Using Critical Incident Analysis to Develop Form 11 English as a Foreign Language Students' Self-Reflection Skills and Conditional Phrase Usage Incident

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Abstract: The author aimed to explore how critical incident analysis could be adapted for form 11 English as a foreign language (EFL) students in Latvia to improve their critical self-reflection skills. A case study of twenty-two form 11 students and one teacher was carried out over one month. Data collection methods included a questionnaire, individual and group interviews, student reflection journals, and written student feedback. Critical incident analysis, originally developed by J.C. Flannagan and D. Tripp as a series of procedures to improve an organization's activities, was adapted to develop form 11 students' self-reflection skills as well as their competence in using third and mixed conditional phrases in EFL class. Analysis of students' reflection journals using the J.D. Bain scale showed that a majority of students' levels of self-reflection decreased or stagnated between their first and final journal entries, and most students did not receive high scores on a summative assessment testing their abilities in using third and mixed conditional phrases following the unit. Students self- reported a perceived increase in self-reflection skills, though modifications are required in order for the technique to satisfactorily improve self-reflection skills and use of conditional phrases.

Keywords: English as a foreign language, secondary school education, critical incidents, conditional phrases, reflection skills.

Introduction

On 21 May 2013, the Latvian Cabinet of Ministers adopted *Regulations on the National General Secondary Education Standards, Study Subject Standards and Curriculum Samples* (Noteikumi par valsts..., 2013), a set of guidelines that establishes overall goals, standards, evaluation procedures, and sample curriculum for state-funded secondary schools (forms ten through twelve, generally ages sixteen through nineteen). Section II, titled, "General Secondary Education Programme Main Objectives and Tasks", sets out four major "objectives" for Latvian secondary education. Objectives 2.1, 2.2, and 2.4 are worded in the following way:

- 2.1. to provide students with the knowledge and skills necessary for personal growth and development, civic participation, employment, social integration and continuation of education
- 2.2. to promote the improvement of students' spiritually, emotionally and physically developed personality and to cultivate healthy lifestyle habits
- 2.4. to develop students' ability to learn and improve independently, motivating lifelong learning and the choice of a career (Noteikumi par valsts..., 2013).

In these three objectives, there are a few key words and phrases that are closely inter-related: "personal growth and development", "improvement of a student's... emotionally... developed personality", and "students' ability to... improve independently, motivating lifelong learning". One crucial ability that students must have to succeed in all of these ways is that of self-reflection, by which is meant *A mental process in which one gives active and careful thought to their past, present, or future actions or situation*. The ability for students to properly reflect on their actions and experiences has been promoted by teacher trainers and education authors, often in the form of "reflection journals" or post-assignment feedback.

It can be difficult for students and adults alike to find the time to properly and deeply reflect on one's past, present, and potential future. In the exam-based drive to prepare students for the workplace or academia after the completion of secondary school, it is the author's fear that not enough time is spent in class teaching students how to engage in meaningful reflection about their school work, their past experiences, and the future directions of their lives. With so much material for students to learn and retain that is required to pass their final exams and move on to post-secondary education, the skill of self-reflection which is so critical in achieving the Latvian government's goal of creating "life-long learners" might not be adequately addressed.

There already exist myriad models of self-reflection that can be used in the secondary school foreign language classroom, but one interesting method that to the author's knowledge had not yet been adapted to that context is the classic "critical incident analysis" technique first proposed and outlined by J.C. Flanagan (1954) and modified for the field of education by D. Tripp (1993). Although this technique was originally designed as a psychological method to research and analyse issues of organizational failure in distressful situations, it has previously been successfully adapted for personal self-reflection use in teacher and nurse education programs.

The goal of J.C. Flanagan's work was to develop a flexible system, adaptable to many different situations, which organizations could use to objectively collect data about the behaviour of their members or employees in certain defined situations and use the data to make improvements in some way. J.C. Flanagan (1954) laid out five steps for authors to use the technique to find out about a certain situation (Figure 1). Possible applications that J.C. Flanagan suggested were as diverse as determining job responsibilities, designing operating procedures, measuring proficiency or performance, and psychotherapy (Flanagan, 1954, 48-355).

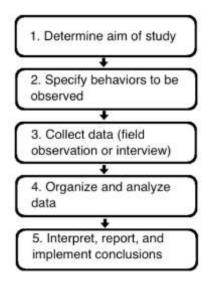


Figure 1. Steps of critical incident analysis (Flanagan, 1954).

In J.C. Flanagan's initial form, there's little conceivable use for critical incident technique as a method to teach self-reflection in the English as a second language classroom. However, the core underlying principles of the technique have been adapted and heavily modified for usage in a number of contexts. D. Tripp (1993) did the first major work in adapting the technique to the field of education, beginning with redefining exactly what critical incidents are and are not. According to D. Tripp, "critical incidents are not 'things' which exist independently of an observer and are awaiting discovery like gold nuggets or desert islands, but like all data, critical incidents are created. Incidents happen, but critical incidents are produced by the way we look at a situation: a critical incident is an interpretation of the significance of an event" (Tripp, 1993, 8).

D. Tripp (1993) believed that critical incidents need not be dramatic life-turning moments, but ones that upon analysis gain new meaning that is transformative in some way. People "create" critical incidents through the process of analysis of moments that often seem very ordinary to begin with. He saw critical incidents as more than a way to analyse organizational practices, instead creating various frameworks of "critical incident analysis" to take such incidents and derive meaning from them. Various scientists since D. Tripp have applied critical incident analysis in a variety of situations, such as G. Kilianska-Przybylo (2009) who wrote about using the process to enhance the inter-cultural competence of students in her teacher training program. Like G. Kilianska-Przybylo, the wide majority of those who have done field and theory work with critical incident analysis have done so in the context of post-secondary education, especially teacher education programs. While the value of critical incidents for teachers and university students has been recognized for a significant period of time, use of this valuable technique with secondary school students has largely been overlooked.

Although there is no universally agreed upon framework for writing critical incident analyses, most frameworks involve answering certain prompt questions that describe and analyse a critical incident in great detail. Critical incident analysis frameworks are usually designed with specific audiences and purposes in mind (Tripp, 1993; Green-Lister, Crisp, 2007; Nygren, Blom, 2001). The information for critical incident analyses often comes from reflective journals that are written in on a regular basis (Farrell, 2012), but the analyses themselves can also be a part of a regular journal. A.M. Priest and P. Sturgess (2005), J.E. Dyment and T.S. O'Connell (2003), and M. Farrah (2012) all argue that reflective journal writing promotes high school students' critical thinking skills and engages the learner in self-assessment, developing confidence and writing competence.

This aim of the present research was to explore how critical incident analysis can be adapted for form 11 English as a foreign language (EFL) students to perform critical self-reflection and develop self-reflection skills.

Methodology

Based on review of the available literature, the author decided to create a critical incident framework that was appropriate for the level of form 11 English as some foreign language students that also practiced the difficult grammar of third and mixed conditional phrases. A sample of fourteen form 11 students at Jelgava Spidola Gymnasium in Jelgava, Latvia were asked to keep a reflection journal in which every Friday, Sunday, Monday, and Wednesday, the students would make a list of ten things that they remembered happening since writing the previous entry. In accordance with D. Tripp's (1999,3) definition of critical incidents discussed earlier, the events could be dramatic or mundane, faraway or personal; simply the first ten things that came to their mind that they remembered. After completing the list, students would look over the list of events and pick one that seemed particularly memorable or "stuck out" to them for some reason. Then students would answer the following series of prompts:

1.	One good thing about	is that		
2.	One bad thing about	is that		
3.	One interesting thing about	t is that		
4.	<i>If I had(n't)</i>	, I would(n't) have		
5.		, I would(n't)		ise
	mixed conditional, first pa	rt in the past second part in the pa	resent)	
6.	<i>If</i>	had	_ instead, I would(n	ı't)
	(this i	s for if something else had happe	ned instead, what would	be
	different?			
7.	If I was/did(n't)	,	would(n't) ha	ive
	(if something about you was diffe	rent, how would this eve	2nt
	have been different, or hav	ve affected you differently)		

To answer the first three prompts, students responded using the past simple tense and described the incident as it really happened. The final four prompts all regarded hypothetical alternative scenarios. Question #3 required students to use a third conditional phrase, #4 required the mixed conditional, #6 required either the third or mixed conditional to describe what could be (or could have been different) if something else had happened instead, and #7 required a less common form of the mixed conditional in which they had to explain how something else could have happened if they were (or something about the situation was) different in some way. The author personally demonstrated the process during two lessons to make sure that students understood how it worked, and had students go through the process once themselves in class before assigning the journal as homework. The author also uploaded instructions and examples to the class website which had been previously used throughout the year as a means of communication between students and the author regarding assignments and other important information.

Students by the end of the unit had to write nine entries altogether, each one counting as a separate homework assignment. The completion or lack of completion of each assignment was recorded into the national E-Class (E-klase) system (the system used by Latvian schools to record grades and attendance

and report them to students and parents instantly) and were graded like any other homework assignment that was given throughout the year.

N. Hatton and D. Smith (1995) found that discussion of reflection journals with a partner led to higher levels of self-reflection. R. Ballantyne and J. Packer (1995) concurred with this idea, finding that one of the major weaknesses of journal writing is that it is essentially solitary and concluded that sharing or discussing their journals with peers or mentors could enhance the process. Though J.D. Bain, R. Ballantyne, J. Packer, and C. Mills (1999) pointed out that there is no concrete data to prove that such a link between peer discussion and deeper level of reflection exists, these researchers decided to include discussion as an aspect of the reflective process. In three of the lessons, students would get into pairs and take turns reading their most recent journal entry to their partner. After finishing reading the entry, the partner would ask the following questions:

- 1. Why did this incident stand out to you?
- 2. What else was going on at the time?
- 3. Do you think that you have a personal opinion or bias that influenced how you interpreted it?
- 4. Could you have interpreted this incident from a different point of view?
- 5. What did/can you learn from this incident?

The partner would then give their own opinion or interpretation of the incident that was described, and after some discussion the roles would be reversed and the partner would read about their critical event while the original student would ask the questions and then give their opinion afterwards.

At the end of the unit, students wrote a final reflection on the entire process by answering the following series of seven questions:

- 1. What three things did you learn or understand better about yourself from doing this project?
- 2. What was challenging about doing this project?
- 3. What was useful about doing this project?
- 4. What didn't you like about doing this project?
- 5. Compared with before doing this project, do you think that you are better, worse, or just as good at reflecting about yourself?
- 6. Compared with before doing this project, do you think that self-reflection is more important, less important, or just as important as you thought it was?
- 7. What is one thing you will remember from doing this project?

This final series of reflection questions would serve a variety of purposes. First of all, it would give a more meaningful sense of closure to the unit than a simple grammar test on conditional sentences. Secondly, it would serve as a data collection tool to provide valuable information to the author concerning students' experiences with the curriculum unit that could be analysed. The author chose to rely on these questions as opposed to a second questionnaire as previously planned, as he believed that this assignment would gain the same information that a second questionnaire would be designed to do and that another questionnaire might be too much of a bother for students to take seriously and give quality answers in response to. Finally, it would serve as a second summative assessment that would be graded on a scale from 1 to 10 and count towards the students' semester grades. As the questions would be graded on a scale from 1-10 and recorded into the E-Class (E-klase) system just like every other grade, the author thought that the students might have more motivation to contribute detailed and useful responses that could be analysed as data.

Since the unit had a grammar focus as well (third and mixed conditional phrases), a short grammar test was planned and announced to students as part of the unit. The test followed the same format for grammar tests that the students had taken throughout forms 10 and 11, and practiced the grammar in the forms of listening tasks as well as writing tasks. The research location required that teachers utilize a traditional test in addition to any project work that an English unit might use as an alternative summative assessment. In total, there were thirteen 40-minute lessons during the unit which lasted from Tuesday, February 23, 2016 until Tuesday, March 22, 2016.

The unit was designed so that students should have written a new critical incident before each lesson so that they would be able to share them with classmates using the questions discussed above. If students had not recently written a critical incident and had nothing to discuss, then instead of speaking with a classmate they would use the time allotted to go through the critical incident writing process in class.

Students' reflections were evaluated through content analysis using the five-point hierarchical scale developed by J.D. Bain, R. Ballantyne, J. Packer and C. Mills (1999) which is outlined in the Table 1 below:

Table 1

Five-point level of reflection scale (Bain, Ballantyne, 1999, 60)			
Reflection Level	Description		
Level 1 (reporting)	The student describes, reports, or re-tells with minimal transformation, no added observations or insights		
Level 2 (responding)	The student uses the source data in some way, but with little transformation or conceptualization		
	The student makes an observation or judgment without making any further inferences or detailing the reasons for the judgment		
	The student asks a "rhetorical" question without attempting to answer it or consider alternatives		
	The student reports a feeling such as relief, anxiety, happiness, ect.		
Level 3 (relating)	The student identifies aspects of the data which have personal meaning or which connect with prior or current experience		
	The student seeks a s superficial understanding of relationships		
	The student identifies something they are good at, something that they need to improve, a mistake they have made, or an area in which they have learned from their practical experience		
	The student gives a superficial explanation of the reason why something has happened or identifies something they need or plan to do or change.		
Level 4 (reasoning)	The student integrates the data into an appropriate relationship, e.g. with theoretical concepts, personal experience, involving a high level of transformation and conceptualization		
	The student seeks a deep understanding of why something has happened		
	The student explores or analyzes a concept, event, or experience, asks questions and looks for answers, considers alternatives, speculates or hypothesizes about why something is happening		
	The student attempts to explain their own or others' behavior or feelings using their own insight, inferences, experiences, or previous learning, with some depth of understanding		
	The student explores the relationship between theory and practice in some depth		
Level 5 (reconstructing)	The student displays a high level of abstract thinking to generalize and/or apply learning		
	The student draws and original conclusion from their reflections, generalizes from their experience, extracts general principles, formulates a personal theory, or takes a position on an issue		
	The student extracts and internalizes the personal significance of their learning and/or plans their own further learning on the basis of their reflections		

Results and discussion

The author evaluated the students' journals by applying the aforementioned five-point reflection level scale to the first and last journal of each student to see if there was an increase in the level of reflection between the first and last entry. While the author predicted that there would be an increase in the students' level of reflection as they would improve their reflection abilities over the course of doing the journal project, the data in Figure 2 shows the opposite:

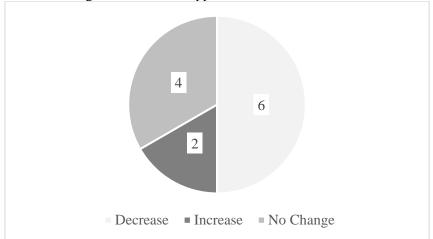


Figure 2. Change in students' reflection levels (amount of students).

The final reflection assignments were also analysed using the five-level scale. For students whose responses showed certain aspects of one level and certain aspects of another, the author assigned a level with a decimal of ".5". For example, a student whose response showed some aspects of Level 2 and some aspects of level three, a level of 2.5 was assigned to their response. As can be seen in Figure 3, half of the students' responses displayed a Level of 2.5 or below. Only one student displayed a level of 4.5, as that student reported planning to change specific aspects of their life after completing the assignment which is a sign of Level 5 self-reflection. Although that student displayed more signs of Level 3 self-reflection than level 4, the author still decided to label it Level 5 due to the specific plans to carry out action. The fact that half of the students displayed a self-reflection Level of 3 or higher represents some level of success for the research, as those levels are considered high levels of self-reflection by J.D. Bain, R. Ballantyne, J. Packer and C. Mills (1999) and the students displayed evidence of being able to do self-reflection at those levels after completing the unit.



Figure 3. Level of self-reflection observed in final reflection assignments.

Only two of the twelve students who completed the assignment showed an increase in level on the five-point reflection scale between the first and last entries. Four of the students showed no increase in level, and six students showed a decrease in their level of reflection. This data shows that the reflection journals did not work as the author had intended them, and that there might have been an issue in the design of the unit that could be discovered through the students' responses to their final reflection assignments and their responses to the group interview.

On the unit grammar quiz, the mean grade for the class was 5.69 on a ten-point scale, which rounds up to a grade of "6". The E-Class (E-klase) system further categorizes the results as "high" (9-10), "optimal" (6-8), "sufficient" (4-5), and "insufficient" (1-3). The grades broken into these categories can be seen in Figure 4 below.

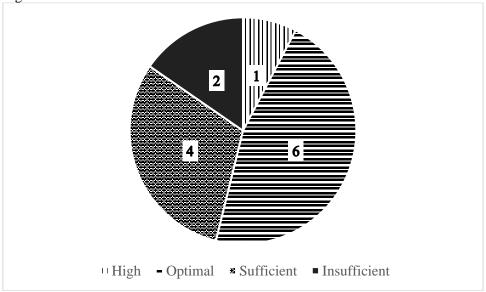


Figure 4. Students' learning results in unit grammar quiz (amount of students).

While more than half of the class scored at least "optimal", the author was disappointed that four students scored "sufficient" and three students scored "insufficient", almost half of the class altogether. This would indicate that knowledge of the usage of conditional phrases was still fairly inconsistent among the students who took part in the unit. This might indicate that more work should have been done practicing these conditional phrases outside of the self-reflection journal project, or that the author should have checked the journal entries more frequently to see that common mistakes were being made and help the students with the mistakes before they became internalized and were made on the final grammar quiz.

Conclusions

Based on analysis of students' reflection journal entries, unit grammar tests, and final reflection assignments, the self-reflection unit designed and taught by the author was only partially successful in improving students' self-reflection skills and abilities in using third and mixed conditional phrases. Analysis of the first and last journal of each student showed a general decline or stagnation on the J.D. Bain, R. Ballantyne, J. Packer and C. Mills (1999) scale, contrary to the author's hope that students' level of reflection would improve. Since the author did not analyse the level of every entry that each student wrote it is impossible to conclude whether there was an improvement of level before a decrease towards the end of the unit, and future research should include more analysis of each journal entry. Students also struggled on the unit grammar test even after completing the self-reflection unit, and since the author did not make use of pre-testing it is impossible to know whether or not the students' knowledge and abilities improved in any way. Future research should include the use of pre- and post-testing of students' abilities in using conditional phrases.

In analysing students' experiences during the self-reflection unit based on their reflection journals and group interviews, the author would make changes to the curriculum were it to be taught again. Students were asked to write journal entries too frequently over a short period of time, and did not receive enough

support in the form of having their reflection journal entries reviewed and given feedback regarding. Students also felt uncomfortable in their abilities to do reflection, although they believed that their abilities in using conditional phrases improved. The author would modify the unit to provide more support in the self-reflection itself, possibly making use of the five-point scale so that students have objective criteria on how to self-evaluate their own self-reflection. A grading system which made use of the five-point scale or a similar system might motivate students to provide more thorough self-reflection than pass or fail grading criteria.

The author concludes that while critical incident analysis remains a promising technique to teach reflection skills as well as conditional phrase usage, further modifications must be made to realize its full potential.

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