

Using ipsative assessment in teaching and learning English grammar through e-portfolios

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Research focus

Technical and Further Education (TAFE) Queensland Brisbane (TQB) is an established English Language Intensive Course for Overseas Students (ELICOS) provider that offers diverse language courses for onshore and offshore international students. This action research (AR) explored upper-intermediate students' perceptions, experiences, and evaluation of using e-portfolios for supporting grammar learning in a TQB ELICOS department. The research object was an ipsative assessment paradigm in English as a Second Language (ESL) education. The research subject was its practical implementation in the Australian TAFE context through the systematic use of Google Drive e-portfolios at the upper-intermediate level aimed at encouraging students' grammar development. We felt there was a need to explore ipsative assessment to promote grammar learning for all types of learners, in particular, those with learning differences. Grammar was perceived by many students as a boring aspect of language learning as its mastery implied dealing with memorising rules, language patterns, and multiple exceptions. Using ipsative assessment in teaching and learning English grammar aimed at shifting the focus from a burdensome grammar task to an outcome-focused culture.

Research theoretical framework

Ipsative assessment (Cattell 1944) is an innovative approach which refers to 'academic measurement based on intra-individual comparisons' (McLean and Chissom 1986:3), when students are encouraged to compete against themselves (Hughes 2014), monitor their ongoing academic progress (Sheridan 2015) and determine long-term perspectives of personal growth through learning (Brown and Knight 1998). This modern assessment method encouraged us as educators to refrain from comparing our students' academic performance to other people's responses, as in a norm-referenced assessment paradigm (Biggs 1999, Dunn, Morgan, O'Reilly and Parry 2004, Rust, Price and O'Donovan 2003), or assessing in accordance with pre-set standards, as in a criterion-referenced model (Le Brun and Johnstone 1994, Newble and Cannon 1989, Scarino 2005).

Grammar is a fundamental linguistic constituent which plays a pivotal role in any language teaching and assessment (Zain and Rohani 2007). According to Larsen-Freeman, grammar is a multi-dimensional construct, which comprises three important elements: 'morphosyntax, semantics, and pragmatics' (Larsen-Freeman 1997:2). Thus, while designing relevant grammar assessment tasks within a Communicative Language Teaching framework (Larsen-Freeman 1997) one must focus on the evaluation of the grammatical form, its meaning, and its actual use. We felt the need to incorporate grammar tasks that enabled learners to interact with thematic units, create hands-on artefacts and use grammar structures appropriately. According to Purpura's (2004) categorisation, grammar assessment tasks are classified into (1) 'selected response' (such as multiple-choice tests, discrimination tasks, or consciousness-raising tasks), (2) 'limited-production' (such as cloze exercises, short-answer tasks, sentence completion or dialogue-completion tasks), and (3) 'extended production tasks' (such as information gap tasks, role plays or simulation tasks). Extended production assignments are further categorised into three sets of activities: (1) 'performance-focused' (e.g., simulations, recasts, practice activities); (2) 'product-focused' (e.g., presentations, essays); and (3) 'process-focused' (e.g., observations, discussions, reflection activities).

E-portfolios allow students to demonstrate multi-dimensional grammar competence through collecting relevant digital artefacts (such as digital images, sketch notes, audio clips, video clips, cell phone recordings, web pages, etc.), and provide valuable learning experiences as they show 'the cumulative efforts and learning of a particular student over time' (McDonald 2011).

The teaching approach we took was grounded in pedagogies, educational psychology, and methodology. In terms of pedagogies and educational psychology, the research was based on Creative Pedagogy (Craft 2001) and Humanist Theory (Knowles, Holton and Swanson 1998). The Creative Pedagogy theoretical framework claims that creating innovative practices and novel classroom environments boosts learners' academic motivation and enthusiasm as well as encourages creative behaviour (Craft 2001). Humanist Theory emphasises the whole individual and their ability to learn through study, practice, and experience. It is a 'process by which behaviour is changed, shaped, or controlled' (Knowles et al 1998:13).

In terms of ESL methodology, the Critical Components theoretical framework (Staeher Fenner and Segota 2012) underpinned our research. It states that there are three critical components of the ESL pedagogical process: ESL teachers, ESL standards, and relevant assessment. The components constantly interact and significantly affect each other, creating necessary conditions for ESL academic achievements (Staeher Fenner and Segota 2012).

Organisational context

TAFE ELICOS classes are aimed at developing the skills and confidence necessary for everyday communication and travel, professional communication, and further studies at vocational or university levels, and are delivered in face-to-face, virtual synchronous, and online asynchronous delivery modes. The heterogeneous mix of ELICOS students at TAFE was predominately from the following countries: China, Japan, Brazil, Colombia, South Korea, Thailand, India, Taiwan, Spain, and Vietnam, and the typical age group was between 20 to 35 years. The participants in our research were four ELICOS upper-intermediate students studying virtually. They were a cross-cultural multi-age cohort from Japan, the Philippines, Argentina, and Indonesia. Two of the students were residing offshore, while the other two were living in Queensland. All of them had chosen a virtual method of English language learning. They were all digitally literate and their IT skills were at an average level.

Currently, the ELICOS program at TAFE relies on formative and summative assessment results for students to progress to the next-level classes. ELICOS educators at TAFE are required to use a criterion-referenced assessment model and evaluate their students' progress against a pre-determined set of standards. However, not every student can show progress through normative assessment types; thus, a new assessment approach was needed in the ELICOS department to support low achievers and students with special needs. We introduced a novel ipsative approach as a possible organisational solution that focused on intra-individual comparisons and enhanced the learning journey through building a growth mindset.

Research gap and research questions

Given that e-portfolios have been used in education for decades, it seems reasonable to expect a sizeable body of research to exist on how to apply them most efficiently and sustainably in the ESL classroom. Unfortunately, this has not proven to be the case. Firstly, although international students arrive in Australia with an array of learning and assessment experiences, receiving ipsative feedback through e-portfolios may be one way that has been least experienced by these students. Secondly, ipsative e-portfolios have the potential to develop students' multi-dimensional grammar competence, but an ESL classroom implementation plan has not been described in the research literature yet. Thirdly, a wide range of ELICOS students' assumptions about the benefits of e-portfolios is based on theoretical presuppositions of quality and potential effectiveness, rather than on empirical data drawn from a concrete ESL context.

Considering the specific context mentioned above, the following research questions arose:

1. What is the pedagogical plan for implementing a multi-phase ipsative assessment approach in the ESL classroom?
2. What are ELICOS upper-intermediate students' perceptions, experiences and evaluation of a multi-phase ipsative assessment teaching and learning approach in the ESL virtual classroom?

In our context, we hoped to initiate ground-breaking research that would continue a cycle of integrating e-portfolios as learning tools into the main ELICOS curriculum. We aimed to enhance students' learning journeys and provide professional development opportunities for colleagues.

Research design and plan

This AR project used a qualitative approach. Qualitative research methods investigate 'complex human-centered issues' (Webster and Mertova 2007) when the level of subjectivism is relatively high (Heale and Forbes 2013). This methodology enabled participants to share experiences and capture their voices (Creswell 2014). It also provided insights through student reflections on how e-portfolios supported the learning of grammar, in addition to concomitant learning of organisational, planning, and technological skills.

A single case study research analysis was chosen as an appropriate method for this project. It allowed for contextually specific and in-depth knowledge about particular academic issues by focusing on qualitative data gathered through various sources.

Data collection involved eight principal sources of qualitative data: fortnightly Testmoz¹ quizzes, fortnightly Smart Survey satisfaction questionnaires, systemic non-structured classroom observations, unstructured virtual classroom conversations, discourse analysis of verbal and written communication, reflective journals in Google Documents, weekly ipsative assessment planners, and progress checklists.

The ELICOS programme we developed was a 12-week learning process in a virtual class. We designed six blocks of 18 ipsative assessment tasks in total and linked them to the Cengage Life B2 course book (Dummett, Hughes and Stephenson 2012) and the current ELICOS curriculum. The ipsative assessment theme schedule comprised such topics as Getting to Know You, Relationships, Storytelling, Science and Technology, Art and Creativity, and Development. We created six blocks of themes with three ipsative assessment grammar tasks with gradually increasing difficulty levels: selected response, limited production, and extended production tasks. In order to facilitate instructional scaffolding, we created a Digital Weekly Planner (spark.adobe.com/page/ODdBA3yae3Ov4) with 33 Spark Pages (Spark Adobe), featuring extensive pedagogical instructions, ipsative assessment samples, and assessment

1 Testmoz is a web tool that allows you to create auto-graded tests and quizzes.

checklists. This type of scaffolding was ideal for virtual teaching and learning, as it was practical and students followed the modelling to create their own artefacts.

Implementation, observation, and evidence of student progress

Firstly, we conducted diagnostic testing to identify students' grammar gaps, preferred learning styles, past experiences of assessment types, digital competency levels, and current technology acceptance views. Initial critical reflections helped us to design our project plan and incorporate ipsative assessment tasks into the existing ELICOS course curriculum. We also helped our students to set up their Google Drive e-portfolios and Google Docs as part of the orientation process.

We delivered the course book content in virtual synchronous and asynchronous teaching-learning modes. We designed each fortnightly thematic block as a sequence of subtasks or phases aimed at building hierarchical grammar skills. Learners' progression was followed through our observation journals, informal discussions, Testmoz quizzes, Smart Survey questionnaires, and self-reflective assessment tasks. The students were constantly encouraged to upload their digital artefacts into Google Drive e-portfolios. Our critical reflections allowed us to make some changes in getting students' feedback. As a result, we incorporated students' real voices into the project using a Vocaroo online recorder.

We reviewed the artefacts in the students' e-portfolios (An Ipsative Assessment Student's Journey, <https://spark.adobe.com/video/jPx6FJuP0jfry>) and collated the student feedback received through Testmoz quizzes, Smart Survey questionnaires, Vocaroo voice recordings, Google Docs reflection notes, blog posts, and social media messages during the 12-week term. We conducted a post-project Likert Scale Survey (see Table 1) to reveal overall satisfaction levels, shortlist activities the students had enjoyed most, identify technology that had enhanced the students' learning, and analyse their acceptance of the technology changes, which had taken place over time.

Table I: Post-project Likert scale survey data

Students' perceptions, experiences and evaluation of implementing a multi-phase ipsative assessment approach in the ESL virtual classroom						
	1 - Strongly Disagree	2 - Disagree	3 - Neutral	4 - Agree	5 - Strongly Agree	Response Total
A. The assessment tasks were easy to understand.	0.0% (0)	0.0% (0)	0.0% (0)	75.0% (3)	25.0% (1)	4
B. It was clear what the teacher expected of me.	0.0% (0)	0.0% (0)	0.0% (0)	75.0% (3)	25.0% (1)	4
C. There were opportunities to ask the teacher questions about the assessment tasks.	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	100.0% (4)	4
D. I experienced a lot of technical difficulties.	0.0% (0)	50.0% (2)	50.0% (2)	0.0% (0)	0.0% (0)	4
E. I had enough time to complete the tasks.	0.0% (0)	50.0% (2)	0.0% (0)	50.0% (2)	0.0% (0)	4
F. I believe the ipsative assessment is good learning practice.	0.0% (0)	0.0% (0)	0.0% (0)	50.0% (2)	50.0% (2)	4
G. I enjoyed my learning experience while completing the tasks.	0.0% (0)	0.0% (0)	0.0% (0)	100.0% (4)	0.0% (0)	4
H. The ipsative assessment tasks were useful for my language learning.	0.0% (0)	0.0% (0)	0.0% (0)	75.0% (3)	25.0% (1)	4
I. The feedback I received on my work was sufficient.	0.0% (0)	0.0% (0)	0.0% (0)	25.0% (1)	75.0% (3)	4
J. I would like to participate in ipsative assessment in the future.	0.0% (0)	0.0% (0)	25.0% (1)	75.0% (3)	0.0% (0)	4
K. My motivation has increased through the Ipsative Assessment journey.	0.0% (0)	0.0% (0)	0.0% (0)	25.0% (1)	75.0% (3)	4
L. My engagement has increased through the Ipsative Assessment journey.	0.0% (0)	0.0% (0)	0.0% (0)	25.0% (1)	75.0% (3)	4
M. My creativity has increased through the Ipsative Assessment journey.	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	100.0% (4)	4
N. I believe technology enhances language learning.	0.0% (0)	0.0% (0)	0.0% (0)	75.0% (3)	25.0% (1)	4

We gave individual feedback on each student's ipsative assessment progress/process. Each student received our extended advice on how to improve his/her individual performance in the future. Peer feedback on Google Drive e-portfolios was encouraged.

Our findings

Our research participants found that they had reduced their fear of receiving poor assessment results. The educational focus shifted from mistakes and errors to such metrics as students' feedback responsiveness, self-reflection, autonomy, academic sustainability, cultural sensitivity, creativity, personal commitment, and accountability. They enjoyed and managed ipsative assessment tasks regardless of external (pandemic restrictions or family circumstances) or internal (different technology acceptance mindsets or diverse academic abilities) challenges. An outcome-focused culture prevailed.

In terms of students' technology acceptance mindsets, they easily adapted as their confidence in technology increased. All four participants believed that the use of technology enhanced their language learning. They familiarised themselves with an array of programs; Spark Adobe, CANVA, Toonme, Reface, Bitmoji, Testmoz, YouTube, and Power Point. They particularly enjoyed creating comic strips, photo collages, blog posts, silent movies, and YouTube videos. All four participants agreed on the fact that they had enjoyed their learning experiences while completing the ipsative assessment tasks and three participants wanted to participate in ipsative assessment in the future, as they found it useful for their language learning. Some participants' quotes are presented below (comments are unedited to maintain authenticity).

Ipsative assessment tasks help me learn English a lot! The first grammar task is always easy to deal with. The second task stretches me. The third task is always challenging for me. It is challenging and fun to learn this way. I prefer not to change anything about my class. (Participant 1)

This is the first time I create something in English! Last week it wasn't as easy as I thought. These tasks require computer skills, English skills, and creativity. I love the feeling of accomplishment in the end. (Participant 2)

Pedagogical reflections

Overall, our research revealed ipsative gains made by the students during the 12-week term. The initial impressions of the introduction of ipsative assessment were highly positive. Of particular note was how readily accepted this novel assessment approach was among the student cohort and how easy and reliable the weekly tasks were to set up and monitor. In addition to the anticipated benefits for the students in terms of their retention of the course material, the gradual implementation of ipsative assessment tasks gave us as ELICOS teachers a meaningful real-time indicator of students' responsiveness to pedagogical feedback and follow-up educative instructions. Besides that, all four students improved their macro skills in listening, speaking, reading, and writing during the process of

drafting and submitting the 'best' final versions of ipsative assessment tasks to the e-portfolios. Furthermore, there was a noticeable increase in development of organisational, planning, and technological skills as well as the students' cumulative efforts in learning through the multi-phase grammar tasks. Learning engagement was evident from the successful submission of tasks into students' Google e-portfolios.

A number of recommendations/insights arise from our research. Firstly, ipsative assessment is not simply a replacement for forms of normative assessment; it is a supplementary instrument targeted at increasing academic performance and supporting other assessment formats by enhancing students' motivation, engagement, and personal accountability as well as facilitating the retention of key course milestones via completing alternative tasks. Ipsative assessment can only be as effective and engaging as the quality of the tasks it consists of. The implementation of ipsative assessment involved utilising weekly-planned digital Spark Pages with sample ipsative artefacts designed by us.

High levels of pedagogical commitment, involvement, and consistency are required to guarantee the project viability. The educator must invest a lot of effort into communicating academic wins for the students, retaining the initial interest in the ipsative assessment approach, stimulating students' curiosity, and forming exploratory behaviour.

Any organisational fluidity, such as that produced by the pandemic, produces a destabilizing influence on the educational process. For instance, rotating teachers or adding new students to an existing class in a virtual delivery mode might lead to academic frustration, procrastination, or procedural chaos. Organisational flux and instructional diversity shift the focus from what is originally required and interfere with the overall students' experiences. Ipsative assessment success greatly depends on teacher-student relationships and emotional bonds; this type of assessment is more effective with one main class teacher or a maximum of two co-teachers (a pedagogical partnership). Teachers and students must have similar technology acceptance mindsets (Davis 1986) which greatly impact their individual intentions to utilise technology, and anticipations about its perceived ease of use and potential usefulness.

Our experience of conducting this cycle of research has encouraged us to consider a second cycle. Since we will continue to work in this workplace, we also hope to include other teachers who can join with us to guide new students in their learning of e-portfolio use for ipsative assessment.

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