase 1

Tasks 1 - 5

Task performance 1

(Week 2-6)

Phase 2

Japanese-Japanese Pairs
*Tasks 1-5

Japanese-Japanese Pairs
*Tasks 1-5

Japanese-Japanese Pairs
*Tasks 1-5

Japanese-international Pairs
*Tasks 1-5

Task performance 2

(Week 8-12)
Task implementation

<table>
<thead>
<tr>
<th>Pre-task</th>
<th>10 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information gap</td>
<td></td>
</tr>
<tr>
<td>Opinion sharing</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Decision-making</td>
<td>5 minutes</td>
</tr>
</tbody>
</table>
Data collection

Flow questionnaire (Egbert, 2003)
*Task 1-4
*Task 1R-4R

Learner diaries
*Task 1R-5R

Audio recordings
*Task 1R & 4R

1. This task excited my curiosity.
   - Absolutely true/とてもよくある 7
   - True/よくある 6
   - Somewhat true/どちらかといえばある 3
   - Neutral/どちらとも言えない 4
   - Somewhat untrue/どちらかといえばない 3
   - False/まったくない 2
   - Absolutely untrue/뚜렷히 아니다 1

2. Performing the task was interesting.
   - Absolutely true/とてもよくある 7
   - True/よくある 6
Analysis

(RQ1)
- MANOVA conducted on flow questionnaire scores
  - *Within-subjects factor* = Initial task performance; Repeated task performance
  - *Between-group factor* = Inter-cultural group; Intra-cultural group
- Tabulated the number of students “in flow” using a threshold questionnaire score of “5” (out of 7)

(RQ2)
- Independent *t* tests were conducted to test for a significant difference in word and turn counts - adjusted threshold for significance of .025 (.05/2).

(RQ3-4)
- Content analysis of learner diaries to determine the components of flow.
## Results

### Questionnaires

#### 1. This task excited my curiosity.

<table>
<thead>
<tr>
<th>Description</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolutely true / とても当てはまる</td>
<td>7</td>
</tr>
<tr>
<td>True / 当てはまる</td>
<td>6</td>
</tr>
<tr>
<td>Somewhat true / どちらかと言えば当てはまる</td>
<td>5</td>
</tr>
<tr>
<td>Neutral / どちらともいえない</td>
<td>4</td>
</tr>
<tr>
<td>Somewhat untrue / どちらかと言えば当てはまらない</td>
<td>3</td>
</tr>
<tr>
<td>Untrue / 当てはまらない</td>
<td>2</td>
</tr>
<tr>
<td>Absolutely untrue / 全く当てはまらない</td>
<td>1</td>
</tr>
</tbody>
</table>

#### 2. Performing the task was interesting.

<table>
<thead>
<tr>
<th>Description</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolutely true / とても当てはまる</td>
<td>7</td>
</tr>
<tr>
<td>True / 当てはまる</td>
<td>6</td>
</tr>
</tbody>
</table>
Flow scores

Inter-cultural group

Intra-cultural group

Repetition x Group

\( p = .016 \)
Flow scores

$p = .009$

$p = .458$
Participants “in flow”

Inter-cultural group

Intra-cultural group

Number of students in flow

Inter = 68
Intra = 62
Participants “in flow”

Inter-cultural group

Intra-cultural group

Number of participants in flow

Inter = 68
Intra = 62

Inter = 83
Intra = 55
前回、または初めてのタスクと比べると格段に良くなりました。聞く能力については聞き取れないところもありますが、分かったところから内容を推測する能力が高くなりました。話し方については、初回は自分の文法が合っているか不安で話すことにためらいがありました。しかし、繰り返して自分で考えた話していることに自信がもてるようになりました。相手も分かりやすいので文法が合っているか不安になるよりも積極的に話すべきだと思いました。留学をしたいと考えていますが、今回得られた経験を活かしたいです。
課題としては話しをしているときに、複雑な文法を使えず、単調な文法で話すことが多かったです。特に関係代名詞、to不定詞などは会話の中で使えないようにしたいです。
今回の大まを通じて話そうという気持ちがあれば会話することはできるのだと実感できました。授業でこのようなことができないのは残念ですが、これからは自分でこういった機会をつくってもっと話せるようにしたいです。
Inter-cultural group (flow enhancing)

- Sense of accomplishment
- Enjoyment
- Interest
- Attention
- Challenge-skills balance
- Control

Tasks: 1R, 2R, 3R, 4R, 5R
Intra-cultural group
(flow enhancing)
Inter-cultural group
(flow inhibiting)

Challenge-skills balance

Sense of accomplishment
Intra-cultural group (flow inhibiting)
Results
Language production (words & turns)
Results: Word Count

- Inter-cultural group
- Intra-cultural group

Task 1R
- Mean words: 620
- p = .05

Task 4R
- Mean words: 465
- p = 0.14
Results: Turns of Talk

- **Inter-cultural group**
  - Task 1R: $p = .02$
  - Task 4R: $p < .01$

- **Intra-cultural group**
Results:
Relationship between flow and words/turns

<table>
<thead>
<tr>
<th></th>
<th>Inter-cultural group</th>
<th></th>
<th>Intra-cultural group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Words</td>
<td>Turns</td>
<td>Words</td>
</tr>
<tr>
<td></td>
<td>$r$</td>
<td>$p$</td>
<td>$r$</td>
</tr>
<tr>
<td>Flow</td>
<td>.16</td>
<td>.35</td>
<td>.17</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Main findings

(RQ1) Flow levels:
- negatively affected by task repetition
- offset by the positive effect of inter-cultural contact
- greater in number of “in flow” experiences for the inter-cultural group

(RQ3) Language production:
- Inter-cultural contact resulted in significantly more interaction.

(RQ4) Dimensions of flow:
- (1) Challenge-skills balance, (2) Sense of accomplishment, (3) Interest,
  (4) Enjoyment, (5) Attention, (6) Control

(RQ4) Change in dimensions of flow:
- Inter-cultural contact - increasing contribution from sense of accomplishment (flow enhancing)
- Inter-cultural contact - decreasing contribution “Challenge-skills balance” (flow inhibiting)
Implications

- Inter-cultural contact could be one way to promote engagement and productive language use - other ways: mixed proficiency pairs, mixed ‘knowledge’ pairs
- Tasks should be designed to optimize interactivity — learner-generated content, create a knowledge gap
- To facilitate interaction, students may benefit from explicit instruction on using interactional strategies.
- Students tend to lose engagement if the tasks (same content & procedures) are repeated - teachers could vary content
- Cultivate a ‘sense of accomplishment’ through providing post-task opportunities to evaluate their performance accomplishments
Selected References