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教育データを利活用するために

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要旨

子どもたちが 1 人 1 台の端末を携えて，クラウドサービスを活用しながら学校内外で学ぶことができる時代が到来した.こうした環境は学びに関するデータ（教育データ）について，学習の結果だけでなく学習の過程で起こっていることを記録することも可能にする.教育データ利活用が有する可能性に対して社会的な期待が高まっている中で,膨大になり得る教育データの何をどのように保存し，有益な形で利活用するかについては議論が待たれている．そこで本稿では，先行事例の検討を通じて，教育データ利活用の具体的なあり方を展望する.また,より良い教育データ利活用のためには,良質な教育実践を仕掛けることが大前提となることを確認する.そのうえで,人の学びの質をより高める目的での教育データ利活用を実現するうえでの原則を提案する.

キーワード：教育データ，GIGA スクール，クラウドサービス，学習過程

1. 教育データ利活用に対する気運の高まり

1.1. 関係府省庁の動向

2022 年 1 月 7 日に，デジタル庁から「教育データ利活用ロードマップ」が策定された旨の報道発表があった（デジタル庁, 2022）.これは,児童生徒に対する学校等での教育場面において記録された教育・学習に関する様々なデータを蓄積し，教育の更なる改善へと

役立てることを目的としてまとめられたものである.この背景には,文部科学省による「GIGA スクール構想」(文部科学省, 2019) がある. これによって, 児童生徒が 1 人 1 台端末を用いて学習し, そこでの教育に関するデータを端末本体ではなくクラウド上に記録するようになったことで,教育データの蓄積と横断的分析が技術的に可能になったと言える.

折しも日本の大学では,「ビッグデータ」と呼ばれる大量のデータの中から新たな価値を見出すためのリテラシー教育としての「データサイエンス」教育が一斉に開始されようとしていた頃でもあった.社会的には,政治に対して「証拠に基づく政策立案」(Evidence-Based Policy Making)」を市民が一層強く期待するようになったことや, 医療場面での電子カルテシステムの導入促進とともに「根拠に基づく医療」(Evidence-Based Medicine) に対する一層の期待の高まりがみられていた頃でもあった. また昨今では, 預金の代わりに自身の行動ログなどのパーソナルデータを預け入れ,そのデータを銀行が運用することによって利益を生み出す「情報銀行」と呼ばれる仕組み (総務省, 2017) でも, 教育データの取り扱いが議論され始めたところでもある.

こうした各省庁の動きから考えれば,教育場面においてデータの利活用を推進することが期待されるのは自然な流れと捉えられる. 一方で, 教育データを取り扱う場合には, どのようなデータを取得するのか, どのように活用するのか, といった点において慎重な議論が求められるところでもある. 後述するが, 教育データでは一意の基準値を設けることが極めて難しい. 基準値がないならば, どのようなデータを記録すべきかが定まらないため,記録対象のデータは何にするかの議論がまず必要になる. また, 教育データには家庭環境の影響や子どもの発達的特性が少なからず反映されることや, 教育データの活用方法によっては子どもの進路選択にも影響を及ぼすことから, ELSI の観点で検討することも重要である (加納, 2022). 国や自治体をあげて教育データの利活用を推し進めるとな

れば，誰がデータを管理するのか（どの自治体あるいはどの機関が Controller となるのか）を決めることも必要だが，その決定のためには，そもそも教育データを集めて何をしたいのかについて明確にする必要がある（鈴木，2022）．その決定の過程では，データ閲覧権者をどのように限定し，どのような範囲でデータ活用を許容するかについても検討が進むと考えられる．

「教育データを集めて何をしたいのか」については，現在も文部科学省の「教育データの利活用に関する有識者会議」[1]や各種学会等において議論が進められているところである．同会議においては，子ども達の「主体的・対話的で深い学び」（文部科学省，2017）をよりよく実現するために ICT がいかに活用できるかを考える，つまり実現したい学習活動を見据えたうえでそれを実現するための技術の活用方法を考える「Pedagogy first, technology second」（文部科学省，2020; 白水，2020）を前提とすることが繰り返し確認されている．これは，技術が先行することによって「記録しやすい」データや，「変化が見えやすい」データを偏重することを避けるのはもちろんのこと，かつ得られたデータを教育目標に照らして客観的に評価するためにも必要不可欠な観点である．

1.2. 教育データの評価の難しさ

医療場面における体温や血圧といったデータは，日々の測定結果を基準値と照らし合わせることで，健康状態を推し量るための情報となる．一方で教育データは，体温のように測定対象とするデータも，37.5 度以上ある場合は登園・登校を見合わせるというような評基準値も多様である．

「掛け算の九九は小学校 2 年生で学習するのだから，3 年生以上の子ども達に対して九九のテストをすれば，算数の学習がどのくら

[1] 教育データの利活用に関する有識者会議．
https://www.mext.go.jp/b_menu/shingi/chousa/shotou/158/index.html

いうまくいっているかを評価できるのではないか」といった意見もあると推測される．たしかに，小学校 2 年生の段階で確実に九九を暗唱できるようになったかどうかを評価することは可能である．しかしながら，暗記している知識を思い出すことよりも場の状況に応じて問題解決の方法を作り出すことができることが重視される現代において，九九を暗記しているかどうかをテストすることにどのような意義があるかは，検討しがいのある論点である．したがって現代的な学習観を前提とした場合，子ども達のどのような学習場面において何を記録し，そのデータをどのような基準で分析するのかについても問い直しが必要となる．

Pellegrino（2018）は「評価の三角形」を通じて，データのみを集めても妥当な学習評価を行うことが困難なことを「認知」・「観察」・「解釈」という 3 つのキーワードを用いて説明した．「認知」とは，学習者の理解の状況や何をどのように考えているのかなど認知の状態を表す．この「認知」を，評価者が誤りなく全て捉える方法があれば話は早いが，残念ながらそのような方法はない．このため，学習者には九九の問題を解いてもらい，評価者はその解答を見ることができるようにするなどの工夫を通じて，学習者の認知状態を「観察」可能にする．「観察」によって得られたデータは学習評価を行う者が「解釈」するが，このときに評価者がどのような考えを持っているかによって，解釈結果は異なり得る．

先ほどの九九の例で考えると，九九を暗記することが大事だと考える評価者であれば，九九の暗記問題で正答が多ければその学習者を高く評価すると考えられる．一方で九九の暗記よりも，九九を使って文章問題を解くことができるような知識の活用を大事だと考える評価者であれば，九九の暗記問題で正答が多いことのみを以て学習者を高く評価することはしないだろう．知識活用を重視する評価者であれば，「観察」の時点で九九の暗記問題ではなく，文章問題を出題する可能性もある．つまり，学習者の「認知」全体からすればごく一部でしかない「観察」結果であるからこそ，「解釈」を

行う立場の者が予め持っている学習観，つまり，どのような人の学びが素晴らしいとみなすのかが，評価結果に大きく影響する．ただし学習観については，数多の研究知見が日々積み重ねられている一方で，客観的な裏付けのない素朴な学習観も少なくない（益川，2022）ことに注意を要する．

1.3. 教育データを取得する手段

冒頭で述べた「GIGA スクール構想」によって，日本全国の小学校・中学校では，1 人 1 台の端末が配備された．また，各学校は高速インターネット回線へ接続された．これらによって，児童生徒は 1 人 1 台端末を通じて，様々なデジタルサービスを使用可能となった．先述したクラウドサービスもその 1 つである．政府関係府省でのシステム調達における原則となっている「クラウド・バイ・デフォルト」の考え方が GIGA スクール構想にも適用されたことで，様々な教育データがサービス提供ベンダーや端末の OS などの違いを超えて集約されることとなった．子ども達 1 人ひとりにクラウドサービスのアカウントが貸与されたことで，それぞれの子どもの学びの記録を個人と紐づけた形で蓄積することが可能となった．これにより，子ども達が紙のノートやプリントに自分の考えを記録したり練習したりしたものを子ども達自身が手元で管理していた時代と比べて，できることが大きく変わった．教師はノートやプリントを回収する手間をかけることなく，子ども達の学びの記録を縦断的・横断的に確認することが可能となった．サービスの契約内容に依存するが，教育サービス提供元も教師と同じように，自社サービスを使用している子ども達の学びの記録を参照できるようになった．

これまで使用されてきた紙の教科書に代わってデジタル教科書の活用範囲が広がっていることや，副読本やドリルなどの教材がデジタル化されていることは，子ども達の学びの履歴を記録する機会を広げている．こうしたサービスとして近年注目されているものの

1つに「AIドリル」が挙げられる．一般的にAIドリルでは，各教科において児童生徒の学習定着をはかるうえで解くべき様々な問題が蓄積されており，提示された問題に対する児童生徒の回答の正誤によって，次に提示される問題の種類が変化する．各問題に対する回答の正誤だけでなく，回答までに要した時間，回答日時などを記録することも可能であり，教師は児童生徒のデータを一覧表示することができる．1人1台端末を活用することによって，児童生徒は自分のペースで問題を解き進めることができる．つまり，自律的に学習を進めることができる児童生徒が「浮きこぼれ」てしまうことを防ぐうえで利点があると考えられる．

一方で，自分で学習を進めることが困難な児童生徒については検討を要することを示した研究成果もある．益川・稲垣（2021）は，小学5年生が1年間使用した算数科のAIドリルのデータを分析した結果，成績上位者は計算をくり返し解いて学習を進めていくが，成績下位者は問題に解答することを途中で諦めていたことを示しした．つまり，AIドリルの使用のみでは学習を継続できない学習者も存在したということである．また，益川・稲垣（2021）では，分析対象としたAIドリルでは文章問題が少なかったことも指摘されている．このため，1人でAIドリルを使って問題を解き進められた学習者であっても，文章問題が数多く出題されるAIドリルを使った学習では状況が異なる可能性がある．さらに，回答途中に書かれたり消されたりした部分を評価する機能は無いことが一般的であるため，最終的な回答の正誤を評価対象として，次に出題する問題が決められている．したがって，児童生徒の回答が誤答だった場合に，考え方が誤っていたのか，単純なケアレスミスによる計算間違いだったのかといった差異は，システムの内部で検討されていない可能性も残る．

教育データを構成するデータの種類については，日本学術会議から「教育のデジタル化を踏まえた学習データの利活用に関する提言-エビデンスに基づく教育に向けて-」（日本学術会議，2020，p.3）

に示されている．これについて特筆すべきなのは，ドリルやテストの回答正誤といった学習成果だけでなく，学習過程で生じるデータ，つまりAIドリル等の学習支援システムの使用履歴等も教育データとして想定されている点である．日本学術会議の整理に照らせば，回答の正誤が一意に定まる問題のみを出題したり，文章問題の数を少数に限定していたり，学習者の記載した途中式を評価しなかったりといったAIドリルは，人の学習過程で生じるデータのうち限られた一部分のみを取得していると考えるのが妥当である．我々にとって身近になってきたAIドリルだからこそ，学習者のどのような部分に焦点を当ててデータを集めているのかについて客観的に捉える必要がある．

2. 教育データの利活用事例

以下では教育データ利活用の方法を志向した先行研究を例に，そこではどのようなデータが記録され，いかに評価されていたかについて検討する．

2.1. 問題解決場面設定とその理論的背景

ここで紹介するのは，遠山・白水（2017）の研究で報告された協調学習の事例である．この研究では，2人以上で話し合いながら問題を解くことが，学習者にとって問題に正答するためにどのように寄与するのか，また問題に正答できるようになる過程ではどのような話し合いが行われていたのかが検討された．対話研究には数多くの先行研究がある中で，この研究では話し合いが参加者の理解を深める上で役に立つことを示した先行研究（Shirouzu, Miyake & Masukawa, 2002）を理論的背景に据えて実施された．理解の深まりが実際に確認できたのかを検討するための枠組みとして，Clement (2008) や三宅・三宅（2014）の説明モデルが参照された．Clementや三宅らの主張は，学校で学ぶような抽象的な原理・原則に関する

知識を様々な状況に応じて活用できるようになるためには，原理・原則を丸暗記するだけでなく，日々観察したり経験したりしていることと関連付けて理解することが重要であるという指摘である．

研究では，全国の公立小学校 6 年生の児童 110 名を対象として，算数の問題を 2 名で話し合いながら解いてもらい，その解答の正誤と問題を解く様子の両方が記録された．問題は，公立小学校の 6 年生の既有知識で解ける範囲の問題であり，正答率が 30%程度と低かった問題が選ばれた．具体的には，平成 19 年度，平成 24 年度，平成 26 年度にそれぞれ実施された「全国学力・学習状況調査」[2]の算数 B 問題[3]として出題された問題から 3 つが選ばれた．正答率が 30%程度の問題を選択したのは，児童が 1 人では解けない問題で，何らかの支援があれば解けるようになる可能性があると期待できる問題を使用するためだった．また，3 種類の問題を使用したのは，問題の種類によって傾向が異なるのかを調べるためであった．

問題解決場面ではまず，児童が 1 人で問題を解いた．これは児童が 1 人でその問題を解くことができるか，それとも 1 人では解くことができないかを調査する目的で行われた．次に，児童は近くに座っていた別の児童と 2 人組になって，1 人で解いたものと同じ問題を今度は話し合いながら解いた．これは，話し合いによって 1 人で解いた場合から解き方が変化するかを観察する目的で行われた．最後に，児童は再度同じ問題の解き方を 1 人で実験者に説明した．これは，話し合いの中で共有された解き方や考え方について児童がどの程度「腑に落ちて」いたのかを調べる目的で行われた．ただし，最後の手続きは調査対象者のうち一部に対して実施した．

2.2. 問題解決の「結果」

結果として，期待通り，正答率は 1 人のときと比較してどの問題

[2] 全国学力・学習状況調査 https://www.nier.go.jp/kaihatsu/zenkokugakuryoku.html

[3] A 問題と B 問題に分かれていたのは平成 30 年度に実施された調査が最後であり，平成 31 年度以降の調査では A 問題と B 問題の区別はなくなった．

でも2人のときに向上していた．まず，1人で正答した児童を1名以上含むペアの正答率は高かった．1人で正答した児童同士のペアでは，ただ正答するだけでなく，自分達の答えが妥当なのかを確かめるための計算が行われた場合もあった．また，1人で解けなかった児童同士のペアが2人でならば正答した場合もあった．しかし，2人で話し合っても正答に至らないペアも見られた．こうした多様なパターンをまとめるため，児童52ペア（調査対象の全児童から2トリオを除く）の回答正誤と，各ペアに含まれていた児童の1人での回答正誤を整理した結果，表1の通りとなった．また，ペアで回答したあと，再度1人で解き方を説明した児童の回答正誤は表2の通りとなった．

表1は，「少なくとも片方の児童が1人で正答した場合，ペアの回答もほとんど正答だった」と解釈したくなる．たしかにペアAとBではそのようになっている．表2を見ても，これらペアの児童はペア回答後に1人になっても正しく解き方を説明できていたことがわかる．どのようなことがペアAやBで起こっていたかを想像すると，児童同士が「答えの教え合い」あるいは「互いの答えの確認」をしていた，などと考えることが可能である．

一方でペアCとペアDの回答からは，上記の考えに対して反例があったことがわかる．ペアCは児童の片方が1人で正答していたが，表2を見ると，ペア回答後の1人での説明が正しかった児童は75%に留まっていたことがわかる．残り25%は，実は1人で説明するのに十分なほどペア回答に対して納得できていなかった可能性が指摘される．また，ペアDは児童の片方が1人で正答していたにもかかわらず，ペア回答が誤答となっている．正しい回答だけがペアで採用されるわけではないことがここから示唆される．

1人で誤答した児童同士を見ると，ここでも「答えの教え合い」仮説は棄却される．ペアEは1人で正答した児童を1人も含まなかったペアだが，表1のペア解答も，表2のペア後の1人での説明も，どちらも全員が正しく行うことができていた．つまり，1人で

は問題を解くことができなかった児童であっても,対話によって納得できる正答を作り上げていたと推測される．一方で，1人で誤答した児童同士のペアが正答に至らなかった場合もあった.なぜペアによってこのような違いが生じたのだろうか.

表1　児童の解答正誤とその組み合わせ

1人の解答		ペアの回答	ペア数(児童数)	ペア呼称
児童1人目	児童2人目			
正答	正答	正答かつたしかめ算	6 (12)	A
正答	正答	正答	5 (10)	B
正答	誤答	正答	22 (44)	C
正答	誤答	誤答	2 (4)	D
誤答	誤答	正答	4 (8)	E
誤答	誤答	誤答	13 (26)	F

表2　ペア活動後に1人で説明した解き方の正誤人数内訳[4]

ペア呼称	再度1人で説明した人数(ペア内児童数)	再度1人での説明が適切だった人数(%)
A	7 (12)	7 (100%)
B	6 (10)	6 (100%)
C	28 (44)	21 (75%)
D	4 (4)	2 (50%)
E	6 (8)	6 (100%)
F	20 (26)	0 (0%)

2.3. 問題解決の「過程」

以下では，1人で解けなかった児童同士が2人でならば正答した

[4] 遠山・白水（2017）にて報告した結果を再集計して作成.

ペアEについて，発話を書き起こして分析した結果を紹介する．児童aとbが解いた問題は「あた」という単位を用いて割合を求める問題であった．具体的には，片手の親指と人差し指を直角に広げたときの親指と人差し指の先端を直線で結んだ時の長さを「一あた」，「一あた半」は一あたを1.5倍した長さとしたときに，4つの選択肢の中から正解を1つ選ぶという問題である．選択肢として以下(1)-(4)が図示されており，正解は(4)だった．

(1) 一あたを3等分した2つ分までの長さ
(2) 一あたの長さに0.5cmを加えた長さ
(3) 一あたの長さに1.5cmを加えた長さ
(4) 一あたを2つ分の2つ目半分までの長さ

児童が1人で考えた解答は，児童aが(3)，児童bが(1)だった．児童aは問題文に示された「1.5」という数字と同じ数字が示されている(3)を選んでおり，児童bは「一個半」という自分の考えに沿って選択していたものの，「半分」の図を選択する際に誤って(1)を選んでいた（上記は事後に発話を見て筆者や仲間が解釈したことであり，問題解決中の児童ら本人が上記のように述懐したわけではない）．

児童らの初期の回答が異なっていたところから，各自が自分の考えの根拠を説明するところから対話が始まった．児童aは「1.5（倍）」という視点から，1.5倍を図示するとどのようになるのかを，児童bと対話しながら考えていた．一方の児童bは1.5倍を「一個半」と考えていたことから，対話を通じて(4)が正答である可能性に気付いた．しかしながら自分の手で「一個半」を作ったときに「これは0.5（倍）かもしれない」と迷いを表明した．児童bは「倍」に対する理解が曖昧だったと思われる．それに対して児童aが「一個半の長さが0.5ならば(1)も0.5のようなもの」という趣旨の発言をしたことで，(1)が誤答である可能性に2人が気付いた．こうして2人は自分の両手で「一あた」を2つ作って並べながら，「一個半」の長さは「0.5」よりも長いこと，1.5倍は一個と半分であることに

話し合いを通じて気付いていき，最後には 2 人で迷いなく(4)の正答を選択した．また，その後に実験者へ解き方を 1 人で説明する際にも，1.5 倍と「一個半」が同じであることを踏まえて迷いなく説明することができていた．

この例からは，正解を教えられなくても，小学生であっても，話し合いを通じて正解を作ることが可能だと言える．また児童らは，問題文として与えられた情報や，自分の手などの物理的な情報をヒントにしながら，情報を比較し関連付けて，算数での学習内容を活用していたこともわかる．この過程を経たことで，「1.5」という問題文中の数字を答えとして採用するのではなく，「1.5 倍」とはどのような長さなのかを具体物で説明することが可能になり，その結果正解に至ったと考えられる．

2.4. 結果から過程へと後戻りする

このように，結果を見てから過程を深掘りする「後戻り」的な分析をしてみると，どのような過程に支えられて表 1 や表 2 のような結果が生じたのかよりよく理解することが可能になる．上記を含む，1 人で解けなかった児童同士のペアが 2 人でならば正答した 4 例と，話し合いを経ても正答に至ることができなかったペアの発話とを比較した結果，違いが見出されたのは，「1.5 倍」のような数学的な概念と，「一個半」のような学習者の身体や日常経験から得られる素朴な考えとの間を関連付けていく過程が対話の中にあったか否か，であった．1 人では正答できなくても 2 人で正答に至ったペアは，数学的な概念と学習者の身の回りで観察される素朴な出来事とを，対話の中で丁寧に対応付けていた．一方で，1 人で解けなかった児童が，上記のような対応付けを対話の中で経験しなかった場合は，ペア活動後の 1 人での説明に失敗する傾向が見られた．

上記の関連付けの過程が起こっているかを観察したのは，Clement (2008) や三宅・三宅（2014）が説明している，理解深化の認知科学的な説明モデルを参照したからこそである．Pellegrino の

評価の三角形に照らせば,「認知」の部分には理解深化の説明モデルが,「観察」の部分には全国学力・学習状況調査の算数 B 問題のうちの 1 問を話し合いながら解く過程があったうえで,「解釈」としては 2 人で話し合いながら数学的概念と日常経験との間を結びつけていくような対話が見られた，と言える.

なお，遠山・白水（2017）は，Pellegrino の評価の三角形で言うところの「認知」の部分に「成功するペアほど疑問や建設的批判の割合が多い」という素朴な考えを据えた場合に，上記の「観察」から何が「解釈」できるかについても検討している. 結果としては,発話に占める疑問や批判の割合は,ペアで問題が解けるかどうかを説明しなかった. それだけでなく,話者が交代する頻度など機械的に数えられる他の特徴についても差がなかったことがわかった. 同じデータを対象とした分析であっても，想定する「認知」の部分が変われば数え方が変わるため結果も変わること,「認知」の部分には先行研究で積み上げられてきた人の学びに関する理論を適用することでデータの解釈が支えられ,有意義な考察が生まれることが,この例からわかる.

3. 教育データを利活用するために

2 章では，人が対象についてよりよく理解していくことを支える目的での教育データ利活用について紹介した. こうした目的での教育データ利活用においては,次の 3 点に留意することが妥当だと考えられる.

(1) 起こり得る学習過程を想定する：先行研究で示されている学習に関する理論に基づいて，どのような学習過程が発生するかを想定しておく. ただし，我々の想定を超える素晴らしい学習が発生する可能性があることも視野に入れておく.
(2) 学習成果から過程へと後戻りする：学習過程のデータが蓄積さ

れていくのと同時平行でどのような変化が起こるのかを見て過度に一喜一憂するのではなく，学習過程のデータがいかに学習成果を物語っているのかを考える．

(3) 結果からの後戻りを可能にするデータを記録しておく：調査対象の学習者のうち，誰がいつ素晴らしい学習成果に到達するかはわからないという見方に立って，広範な学者者の学習過程のデータを詳しく掘り下げられるように記録しておく

上記のような考え方に立脚する場合，機材やサービスの限界に合わせて記録するデータの種類や範囲を決めることや，学習過程について手当たり次第にデータを記録しそれらに対してデータマイニングを行うことはそぐわない．また，日々蓄積されていく学習過程のデータを見ながら過程そのものの良し悪しを判断するのではなく，ある程度の学びが形成された時点から遡って学習過程のデータを見に行くほうが生産的であることも示唆される．ビッグデータを集めることによって，それらデータの中から法則性を見出すアプローチとは異なり，人が介在する予測困難な営みを評価するための大量データの取り方と分析の方法は，これから一層議論が求められる対象である．

現代の教育では，決められた問題をできるだけ簡単かつ速く正確に解く方法を身に付けることよりも，未知の問題に対して知識や経験，対話などを活用して最適な解き方を見つけることや，そうした問題を解くことができる能力を身に付けるための学びを主体的に継続することが重視されている（文部科学省，2017）．これは，教育研究に永らく携わってきた Bereiter 氏が言うように，「これまで誰も見たことがないような学習がある」（三宅・白水，2003）ことを想定する立場を取るということでもある．この立場で教育データを分析する際には，少なくとも，現時点でどのような素晴らしい人の学びが観察されており，その学習過程ではどのようなことが起こっているのかについての知識が分析の手がかりになる．

現状を維持するためではなく,より良い学習を引き起こすための教育データ利活用を実現するためには,先行研究から得られた仮説を検証しながら,新たな仮説を生成していく工程が重要になると考えられる.この工程では,これまでに誰も見たことがない素晴らしい学習を引き起こすための仕掛けを作ること,つまり教師が学びの場をいかに整えるかも重要なポイントとなる.都合の良い解釈ではあるが,遠山・白水（2017）で観察されたような,1人では解けなかった児童同士が対話を通じて正答を作り上げたことも,実験が児童にとっての学習機会であったと捉えることができる.先行研究に基づいて学習場面を設計し,その場で起こった学習過程のデータを取得し,結果として生起した学びの結果から学習過程を後戻りで検証することは,学習場面を設計した時点の仮説をより良く作り変える上でも役に立つはずである.

引用文献

Clement, J. (2008). The role of explanatory models in teaching for conceptual change. In S. Vosniadou (Ed.), *International handbook of research on conceptual change*. New York: Routledge.

デジタル庁（2022）. 教育データ利活用ロードマップ. https://www.digital.go.jp/news/a5F_DVWd/ (2022.10.16 参照)

加納圭(2022). 教育データ利活用 EdTech への期待と ELSI(倫理的・法的・社会的課題). 教育データの利活用に関する有識者会議(第13回)会議資料（資料 2-1）. 文部科学省. https://www.mext.go.jp/kaigisiryo/mext_00442.html (2022.10.30 参照)

国立教育政策研究所（2015）. 資質・能力を育成する教育課程の在り方に関する研究参考資料「ICT 活用に関わる資質能力の検討」に関するシリーズ講演会 記録. 国立教育政策研究所.

益川弘如（2022）. 情報通信技術の進展をいかした教育環境の革新

に向けて.『教育学年報 13 教育技術・AI と教育』, pp.93-117, 世織書房.
益川弘如・稲垣忠（2021）. 適応的機能を組み込んだ AI ドリルの「比・割合」のビッグデータ解析から見えてくること.『日本認知科学会第 38 回大会発表論文集』, pp.934-940 https://www.jcss.gr.jp/meetings/jcss2021/JCSS2021_proceedings.pdf (2022.10.16 参照)
三宅なほみ・三宅芳雄（2014）.『教育心理学概論』. 放送大学教育振興会.
三宅なほみ・白水始（2003）.『学習科学とテクノロジ』. 放送大学教育振興会.
文部科学省（2017）. 小学校学習指導要領（平成 29 年告示）. https://www.mext.go.jp/content/1413522_001.pdf (2022.10.16 参照)
文部科学省（2019）. 新しい時代の初等中等教育の在り方 論点取りまとめ（令和元年 12 月初等中等教育分科会）. https://www.mext.go.jp/b_menu/shingi/chukyo/chukyo4/houkoku/1382996_00003.htm (2022.10.16 参照)
日本学術会議（2020）. 教育のデジタル化を踏まえた学習データの利活用に関する提言―エビデンスに基づく教育に向けて―. 日本学術会議 心理学・教育学委員会・情報学委員会合同教育データ利活用分科会. https://www.scj.go.jp/ja/info/kohyo/pdf/kohyo-24-t299-1.pdf (2022.10.16 参照)
Pellegrino, J. W. (2018). A learning sciences perspective on the design and use of assessment in education. In Sawyer, E. (Ed.) *Cambridge Handbook of the Learning Sciences 2nd edition*, pp.233-252, Cambridge University Press.
白水始（2020）. 提言：ポストコロナ時代の学校教育に向けて.『教育展望』, 66(5), pp.46-52.
Shirouzu, H., Miyake, N., & Masukawa, H. (2002). Cognitively active

externalization for situated reflection. *Cognitive Science*, 26(4), 469–501. https://doi.org/10.1207/s15516709cog2604_3

総務省（2017）. 情報信託機能の認定スキームの在り方に関する検討会. https://www.soumu.go.jp/main_sosiki/kenkyu/information_trust_function/index.html (2022.10.16 参照)

鈴木正朝（2022）. 巻頭言：教育データと個人情報保護法.『情報法制レポート第 2 号』, ii-iii.

遠山紗矢香・白水始（2017）. 協調的問題解決能力をいかに評価するか －協調問題解決過程の対話データを用いた横断分析－.『認知科学』, 24(4), pp.494–517.

「ICT を活用した録画プレゼンテーションの実施と評価」

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The Use of Pre-Recorded Presentations in face-to-face Classroom and Evaluation Utilizing Information and Communication Technology (ICT)

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1. はじめに

2020 年、コロナ禍のオンライン授業で様々な制約がある中、事前録画での学生プレゼンテーション形式を採用した。受講者から概ね好評であったこと、対面授業に戻っても、マスクやアクリル板により発表者の声が届きにくいこと、感染状況が悪くなった際、オンライン授業への切り替えの可能性も考慮し、2021 年度以降の対面授業でもオンライン年次と同様の形式を継続した。学期末アンケートの結果から、対面授業での録画プレゼンテーション実施について、発表者側・視聴者側、ともに肯定的であったことが分かり、さらに授業参加度や、学生間および教員からのフィードバックの質の向上といった想定外の利点が複数見受けられた。本稿では、実施の経緯、実践方法の詳細、対面授業での活用実践の報告を行う。

「ICT・デジタル化の必要性」

2015年6月の文部科学省による報告書『Society 5.0に向けた人材育成～社会が変わる、学ぶが変わる～』では「超スマート社会」とも言われるSociety 5.0の到来に伴い、「学校や教師だけでなく、あらゆる教育資源やICT環境を駆使し、基礎的読解力、数学的思考力などの基盤的な学力や情報活用能力をすべての児童生徒が確実に習得できるようにする必要がある。」と論じられている。教育のICT（Information and Communication Technology）化の必要性が強調されるなか、多くの試み・実践が報告されているが、環境整備・活用状況ともに未だ大きな課題がある（文部科学省,2019）。加えて、2020年度、新型コロナウィルス感染拡大により、大学授業が全国的にオンラインへ移行されたのを機に、ますますその需要が高まった。

「英語学習におけるICT活用の有用性」

教育全般のICT化に加え、外国語の習得においてもその有用性が報告されている。糸山（2014） は「英語などの外国語の習得においては、個々の学習者の発達段階に合った言語材料と適切な言語活動を与えることが重要である。つまり、個々の学生のレベルに応じた指導が本来不可欠なのである。しかも、昨今の大学生の英語に関する能力の多様性を考えても、単なる一斉授業だけではそれは無理である。そこで、個別学習に向いているコンピュータなどの情報機器の活用でそれを補う必要性が出てきた」とし、コロナ期以前から、個別学習のみならず、教室内での一斉学習においても個人が所有するスマホ・タブレットの活用を提唱している。全国的にオンライン授業から対面授業へ戻りつつある現在、コロナ期に生み出されたICTを活用した教育手法を対面学習に取り入れる意義は大いにあると言えよう。

「録画の有用性」

コミュニケーションスキルの向上におけるビデオ使用の有用性については多くの研究が報告されている(Guo, 2013)。社会的学習理論で、他人の様子を見ることで学習することが出来るとするモデリング(Bandura, 1969)は、メディアの発達により映像を通しての自己モデリング(Dowrick, 1983)へと発展した（小林2018）。田中（2018)の言う「英語でしかも多くの面前で話をすることに苦手意識を感じる学習者を比較的多く目にする。そのためか、英語コミュニケーションの授業のなかで、特にプレゼンテーション活動を行うとすると、消極的な姿勢を示す学習者が見受けられる。そういうわけで学習者にとって、また授業者にとっても、プレゼンテーションの授業はハードルが高い活動の一つであるように思われる」ことを考慮しても、プレゼンテーションに録画を利用することの効果が期待できるのではないだろうか。

2.実施対象科目「English for Multicultural Communication（EMC)」

本学ML（インドネシア語・ベトナム語・タイ語・ブラジルポルトガル語専攻）・CSK（中国語・スペイン語・韓国語専攻）共通英語プログラムの選択必科目である「English for Multicultural Communication（EMC)」は、専門分野を英語で学び、4技能の向上を図ることを目的とする半期開講（前期、後期）の英語科目である。筆者が担当するクラスでは「異文化コミュニケーション（前期）」「世界語としての英語（後期）」をテーマとし、学期に2～3回の英語プレゼンテーションを受講者に課してきた。2020年コロナウィルス感染拡大により、全学的にオンライン授業への切り替えを余儀なくされ、プレゼンテーションの実施方法について再考する必要に迫られた。本科目はZoom配信を予定していたが、オンライン授業初年度の学生に、

短時間でもホストとしてプレゼンテーションをさせるには、技術的、また通信上の問題発生は不可避であると予想された。とはいえ、ブレークアウトルームでのグループプレゼンテーションとなると、教員が全ての発表を視聴・評価することが難しい。レポート形式への変更も選択肢としてあったが、これまでの担当学生からはライティング力よりもプレゼンテーション力の向上を望む声が多かったこともあり、事前録画によるプレゼンテーション形式を取ることとなった。授業は週 2 回 90 分で、インドネシア語、韓国語、タイ語、中国語、ベトナム語、スペイン語、ポルトガル語専攻の 3，4 年生を対象とし、平年 20 名から 25 名前後で構成される。なお、2020 年から 2022 年度受講者の TOEIC スコア平均は 571 から 616 点で、初級から中級レベルであった。

3.授業（プレゼンテーション）実施方法

プレゼンテーション実施の大まかな流れは以下の通りである。尚、課題の提示及び提出は全て Google Classroom 経由で行った。

① 学習者間評価・質問用 google フォーム作成
② 評価スプレッドシート（教員用）作成
③ プレゼンテーション要旨入力用 google ドキュメント作成
④ 課題提示（事前録画データ提出用）
⑤ 事前録画プレゼンテーションデータ及び要旨提出
（学生所有のスマートフォン、タブレット、PC などを使用）
⑥ 提出された各録画データの動作確認。
⑦ プレゼンテーション要旨及び、プレゼンテーション動画リンク一覧（google ドキュメント）作成
⑧ 課題提示（プレゼンテーション視聴時用）
⑨学習者間評価及び質問用 google フォーム提出
⑩ 学習者間評価及び質問をスプレッドシートにまとめ、共有

⑪ クラスメートからの質問に対する発表者からの回答提出
⑫ 提出された回答を PDF で共有
⑬ 教員による個別評価の提示
⑭ 対面での講評
（全体評価及び学生からの感想等をパワーポイントで提示）

3.1　学習者間評価・質問用 google フォーム作成

図 1 は、受講生が動画視聴時に使用する、学習者間評価・質問用 google フォームである。冒頭に視聴時の注意事項、入力内容等の説明があり、録画データのダウンロード等無断使用禁止に関する同意項目を設けた。評価項目は「Voice（声の大きさ）」「Speed（スピード）」「Content（発表内容）」の 5 段階評価、プレゼンテーションスキルへのコメントと内容に関するコメント、そして発表者への質問の項目を設けた。最後に最も印象に残った発表への投票と選出理由の入力を求めた。

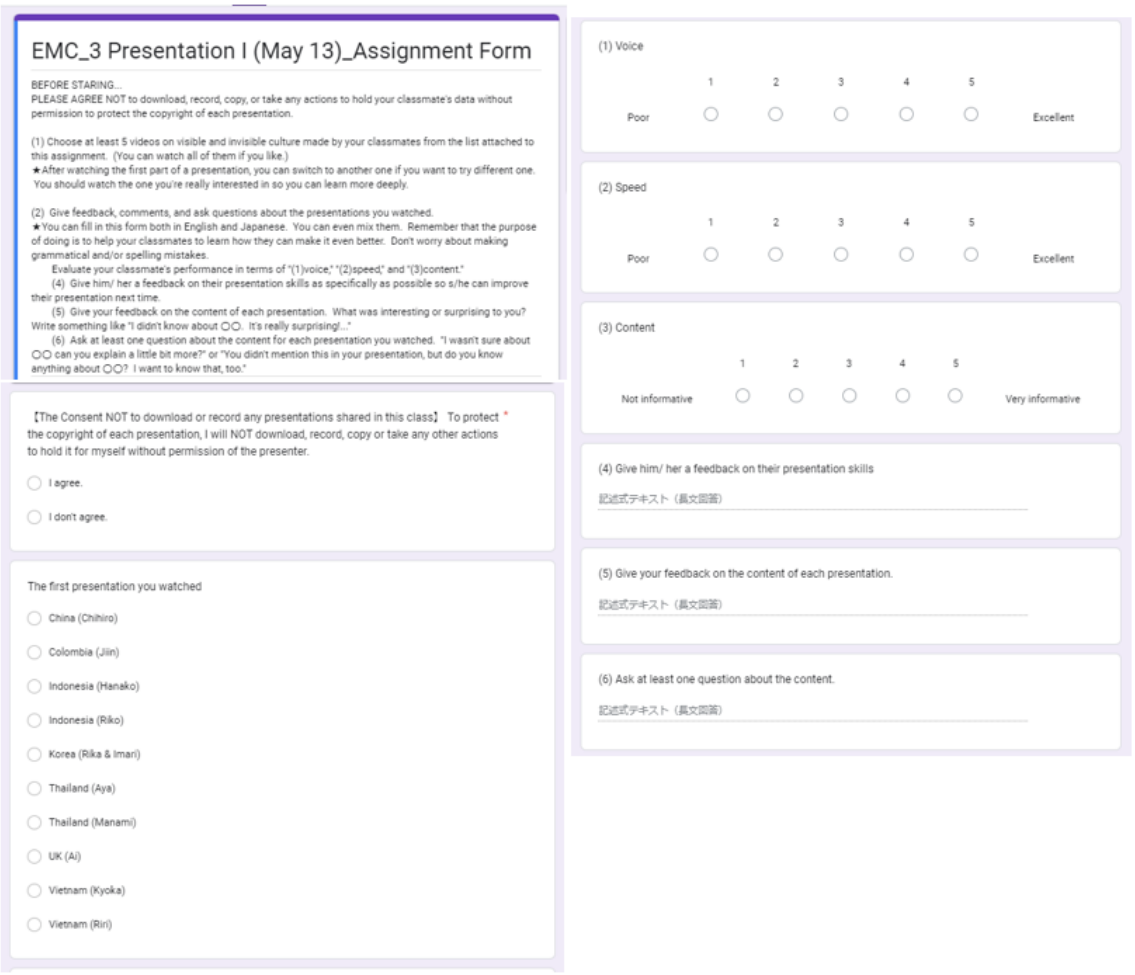


図１　学習者間評価・質問用 google フォーム

3.2　評価用スプレッドシート（教員用）作成

図２は、プレゼンテーションに対する教員評価に使用するスプレッドシートである。学習者間評価の評価軸である「Voice」「Speed」「Content」に、「Length（長さ）」「Voice Inflection（抑揚）」「Eye Contact（アイコンタクト）」「Visual Aids（スライド）」「Posture（姿勢）」「Clarity（明瞭さ）」「Cooperation（協調）」を加え、段階評価とコメント欄を設けた。

3.3　プレゼンテーション要旨入力用 google ドキュメント作成

図３のフォーマットで学生にプレゼンテーションの要旨入力、提出を求めた。

Spring 2022 (EMC 3) Presentation I					Score: / 100
Evaluation Sheet	The Audience's NAME:				
Presenter's NAME:			Topic		
1 Length	Not acceptable	Not OK	OK	Good	Very Good
2 Speed	Not acceptable	Not OK	OK	Good	Very Good
3 Volume	Not acceptable	Not OK	OK	Good	Very Good
4 Voice Inflection	Not acceptable	Not OK	OK	Good	Very Good
5 Eye Contact	Not acceptable	Not OK	OK	Good	Very Good
6 Visual Aids	Not acceptable	Not OK	OK	Good	Very Good
7 Posture	Not acceptable	Not OK	OK	Good	Very Good
8 Clarity	Not acceptable	Not OK	OK	Good	Very Good
9 Content	Not acceptable	Not OK	OK	Good	Very Good
10 Cooperation					
Comments / Advice					

図２　評価用スプレッドシート（教員用）

図３　プレゼンテーション要旨入力用 google ドキュメント

3.4　課題提示（事前録画データ提出）

3.3 で作成した「プレゼンテーション要旨入力用 google ドキュメント」「スライドのサンプルフォーマット」「好ましくないスライドのサンプル」「評価フォーマット（教員用）のサンプル」「Zoom 録画動画提出方法」を Google Classroom で提示した（図４）。

図４　課題提示（Google Classroom）

3.5　事前録画プレゼンテーションデータ及び要旨提出

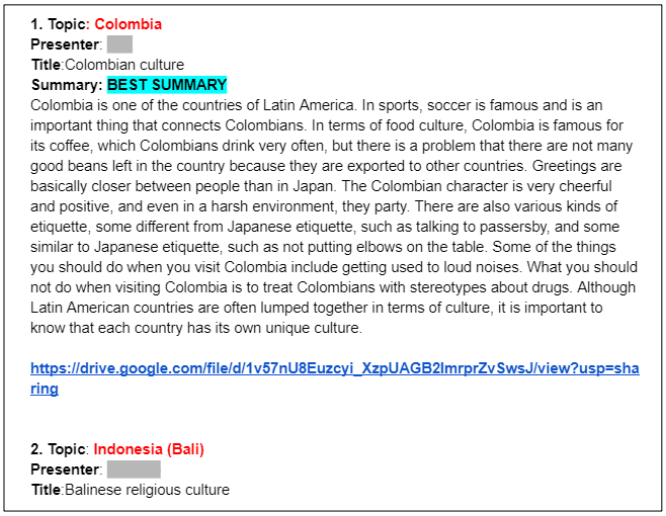
受講者には個人、ペア、グループ発表のいずれかを選択のうえ、PC か Mac での Zoom 録画、PC でのパワーポイント録画、iPad でのプレゼンテーション録画アプリ（Komodo Decks, Knovio, CapCut 等）のいずれかによる顔出しスライドプレゼンテーションでの作成と、動画データ・要旨を入力した google ドキュメントの提出を求めた。

3.6　提出された各録画データの動作確認。

提出された録画データを Google ドライブにアップロードし、冒頭部分で正常に録画されているか、音声が問題なく再生されるかを確認し、共有リンクを作成した。要旨が適切であるかの確認も行った。

3.7　プレゼンテーション要旨及び動画リンク一覧（google ドキュメント）作成

トピックの頭文字、アルファベット順で各プレゼンテーションの要旨と動画リンクを google ドキュメントにまとめた（図5）。



1. Topic: Colombia
Presenter:
Title:Colombian culture
Summary: BEST SUMMARY
Colombia is one of the countries of Latin America. In sports, soccer is famous and is an important thing that connects Colombians. In terms of food culture, Colombia is famous for its coffee, which Colombians drink very often, but there is a problem that there are not many good beans left in the country because they are exported to other countries. Greetings are basically closer between people than in Japan. The Colombian character is very cheerful and positive, and even in a harsh environment, they party. There are also various kinds of etiquette, some different from Japanese etiquette, such as talking to passersby, and some similar to Japanese etiquette, such as not putting elbows on the table. Some of the things you should do when you visit Colombia include getting used to loud noises. What you should not do when visiting Colombia is to treat Colombians with stereotypes about drugs. Although Latin American countries are often lumped together in terms of culture, it is important to know that each country has its own unique culture.

https://drive.google.com/file/d/1v57nU8Euzcyi_XzpUAGB2lmrprZvSwsJ/view?usp=sharing

2. Topic: Indonesia (Bali)
Presenter:
Title:Balinese religious culture

図5　プレゼンテーション要旨及び動画リンク一覧

3.8　課題提示（プレゼンテーション視聴）

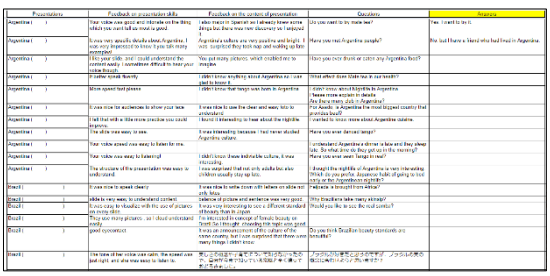
授業時間開始時に「プレゼンテーション要旨及びプレゼンテーション動画リンク一覧」と「学習間評価・質問用 google フォーム」を共有した。

3.9　学習者間評価及び質問用 google フォーム提出

教員により手順を説明の後、各自が一覧から動画を選び、プレゼンテーションを視聴した。視聴後、google フォームへの評価・質問の入力、提出を求めた。

3.10　学習者間評価及び質問をまとめたスプレッドシートの作成及び共有

授業終了後、提出された「学習間評価・質問用 google フォーム」の「回答」タブから回答内容を反映させたスプレッドシート（図 6）を作成し、「Voice」「Speed」「Content」3 つの評価軸を除き、発表者に共有した。この 3 つは、視聴時にこれらの点に注意を払うことで、自身の発表においても意識出来るようにという意図で設定されたが、主観や視聴環境によって大きく左右され適切な評価が難しいことから、発表者への共有は行わなかった。共有方法については、全プレゼンテーション分を 1 枚のスプレッドシートにまとめ、各自がコピーを作成できる設定で行った。Best Presentation 選出投票の結果も同スプレッドシートで発表、共有した。



Which presentation did you like the best for today?	Why??
Brazil ( )	Both the content of the presentation and the way of presentation were good. There were many pictures, so I really wanted to go.
Brazil ( )	The slides were very easy to read and understand.
Brazil ( )	I think her presentation contents and slides are best. It is very easy to understand and interesting.
Brazil ( )	The slides and explanation were easy to watch and get information, and also attracts me. Now I am interested in Brazilian culture.
Brazil ( )	内容も面白かったのですが、八丰八丰とした聴きやすい声でスッとはいってくるプレゼンでした。
Brazil ( )	プレゼン内容の情報の引用元が紹介されていたにより、このプレゼンだけで終わりではなく、ブラジルの文化へ興味を持ってもらおうという姿勢が印象的であったため。また話し方もちょうど良いボリュームとスピードであり、内容もバランス良く総合的に良いと思ったから。
Brazil ( )	She talked many examples but each example are very interesting to know it. and also, photos, presentation design are high level.
Brazil ( )	It is because very interactive culture and easy to understand.
China ( )	For their quality of the slides.
China ( )	I heard about the school and the differences in language, and there were many cultures that I was interested in. It is easy to hear the loudness and speed of voice.
China ( )	The explanation and slides were the easiest to understand.
China ( )	The contents were full of interesting and fun for me. I could see a lot of intriguing cultures in China.
China ( )	I can enjoy watching their video.good contents ,good smile,English easy to understand.
Honduras ( )	Because the contents were very interesting.
Honduras ( )	
Spain ( )	Because he was devising in places other than the presentation. It was fun to watch.
Spain ( )	Because it was the most interesting and the easiest to understand.
Spain ( )	
Spain ( )	His presentation had a good voice and his slides were very easy to see.
Thailand(Fuko)	I thought that the content was interesting, and it was easy to hear her speaking English.

図 6　学生間評価及び質問をまとめたスプレッドシート作成

3.11 クラスメートからの質問への回答提出

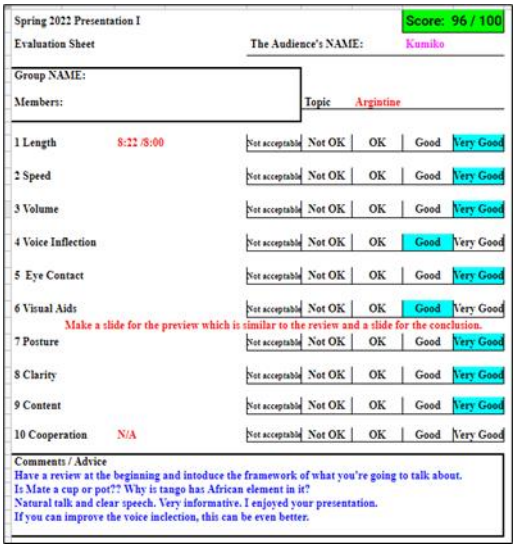
クラスメートからの評価及び質問が入力されたスプレッドシートの確認、質問に対する回答の入力・提出を求めた。

3.12 提出された質問への回答を PDF にまとめ、共有

提出された各発表者からの回答を 1 枚のスプレッドシートにまとめ、PDF に変換、Google Classroom で共有した。

3.13 教員による個別評価の提示

教員は授業外で各プレゼンテーションの視聴を行い、前述 3.2 で作成された「評価用スプレッドシート（教員用）」（図 2）に評価を入力、PDF 化して各学生に Google Classroom で提示した（図 7）。



Spring 2022 Presentation I　　Score: 96 / 100

Evaluation Sheet　　The Audience's NAME: Kumiko

Group NAME:

Members:　　Topic Argintine

1 Length	8:22 /8:00	Not acceptable	Not OK	OK	Good	Very Good
2 Speed		Not acceptable	Not OK	OK	Good	Very Good
3 Volume		Not acceptable	Not OK	OK	Good	Very Good
4 Voice Inflection		Not acceptable	Not OK	OK	Good	Very Good
5 Eye Contact		Not acceptable	Not OK	OK	Good	Very Good
6 Visual Aids		Not acceptable	Not OK	OK	Good	Very Good
	Make a slide for the preview which is similar to the review and a slide for the conclusion.					
7 Posture		Not acceptable	Not OK	OK	Good	Very Good
8 Clarity		Not acceptable	Not OK	OK	Good	Very Good
9 Content		Not acceptable	Not OK	OK	Good	Very Good
10 Cooperation	N/A	Not acceptable	Not OK	OK	Good	Very Good

Comments / Advice

Have a review at the beginning and intoduce the framework of what you're going to talk about.
Is Mate a cup or pot?? Why is tango has African element in it?
Natural talk and clear speech. Very informative. I enjoyed your presentation.
If you can improve the voice inclection, this can be even better.

図 7　教員による評価

3.14 対面での講評

教員によるプレゼンテーションに対する評価を Google Classroom で各自に提示後、平均点、改善できる点、評価の高かったプレゼンテーションのスライド等をパワーポイントにまとめ、プロジェクターに提示し、全体指導を行った。

4.授業展開

学期中に実施するプレゼンテーションの回数、スケジュール、事前録画の形式をシラバスに明記のうえ、初回授業で説明を行った。授業の 2 回分をプレゼンテーションの視聴に当て、2 週間前にはトピックと事前録画方法を授業内で説明した。プレゼンテーションの要旨と録画データの提出締め切りは、事前に割り当てられた発表日の前日 23:59 までとした。初回プレゼンテーションセッションでは、受講者が全員教室に集まり、教員からの指示のもと、「プレゼンテーション要旨及び動画リンク一覧（図 5）」からプレゼンテーションを 5 つ選択し、イヤホンと iPad で視聴した。2 回目以降のセッションでは、授業時間内に行うことを条件

に、教室外での視聴も認めた。時間内に5つのプレゼンテーションの視聴・評価が終わらない場合、次回授業までの課題とした（図6）。教員から共有される学習者間評価・質問を各自が確認、質問へ回答、提出することを課題とし、集めた回答は教員から再び受講者に共有された。その後、教員による個別評価・コメント（図7）及び、授業内での全体評価・コメントを経て、次回プレゼンテーションへと準備を進めた。

5.アンケート調査

2022年度前期選択必修科目、English for Multicultural Communication 3:Intercultural Communicationにおいて学期末に録画形式のプレゼンテーションについてのアンケート調査を実施し、受講者25名から回答を得た。回答結果から、コロナ禍3年目でも、録画形式のプレゼンテーション経験者は半分にとどまり（図8）、アンケートに回答した受講者は、対面授業における事前録画式プレゼンテーションに対して92%が好意的であることが分かった（図9）。

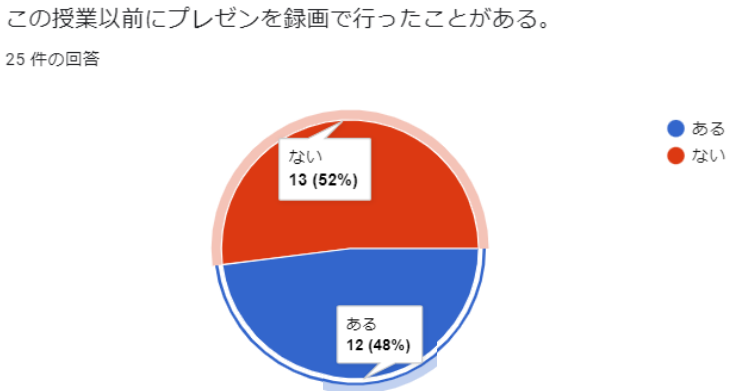


図8「この授業以前にプレゼンテーションを録画で行ったことがある。」

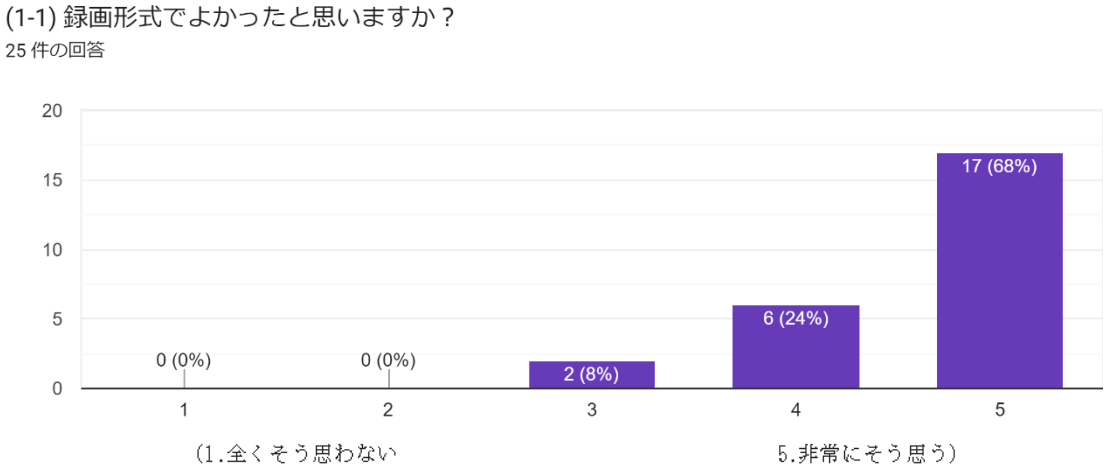


図 9「録画形式でよかっと思いますか？」

また、87.5%がデータ提出前に自分のパフォーマンスを確認し（図 10）、83.3%が事前に確認するべきであると回答した（図 11）。

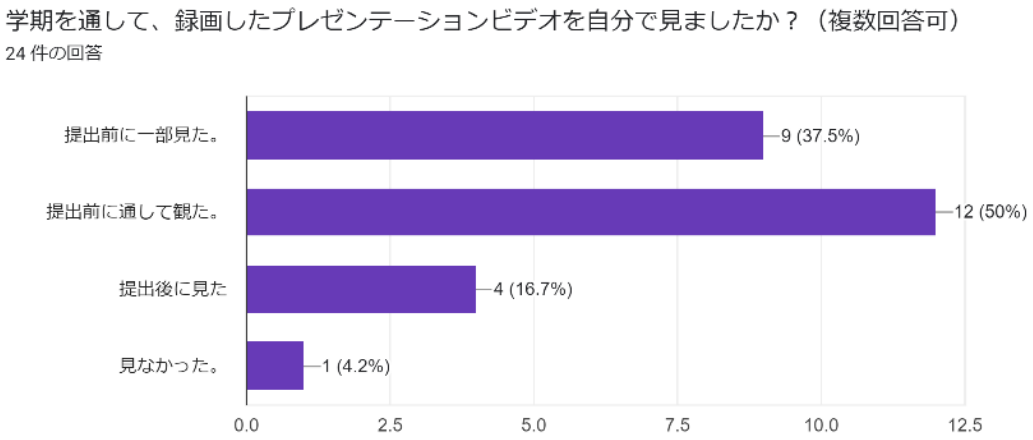


図 10「録画したプレゼンテーションビデオを自分で見ましたか？」

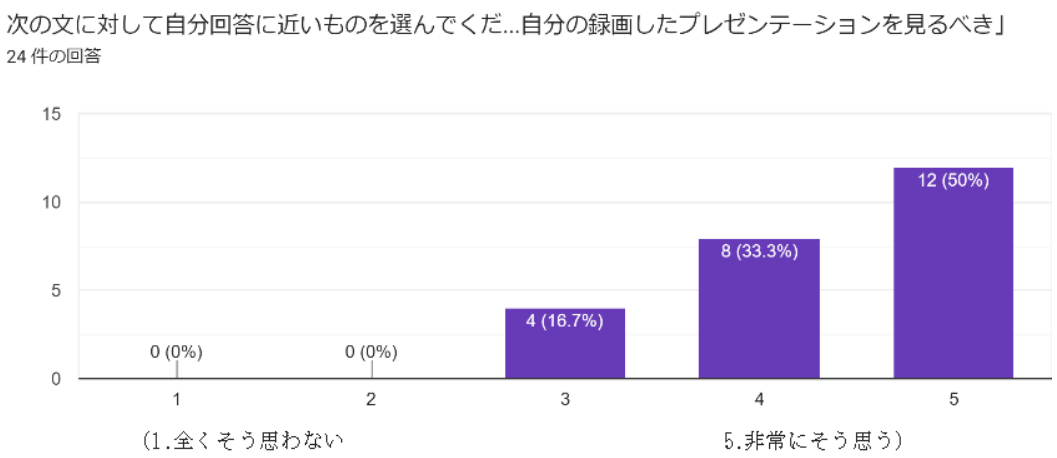


図 11「自分の録画したプレゼンテーションをみるべきだ。

事前確認が必要と回答した理由としては以下のような回答があった。

「プレゼンテーションしている間は話し手としてしか見れないですが、後で見直すことで客観的に見た時の問題点にあらかじめ気づくことができると思うからです。」

「勉強で復習するようにプレゼンも復習するべきである。」

「あらかじめ先生に与えられた評価基準と照らし合わせることで改善点が見つかるかもしれないため。」

「自分のプレゼンを見るのは基本的に嫌ではあるが、見なければ良し悪しがわからないから。少し時間が経った時にみるとより下手なプレゼンだなと分かったりする。」

実際に、83.3%が 2 度以上録画を行ったと回答した。（図 12）「対面のプレゼンテーションに比べて、クラスメートから詳細なフィードバックがあった。」にも 80%が肯定的な回答をし（図 13）。88%が「対面のプレゼンテーションよりも発表者に質問がしやすかった。」という問いに対して肯定的な回答だった（図 14）。

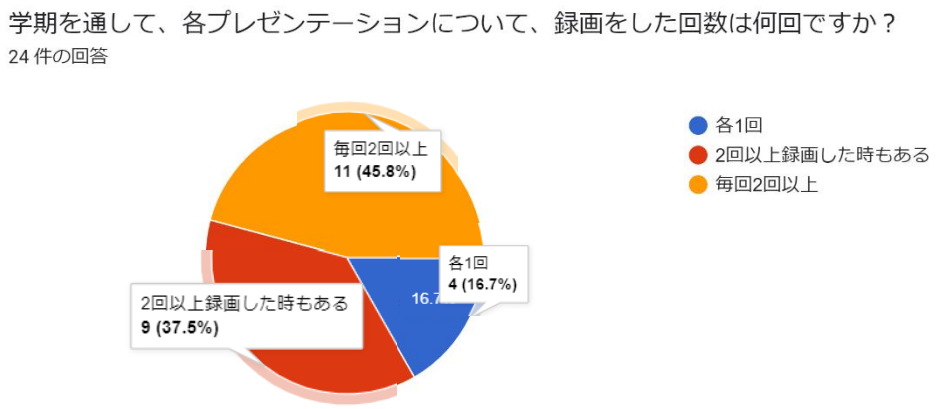


図 12「学期を通して、各プレゼンテーションについて、録画した回数は何回ですか？」

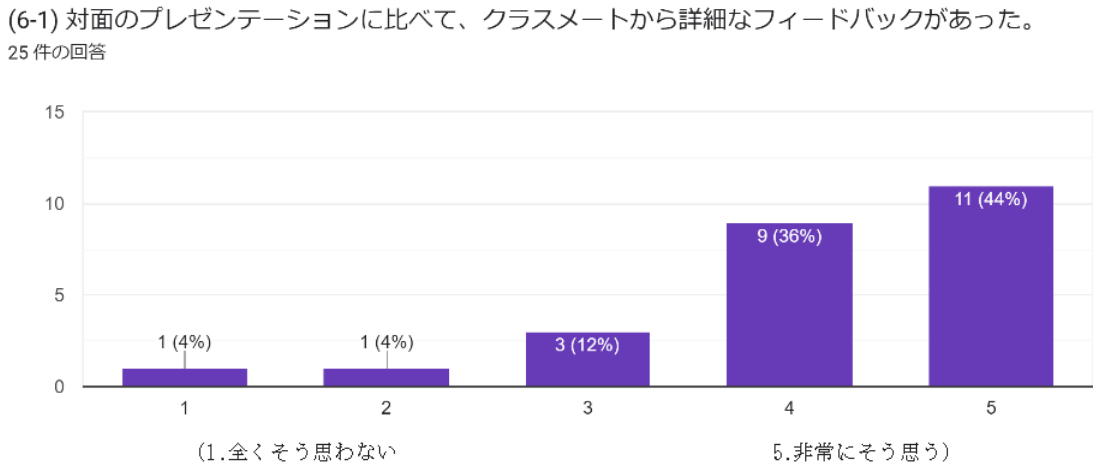


図 13「対面のプレゼンテーションに比べてクラスメートから詳細なフィードバックがあった。

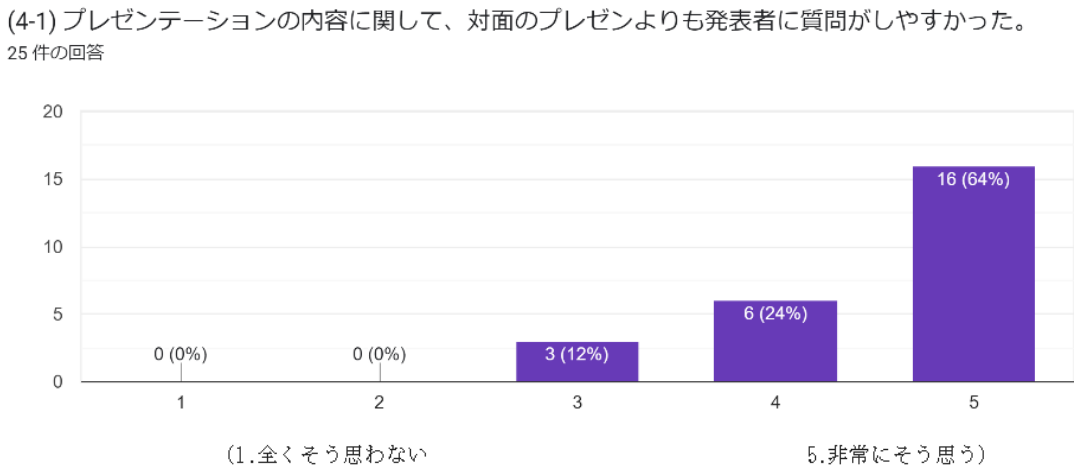


図 14「対面のプレゼンテーションよりも発表者に質問がしやすかった。」

質問がしやすかった理由としては

「咄嗟に思いつかないことが多いので、録画の方が「あ、そういえば」と思い出すことがあるから。」

「I'm not good at asking questions in front of everyone.」

「直接だと躊躇いの気持ちが出てしまうので質問しやすかった。また質問を受ける側もじっくり考えたり調べた上で回答できる。」

「匿名であるため、他の人が自分の質問についてどう思っているか気にする必要がないため気軽に質問できる。」

などが挙がった。設問「対面のプレゼンテーションの方がいい。」に対しては 52%が否定的な回答（対面がいいとは思わない）を行い、肯定的な回答（対面がいい）は 4%に留まった（図 15）ことから、対面授業においても事前録画型プレゼンテーションに対して否定的な受講者は少なかったことが分かった。『対面』がいいという理由としては「人前で話し練習の機会になる」「録画よりリラックス出来る」「資格情報が多く得られる（アイコンタクト・ボディーランゲージが見やすい）」「他の人のプレゼンを聞いてここ少し情報を加えたほうがいいなどと直前で直す

ことが出来る」などがあり、『録画』がいいという理由には「オンラインだと何度も満足いくまで取り直せる」「質問なども周りの目を気にせずできる」「録画だとあまり緊張せずにプレゼンできる」「録画の方が確実にみんなからフィードバックをもらうことができる」「聞き逃したところを何回でも再生できる」「コロナ禍なので、対面で密集して行うよりは事前に録画しておいた方が感染も防げる」「アクリル板でスライドが見えづらかったりするし、マスクでうまく聞こえなかったりするから」「（対面だと全ての発表を見る事になるので）プレゼンの数が多すぎてあまり効率的ではないと思うから」があった。「視聴するプレゼンテーションを選べるのがよかった。」という設問には92%が肯定的な回答をした（図16）。

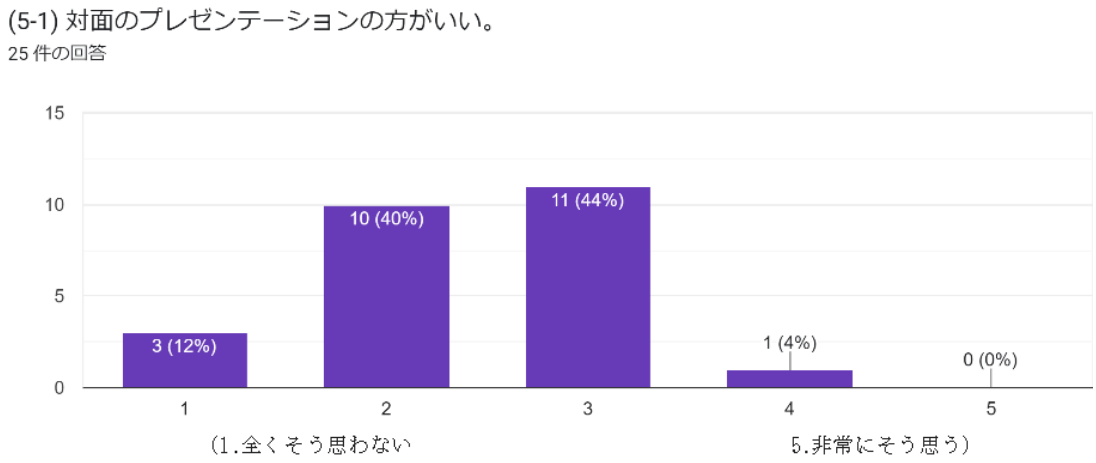


図15「対面のプレゼンテーションの方がいい。」

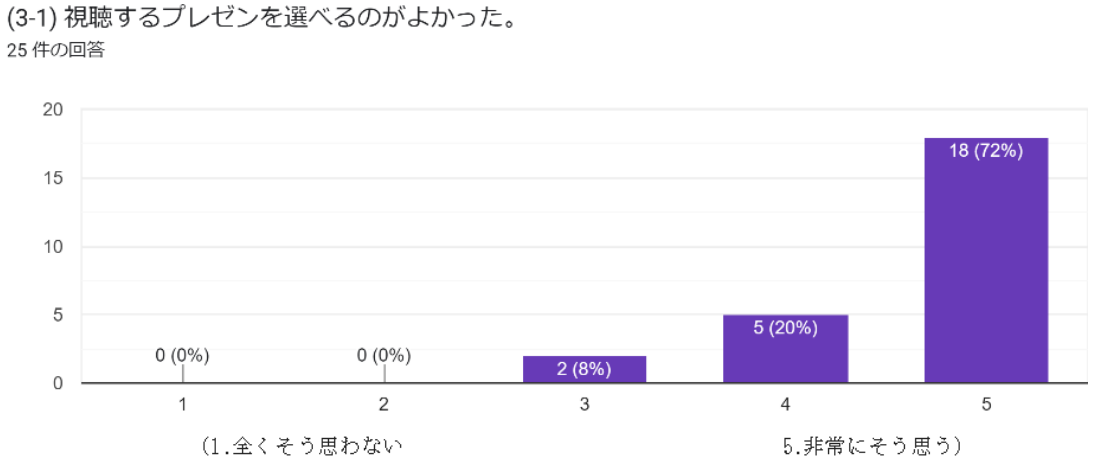


図 16「視聴するプレゼンテーションを選べるのがよかった。」

6. おわりに

本稿では、対面授業における事前録画形式のプレゼンテーション実施の経緯、実践方法の詳細、活用実践の報告を行った。アンケート結果から、受講者は実施の意図を汲み、概ね肯定的に捉えていたことがわかり、従来の対面プレゼンテーションには無い利点も多くあったことが明らかとなった。学生側の難点として、デジタル機器に通じていないと動画作成に時間を要すことがあるため、難しい場合は顔無しのデータも認めたが、全員が指示通りに作成することが出来た。また、アイコンタクトやボディーランゲージを生かしにくい点に関しては、プレゼンテーションスキルに特化した科目ではないため、妥協しうると考えた。逆を言えば、対面でのプレゼンテーションスキル向上のために、録画形式を取り込み、その練習の先に対面での発表を設定することも選択の一つとなりうるだろう。対面でのプレゼンテーションに比べれば、初年度は教員側の事前準備の負担は多かったが、資料は一度作成すれば以後流用出来るものであり、それ以上に学習効果があったとすれば、実践の価値はあったと言えよう。野口（2020）は

2018 年度の総務省の調査結果を受け、「インターネット元年から 20 年余りの間に，インターネットに接続する端末や利用目的に関してすでに世代間での違いが生じている。教師が生徒に効率的な指導を行うためには，スマートフォン，ノート型 PC，タブレット型 PC などについて，それぞれの用途や操作方法をよく理解している必要がある」としている。学生と教員の双方が教育の ICT 化に取り組んだ時、それまでに蓄積したアナログでの手法を生かしたうえで、これまで以上の成果を生むことを期待したい。

参考文献

糸山昌己(2014)「ICT を活用した英語教育― スマートフォン・タブレットを活用した英語教育の実践 ―」『東京成徳短期大学紀要』 第 47 号

小林 輝美(2018)「自己の映像を利用した英語プレゼンテーション改善に関する研究―フィードバック方法による違いの検証―」『CRET 年報』 第 3 号

総務省(2018)情報通信白書 第１部第４章第２節 ICT による「つながり」の現状：https://www.soumu.go.jp/johotsusintokei/whitepaper/ja/h30/pdf/n4200000.pdf

田中裕美(2018)「ICT を活用した主体的な英語プレゼンテーション活動の実践」中部地区英語教育学会紀要.2018 年 47 巻 p. 229-236.

野口朋香(2020)「日本の英語教育における ICT 活用の展望と課題」愛知学院大学文学部紀要第 49 号

文部科学省(2015)『Society 5.0 に向けた人材育成～社会が変わる、学ぶが変わる～』 Society 5.0 に向けた人材育成に係る大臣懇談会.

http://www.mext.go.jp/component/a_menu/other/detail/__icsFiles/afieldfile/2018/06/06/1405844_002.pdf

文部科学省(2019)『教育の情報化の現状について』学校教育情報化推進専門家会議.資料 2
https://www.mext.go.jp/content/20210908-mxt_jogai02-000017807_0003.pdf

Bandura, A. J. (1969) Principles of behavior modification. New York: Holt, Rinehart & Winston.

Dowrick, P. (1983) Self-modeling. In Dowrick, P., & Biggs, S. (Eds.), Using video: Psychological and social applications. New York: Wiley Interscience.

Guo, R.X. (2013) The Use of Video Recordings as an Effective Tool to Improve Presentation Skills. Polyglossia Volume 24

REVISITING INTERPRETATION CLASS AS EFFECTIVE LANGUAGE LEARNING CONTEXT

Taeko Shibasaki

ABSTRACT

Since the Ministry of Education, Culture, Sports, Science, and Technology (MEXT) has promoted communicative language teaching (CLT) methodology, incorporating students' first language (L1) in English classrooms has been a controversial issue in the Japanese English as a foreign language (EFL) context. However, it is a matter of grave significance that despite the movement, researchers continue to stipulate a lack of target language use in overall Japanese EFL classrooms. It is reasonable to assume that such a situation, in which everything must be conducted in English, is somewhat pie in the sky. It is argued that the change in Japanese English education is impeded due to some restrictions, such as a lack of teachers' language competence and skills to teach English only (EO) classes (Barker, 2018). Also, some scholars argue that the educational system in which students are forced to prepare for entrance exams, which is one of the traits in Japanese EFL contexts, hinders the change. Though holding maximum second language use in the classroom as the principle for improving students' target language mastery, this paper sheds light on the intentional use of students' first language, Japanese. The author thinks incorporating interpreters' training methods to the lesson could give a solution to the rampant use of Japanese in the classroom. Through interpreting training methods, students can gain the chance to have English input and output, which is vital for language acquisition to occur. This paper intends to give implications on ways to conduct effective EFL classrooms through interpretation training.

INTRODUCTION

In response to globalization, using English as a medium of instruction (EMI) in English classes has been promoted for decades under the leadership of the Ministry of Education, Culture, Sports, Science, and Technology (MEXT), and the movement grew increasingly in the event of hosting the Olympics. Nonetheless, English as a foreign language (EFL) classrooms in Japan have seen little change. (Barker, 2018; Brennan, N.D.; Holthouse, 2006; Kikuchi & Browne, 2009). The fact that many EFL classrooms in secondary schools are still conducted mainly in the first language (L1) is deeply concerning from a second language acquisition (SLA) standpoint (Shibasaki, 2021). There have been many criticisms in the literature that the low language competence of in-service teachers or lack of teacher education in Japan inhibits the movement of changing the classroom to a communicative, language-rich space (Barker, 2018). In addition, it is also true that in secondary education in Japan, students and teachers are busy preparing for examinations. There is no denying that both students and teachers are reluctant to engage in actual language usage because of it. As a consequence, the situation that EFL classrooms in Japan lack second language (L2) input has remained unsolved. To end the ongoing situation, measures that could create a classroom where the use of L2 is necessary and convincing would be essential. Also, for the measure to be sustainable, a successful L2 self-image in the future, that is not only based on the

successful outcome of examinations would be needed. Regarding this argument, the author believes that it can be achieved by maximizing English input while regarding students' L1 as a necessary tool to allow students' comprehension, which at the same time, answers the needs to raise students' language skill in a multicultural perspective (Ramsden, 2018). In that sense, recently, interpreting training has been considered a valid way to help average Japanese English learners (Els) develop their language competence (Komatsu, 2005,2012a, 2012b, as cited in Morizumi, 2018). Morizumi (2018), in her study, further mentions that thanks to many commercial textbooks written by interpreters, many ELs look up to them as learner models and thus, interpreting training has gained enough popularity to convince many Japanese ELs. Therefore, if incorporated in the lessons, the methods could offer students a meaningful language leaning and usage opportunity. Through the interpreting training, students can envision successful L2 selves carrying out the real-life tasks of interpreters, as well as gain the skill to study better, and practice English in effective learning space through controlled L1 and L2 usage occasions. By incorporating the interpreting training, the issue of rampant use of L1 by the teachers and students could be solved and hence, increase the L2 input and output. The author will introduce how interpreting training could offer language-rich opportunities giving one of the lesson plans as an example.

STUDENTS' PERSPECTIVE ON SUCCESSFUL L2 SELVES

It is said that learners who possess a strong ideal L2-self acquire L2 more comprehensively than those who do not. Motivation is a vital factor in language learning (Aoyama, 2019). In a context like Japan, where language usage is very limited, it is challenging to develop students' motivation to learn the target language in that regard. Many students have difficulty envisioning themselves using their L2 in the future and, therefore, could easily lose their motivation. In such a situation, the discrepancy between their current situation and desired image could impede students' language learning. If, as Aoyama (2019) argues, students with a smaller gap between their ideal future image and their current situation are more likely to be motivated language learners, it is necessary to create an environment in the classroom where students can have a positive self-image of using the language. Otherwise, students may be inclined to focus on test-preparation. In the highly examination-oriented Japanese education system, it is vital to create an environment in the classroom where students can engage in the target language with a successful image of themselves being "language users" other than being successful in examinations. In that sense, interpreters have a steady reputation for being successful language learners in Japan.

As mentioned earlier, recently, interpreting training methods have gained enough popularity among ELs in Japan. In fact, according to a small survey conducted for 28 students in the author's classes, most students find it interesting and helpful to engage in interpreting activities, such as shadowing: a training method that learners try to repeat the sound as they hear, reproduction training: a training which is equivalent to story retelling, sight translation: a training which learners interpret the written passage in a loud voice, and consecutive translation which students interpret the short speech or some part of the speech from one language to another. (Students' answers on their perception of the activities are presented in Figure 1, below.) The author believes that because many students are already familiar with such training methods, students can associate interpreters as being successful models of language learners who utilize the same L1. Therefore, interpreting training has the potential to create a positive environment where students can take advantage of the methods that their role models utilize.

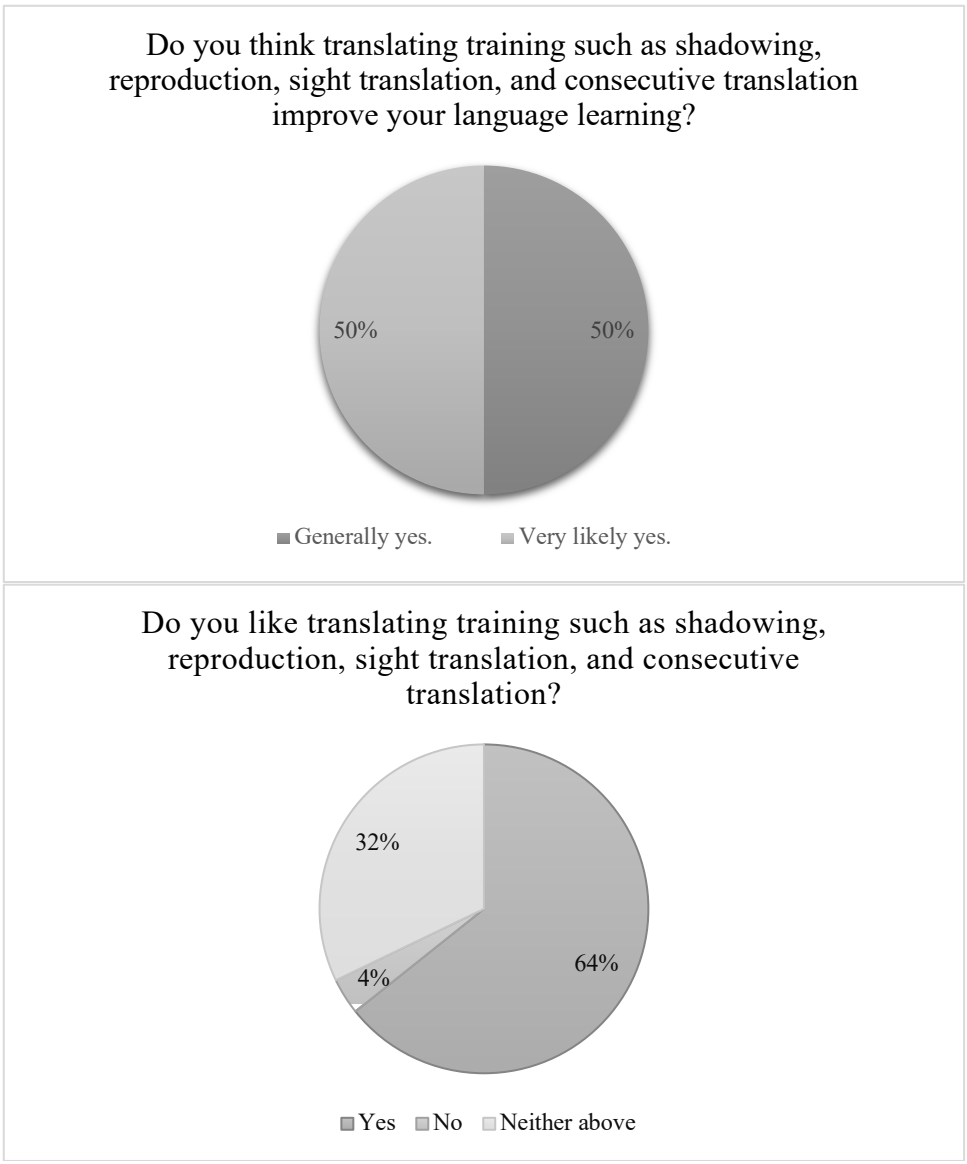


Figure 1. *Students' answers on translating activities (English version)*

INTERPRETATION TRAINING IN THE CLASSROOM

As of 2018, 138 interpretation courses were provided in Japanese universities (Morizumi, 2018). Many interpreting classes offer the course as part of English language education (Morizumi, 2018; Takizawa, 2002; Torikai, cited by Tanaka, 2004), not necessarily to train future interpreters to-be. Generally speaking, to become an interpreter, one must have a high level of proficiency in two or more languages, which Morizumi describes as "one at a mother tongue level and the other almost as good." (Morizumi, 2018, p.129) However, in recent years, it has become common knowledge that even ELs who do not have such a high-level proficiency can learn the method to improve their English language skills. Notably, the courses tend to be accepted by students with satisfaction. For example, a program at Kanda University, The Translation, Interpretation undergraduate course, is favorably reviewed by the students (Shibahara, Sekiya, Silva, and Park, 2012). Also, students perceive the course helpful in those courses where the author is involved in the Kanda Institute of Foreign Languages. Concerning students' motivation for language learning, it is considered worthwhile to study some aspects of interpretation courses that affect students' satisfaction.

Real-Life Connections

The first aspect that should be argued is that the interpreters' task is a real-life skill, and students can think and act like interpreters. As being discussed, role-playing exercises and real training that interpreters practice can be a rich opportunity for students to look for connections and visualize themselves using English in real contexts. Moreover, as a nature of the training, the learning contents of the lessons could be authentic when pulled out from genuine news resources. The author utilizes news, podcasts, and YouTube videos suitable to the student's language proficiency level for them to experience interpreting training. Because the sources are around for access to any audience, some students might know the content already, and thus making it easier for them to relate and spark their interest. That way, teachers can offer opportunities where students can connect their new knowledge with their prior understanding and consequently enhance students' learning (Mims, 2003). The author utilizes news sources from NHK, CNN, BBC, Aljazeera, and others in her daily classes. For video clips, she utilizes TED Talks and short interviews with famous actors, comedians, and sports players.

Interpreters' Training as a Tool for Becoming an Effective Language Learner

Interpreters' training, such as shadowing, quick response, sight translation, and summarizing, can easily be incorporated into students' learning outside the classroom (Morizumi, 2018). Apparently, studying English takes time, and once a week classes would not be enough to develop their language skills. Students can incorporate the methods that interpreters employ for their study at home after being familiarized with the method in the classroom with the teacher's support.

Creating an Active Learning Space

As mentioned earlier, in the survey the author conducted for her students, many had favorable opinions against incorporating interpreter training methods. Below are some of the students' responses to why they think the class is helping them learn better. (Figure 2)

Q. Why do you think the interpretation class is helping you learn better?

- Because I can learn the words and phrases with my friends through activities.
- Because I can practice the pronunciation better by speaking to my partner.
- Because I can actually speak English in the activities.
- Because I think the words and phrases, I learn in this class are useful in the real life.
- Because I can practice the expressions in different ways with my classmates.
- Because I think I can comprehend better through the class.
- Because I like interpreting methods.
- Because I can think deeper about the topic and therefore, I can memorize things better.
- Because it's fun when I feel I did well.
- Because I feel I am using English skills the most in this class.

Figure 2. *Some of the students' responses to why they think the interpreting class is helping them learn better.*

As seen in the survey above, many students perceive the class to be a place where they can practice and use English with classmates through activities utilizing interpreting training methods. As a matter of fact, there were a few students who did not like the class because of the nature. Those students responded, "I don't like the class because I am not comfortable

working with others." Or "I don't like it because I sometimes have to work with a partner who I don't know so well and, in those cases, the activities and practices does not liven up as I hope." Nevertheless, in interpretation classes, through the activities, teachers can create a space where students can collaborate with their classmates to reach each activity's goals. The classes can be interactive, and what is more, students can get feedback from their classmates and the teacher during the activity. Though it takes a lesson or two for the students to get used to the classroom environment, eventually, students will feel safe to make mistakes and, as a consequence, promote L2 language use.

DESIGNING AN INTERPRETATION CLASS

As mentioned earlier, in many Japanese interpretation classes, the main objective of the courses lies in promoting students' language skills rather than raising interpreter candidates (Morizumi, 2018; Takizawa, 2002). In fact, of those students who participated in the survey in the author's interpretation course, out of 28 students, 18 students answered they were not interested in becoming an interpreter, 7 students answered that they had not made their decision yet, and 3 students answered they were interested in the profession. The author designs her interpreter training classes on the premise of improving students' English language skills. An example of a 90-minute class is given below for reference in that regard. The lesson emphasizes maximized L2 input and output with the support of L1, mainly for comprehension purposes. The lesson plan was designed based on Ogura's methods in his textbook, *Eigo Ripurodakusyon Toreeninngu* [English Reproduction Training] (2022) and *Eigo Samaraijinngu Toreeninngu* [English Summarizing Training] (2022).

Reproduction Exercise (45 minutes)		
Group	Activities	Language use
• Whole Class	• Listening 1. Teacher shows the key questions regarding the news content. 2. Students listen to the news source twice. Students take notes as needed. 3. Teacher asks the questions to check comprehension. 4. If students have difficulty comprehending the source, the teacher will let them listen to the sound again as needed.	• English * The Teacher will write the students' language on the board.
	• Repeating 1. Teacher gives the handout with the vocabulary. Each vocabulary has a Japanese translation next to it. 2. Students repeat the vocabulary after the sound.	• English
• Pairs	• Quick Response 1. Students pair up with a partner. One student reads out the	• Japanese to English

• Whole class • Individual • Pairs Pairs/ group	Japanese, and the other gives English words to the translation. 2. Students take turns. • Shadowing and repeating Students will follow the sound and practice shadowing and repeating. • Sight translation Students interpret the written Japanese passage into English. • Reproduction Students reproduce the news by looking at the pictures or their own notes. • Discussion Teacher asks some questions for students to think about the topic, and students discuss the question with a partner or within the group.	• English • Japanese to English • English
Summarizing Exercise (45 minutes) *A different news source will be used.		
Group	Activities	Language use
• Whole Class • Pairs • Individual to whole class	• Listening 1. Teacher shows the key questions regarding the news content. 2. Students listen to the news source twice. Students take notes as needed. 3. Teacher asks the questions to check comprehension. 4. If students have difficulty comprehending the source, the teacher will let them listen to the sound again as needed. • Quick Response 1. Students pair up with a partner. One student reads out the Japanese, and the other gives English words to the translation. 2. Students take turns. • Listening and summarizing 1. Students listen to the source independently and think about	• English * The Teacher will write the students' language on the board. • Japanese to English • English

• group	what should be included in the summary. 2. As a class, go over the story, and the teacher will write down on the blackboard that students picked up as items that should be included in the summary. 3. Teacher will specify the items that should be included in the summary. 4. Students will form a group and summarize the story. 5. Then students will form a different group and tell the summary of the story that his or her original group came up with. • Discussion Teacher asks some questions for students to think about the topic, and students discuss the question with a partner or within the group.	• English

CONCLUSION

Several advantages of incorporating interpreting training methods were discussed. Regarding maximizing students' target language input and output, interpreting training methods could offer students a great chance to envision themselves as language users in real-life contexts using authentic materials. Also, it makes it possible to give students reasons to use their L1 or L2 in different phases of the lesson because of the nature of each method. For instance, in the first 45-minute: "Reproduction Exercise" part of the lesson, when students are engaged in listening, repeating, or shadowing, the objectives of the methods are to comprehend and reproduce the passage in the target language. So, students engage in activities understanding and imitating the target language without L1 interference. However, when the lesson moves on to the quick response or sight translation part, students need to use Japanese to reproduce the English words or sentences because of the training procedure. Consequently, teachers can maximize the L2 use by designing and aligning the activities with clear instructions on which language to use. A lesson plan utilizing the interpreting training suggested in this paper was designed to provide a language-rich environment that offers students as much practice as possible. There are times when the teacher hears students conversing in their L1 during the L2 activities. In such cases, it is not easy to decide how far the teacher should go in regulating the use of languages. However, as long as the use of L1 does not impede the objective of the activity, the teacher must be flexible enough to overlook it at first and gradually reinforce the use of L2. Through interpreting training, the author believes students will be able to have adequate practice with support from peers and teachers and grow as effective language learners.

REFERENCES

Aoyama, T. (2019). Understanding motivation in the language classroom: Insights from complexity perspectives. *Journal of the Center for Foreign Language Education, Shimane University* , *14*, 33–43.https://ir.lib.shimane-u.ac.jp/45248

Barker, D. (2018). Fundamental problems with English education in Japan. 岐阜大学教育学部研究報告　教育実践研究・教師教育研究 [Gifudaigakukyouikugakubukenkyuuhoukoku Kyouikujissennkennkyuu kyousikyouikukennkyuu], 20, 139-148. https://repository.lib.gifu-u.ac.jp/bitstream/20.500.12099/75048/1/edu_180020015.pdf

Brennan, J. (n.d.). University English entrance examinations in Japan. Retrieved February 10, 2021, from https://www.academia.edu/9183468/University_English_Entrance_Examinations_in_Japan

Carson, E. (2016). EFL student L1 preference changes: Proficiency and time. Focus on the learner, 169-177.

Hall, G., & Cook, G. (2013). Own-language use in ELT: Exploring global practices and attitudes. *ELT Research Papers*, *13*(01), 1–48.

Higher Education Bureau, Ministry of Education, Culture, Sports, Science, and Technology. (2012, June 19). Higher Education in Japan. Retrieved February 1, 2021, from https://www.mext.go.jp/en/policy/education/highered/title03/detail03/__icsFiles/afieldfile/2012/06/19/1302653_1.pdf

Holthouse, J. (2006). The role of the mother tongue in EFL classrooms. 外国語教育フォーラム[*Gaikokugokyouikuforamu*], 5, 27-37 https://www.kansai-u.ac.jp/fl/publication/pdf_forum/5/027holthouse.pdf

Krashen, S. (2004). Why support a delayed-gratification approach to language education. The Language Teacher, 28(7) 3-7. https://jalt-publications.org/tlt/articles/687-why-support-delayed-gratification-approach-language-education

Kikuchi, K., & Browne, C. (2009). English educational policy for high schools in Japan. *RELC Journal*, *40*(2), 172–191. https://doi.org/10.1177/0033688209105865

Mims, C. (2003). Authentic Learning: A practical introduction and guide for implementation. *A Middle School Computer Technologies Journal*.https://www.researchgate.net/publication/228395999_Authentic_Learning_A_practical_introduction_and_guide_for_implementation

Ministry of Education, Culture, Sports, Science, and Technology. (2011). The Revisions of the Courses of Study for Elementary and Secondary Schools. https://www.mext.go.jp/en/policy/education/elsec/title02/detail02/__icsFiles/afieldfile/2011/03/28/1303755_001.pdf

Morizumi, F. (2018). Interpreter Training in English Language Education in Japan. *Seikei Review of English Studies No.22*, *22*, 127–153. http://repository.seikei.ac.jp/dspace/bitstream/10928/1042/1/eibun-22_127-154.pdf

Ogura Y. (2022). *Eigo ripurodakushon torēningu = English reproduction training: Tankikan de hiyakuteki Ni Hanaseru yōni naru*. DHC.

Ogura, Y. (2022). *Eigo Samaraijingu Toreningu: Tsuyaku Mesoddo de Jiyu Ni Hanaseru: Onsei Dierutsuki*. DHC.

Ogura, Y. (2022). *Eigo Surasshu Risuningu Toreningu: Purotsuyaku Kyoka mesoddo katsuyo: Onsei Dierutsuki* (2nd ed.). DHC.

Ramsden, T. (2018). Translation in Language Teaching (TILT): Implementing translation techniques as effective communicative tools in the language learning/ teaching environment. *ACTA Humanistica Et Scientifica Universita Tis Sangio Kyotiensis*, *51*, 249–274.

Shibasaki, T. (2021). Appropriate L1and L2 use in EFL classroom —Promoting greater second language use. *2020 Nendo Gengomedia-Kyouiku-Kenkyusentaa-Nenpo*, *4*, 49–56. https://www.kandagaigo.ac.jp/kuis/cms/wp-content/uploads/2018/04/2020_03.pdf

Shibahara, T., Sekiya, Y., Siva, R. D., & Park, S. (2012). Translation and interpreting education at the undergraduate level. *Gengokyouikukenkyu*, *22*, 173–185. http://id.nii.ac.jp/1092/00000938/

Takizawa, M. (2002). Interpreter Training Techniques and Their Application as a Tool for Language Enhancement. *Hokurikudaigaku Kiyo*, *26*, 63–72. https://www.hokuriku-u.ac.jp/about/campus/libraryDATA/kiyo26/gai3.pdf

Tanaka, M. (2004). Tsuyakukunrenhou wo riyoushita daigakudeno eigokyouiku no jissai to mondaiten [Current Pedagogical issues in Teaching Interpreting at the Under graduate Level]. *Japan Association for Interpretation Studies*, *4*, 63–82. http://someya-net.com/10-JAIS/Kaishi2004/pdf/04-04-tanaka%28final%29.pdf

越境キャリア教育の実践
－高専連携における越境学習の取り組みと教育効果に関して－

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The Practice of Cross-Boundary Career Education: Cross-boundary Learning and Educational Effectiveness in Cooperative Education between High Schools and Vocational Schools

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はじめに

人生 100 年時代が提唱される中、労働者としてのキャリアは長期化しており、リカレント教育やリスキリングの重要性が唱えられている。また、2020 年の世界的な新型コロナウイルス感染拡大に伴い、人々のライフスタイルや働き方にも大きな変化がもたらされている。今日のように社会環境が大きく変化し、社会の不確実性が高まる中において、企業はイノベーティブな思考力と実行力のある人材を求めており、そのような人材育成の手法の一つとして近年注目されているのが越境学習である。越境とは、香川（2015）では「人やものが複数のコミュニティをまたいだり、異質な文脈同士がその境界を越えて結びついたりする過程を、さらには、そこで起こる人々やモノの変容過程」と定義している。また、企業人を対象とした研究において中原（2012）は、越境学習の定義を「個人が所属する組織の境界を往還しつつ、自分の仕事・業務に関連する内容について学習・内省すること」とし、企業人の学びを OJT や OFF-JT で捉えるのではなく、業務を通じた様々な経験や職場内の他者からの

気づきや学びと同様、組織外における経験も重要な学びの機会であると論じている。企業のイノベーションを促進させる上で、越境学習は人材育成手法の一つとして取り組み研究されている一方で、高等教育機関における実践や研究は、現状十分には行われていない。

本稿では、専門学校神田外語学院（以下、本学）国際ビジネスキャリア科（以下、IBC）の 2 年次必修科目「ビジネス研究演習（ゼミ）」で 2018 年より取り組む本学 IBC のゼミ生(以下、学生)と、新潟県上越市にある私立関根学園高等学校特進コースの 1 年生 2 年生（以下、高校生）が混ざり合い学び合う、越境学習をベースとした越境キャリア教育の効果を検討する。

1. 背景

本学の IBC は、2012 年に開設され「ゼロから 1 を生み出せる人材」の育成を目指し、「多角的視点」「心の筋肉」「システム思考×デザイン思考」の 3 つの能力の育成に取り組んでいる。学びのスタイルとしては、グループワークや課題解決型授業(PBL)を多用し、上記 3 つの能力のほかにも、学生のコミュニケーション能力とシェアドリーダーシップ力の涵養に日々取り組んでいる。IBC が実践する教育プログラムの特色の一つである 2 年次学科必修科目「ビジネス研究演習（ゼミ)」(以下、ゼミ）では、定性調査、定量調査の手法を学び、日常生活の中で問いを立て、グループ単位で研究に取り組む。研究発表会は毎年 12 月に開催され、2 年間の学びの集大成の場として位置づけられている。

一方、新潟県上越市にある関根学園高等学校は、1909 年関根萬司氏により創立され、2019 年には創立 110 周年を迎えた歴史ある私立の高校である。長年上越の中等教育機関としてこの地域の教育に取り組んでいる。現在 1 学年約 220 名が在籍しており、特進コース・進学コース・普通コースの 3 コースに分かれ学んでいる。「輝いて生きる」を建学の精神とし、日々の教育活動が行われている。

2012 年より筆者は本学のキャリア教育やビジネス教育の授業以

外に、主に東日本の高校生を対象とした「高校生のためのキャリア出張講義」を実施しており、現在までに10年間で延べ45校約9,000人の高校生が筆者のキャリア出張講義を受講し学んでいる。この出張講義を通じて2013年に関根学園高等学校進路指導部長である金田大樹教諭と筆者が出会い、その後議論を重ね、2018年より双方の学生と高校生が東京と新潟を往還し混ざり合い学び合う越境キャリア教育の実践に取り組んでいる。本稿では、この実践を通した教育効果を明らかにする。

2. 先行研究

2. 1 越境学習とは

青山（2015）によれば、越境という概念を初めて提唱したのは、心理学者のエンゲストロームだとされる。エンゲストロームは活動理論の枠組みから越境を提唱した。越境に対する学術的議論は、1990年代以降活発化し、経営組織論、教育学や心理学などさまざまな分野で取り上げられ、キャリア論、活動理論、実践共同体といった視点で研究されている。

香川（2015）は、「越境とは互いにとって異質な文化に触れ合うことで、いったん熟達した経験（実践）の層やそれまでのコミュニティのあり方が揺さぶられ（揺さぶりあい）崩れていく過程、すなわち熟達や既存の枠組みの動揺と破壊が大なり小なり起こる過程である」とし、「そこから新しい振る舞い方やコミュニティ間の関係性を再構築していく過程である」と述べている。そして、越境の対象者は、組織に所属し働く人に限定せず、異なる状況下をまたぐ全ての人を対象としている。

一方で中原（2012）は、越境学習の対象者を組織に所属する企業人とし、越境学習の定義を「個人が所属する組織の境界を往還しつつ、自分の仕事・業務に関する内容について学習・内省すること」とし、越境学習は、多くの場合就業時間外に組織外の場所で個人の

自由意志により行われる行為と捉えている。

石山（2018）は、越境学習の定義を図表１のように定義づけており、香川、中原、石山の越境学習の定義は微妙に異なるが、概して、越境学習とは「自らが準拠している状況とその他の状況を往還し気づきや学びを得る行為」と考えられる。

表1　越境学習の定義

①	広義の越境的学習の対象者は、「異なる状況をまたぐ人すべて」である。
②	狭義の越境的学習の対象者は、「組織との関わりを有する働く人、働く意思のある人」である。
③	越境的学習の境界とは、「自らが準拠している状況」と「その他の状況」との境を意味する。
④	越境的学習の対象範囲は、越境者が境界を往還し、境界をつなぐ、一連のプロセス全体が該当する。
⑤	越境的学習は、境界を往還しているという個人の認識が存在することで成立する。

出所：石山（2018）

２．２　高等教育の現場における越境学習の研究

越境学習で得られる学びについて石山（2013）は、具体的には初対面の他者と社会的地位にとらわれず、相互作用すること、異質で多様な他者の否定的意見を怖がらずに対話し視点を拡大することなど、知識の仲介の際に重要なスキルがあげられると指摘している。

現状、企業で就業する人材を対象に展開されている越境学習ではあるが、高等教育の現場における越境学習の教育効果に関して、香川（2012）は、看護学生が学内学習から臨地実習に越境することで学内学習の形式知にも臨地実習で獲得される実践知どちらにも依拠しない「第３の知」としての「越境知」が生じていることを明らかにした。また、石山・新目・半田（2016）によるインストラクショナルデザイン理論に基づくインターンシッププログラムの学習効果の研究においては、産学連携により実施された学部生対象のインターンシッププログラムを通して、さまざまな視点を獲得し新しい気づきが、その後のゼミ活動やサークル活動への立ち振る舞いや自身のキャリア志向に変化をもたらすことを明らかにしている。日頃ホームとしている大学を飛び出し、アウェイの企業へ越境し、限られた実習期間の中、日々大学と企業を往還しながら企業という異なる文脈の中から新しい刺激を受け、越境学習が実践されているこ

とが指摘されている。

このように大学生に対する越境学習の教育効果が報告される一方で、越境学習の研究対象の中心は、依然組織に所属する企業人を対象としており、高校や大学・短大・専門学校で学ぶ生徒や学生を対象とした越境学習の研究は未だ十分とはいえず、今後の研究課題といえる。

3. 本研究の目的

本稿では、2018年より現在まで毎年IBCの学生と関根学園高等学校の高校生が、混ざり合い学び合う越境学習をベースにしたキャリア教育の実践の中から、2018年度に実施した越境キャリア教育と2021年度実施したオンラインと対面を併用したハイブリッド型越境キャリア教育における教育効果を明らかにする。

本稿で紹介する越境キャリア教育とは、自らが準拠している状況とその他の状況を往還し、日頃接点を持つことのない人々が混ざり合い学び合う活動を通じ、今後の自身のキャリア形成につながる気づきや学びを獲得する教育である。

越境キャリア教育の意義に関して、金田（2018）は、目的意識を共有した若者が交わるということは、その人間がもつ輝きを最大限に引き出し、これほどまでに個人を成長させ、その成長した個人が集団を成長させる原動力となることを示唆している。池田（2020）は、東京で学ぶ専門学校生と新潟で学ぶ高校生が互いの住み慣れた土地を離れ、日常と異なる景色に身を置き人と触れ合い、五感を研ぎ澄ませフィールドワークを実践しながら、凝り固まった思考を解きほぐし、今までになかった新しい視点で世の中を見る目を養うことができる点に教育的意義を見出している。また、活動に参加した生徒・学生は、他者理解と合意形成のあり方について学ぶと同時に、自らのキャリア形成についても考えを深める契機となることを示唆し、新しいキャリア教育の一つのカタチとして、越境キャリア教育の意義を指摘している。

本研究では、東京に所在する専門学校の学生と新潟に所在する高等学校の高校生が往還し混ざり合う学習環境の中で、どのような気づきや学びを得られるのか、越境キャリア教育の効果を検証する。

4. 研究1　2018年度越境キャリア教育

4.1　目的

越境キャリア教育初年度の2018年は、IBCの学生15名、関根学園高等学校の高校生10名が参加し、8月の2泊3日の東京フィールドワーク（図1）、9月の2泊3日の新潟フィールドワーク（図2）を開催し、互いの住み慣れた土地を往還しながら、多角的視点を養うと同時にキャリア形成能力の向上を目指し実施した。

参加学生は、東京・新潟のフィールドワークを経て、11月に上越市内で行政と地域住民に対する地域創生プランの発表会を開催した。一方、参加高校生は、10月に校内で開催されたNIE（Newspaper In Education）教育発表会で、本活動をベースにした上越地域のインバウンドに関する発表を行なった。

本研究では、8月9月の2度の越境フィールドワークを通して、受講前と受講後の高校生のまなざしの変化やキャリアデザイン力の変化を明らかにし、越境キャリア教育の効果を検討する。

図1　2018年東京フィールドワークの様子

図2　2018年新潟フィールドワークの様子

4．2　方法

関根学園高等学校の1年生10名に対して、フィールドワーク初日のワーク開始前とフィールドワーク最終日にレゴブロックを活用したワークと、三川ら（2015）が開発した「キャリアデザイン力尺度」（改訂版）を使用し、越境キャリア教育の受講前後における多角的視点の変化やキャリアデザイン力の変化を測定した。

4．3　結果

1）多角的視点の変化

越境キャリア教育に参加した10名の高校生の多角的視点の変化を分析するため、高校生を3グループに分け、グループ単位でレゴブロックを活用したワークショップを初日のフィールドワーク開始前と最終日に実施した。初日と最終日に、自らがイメージする「東京」と「上越」をレゴブロックで表現し、高校生のまなざしの変化の見える化に取り組んだ。

初日に東京をイメージし作成した作品は、図3から読み取れるように東京は人が多くて、雑駁な街といったイメージで作れられていることがわかる。一方で、最終日の作品からは、東京のスペースは新潟と比べて限られており、地上にも地下にもきちんと計算され街がつくられているということが読み取れる。初日は「人が多い」「高層ビル」「雑然とした街」「鉄道の種類が多い」の4つの視点で東京を作成したが、最終日は、五感を活かしたフィールドワークを

図3　初日・最終日の東京をイメージした作品の比較

※生徒の作品発表時の内容を踏まえ、筆者がコメントを作成

東京フィールドワーク初日作成の東京　　東京フィールドワーク最終日作成の東京

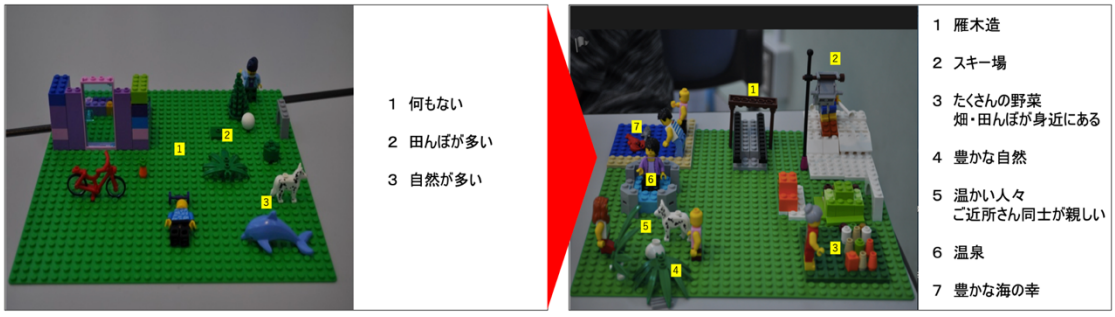
通して、「デザインされた街」「狭小スペースにも建っている建物」「地下にも広がる街」「地下鉄」「たくさんの人」「高層ビル」「高層オフィスで働く人」の７つの視点を獲得し、東京を捉え作成していることがわかる。

上越に関しては、図４から読み取れるように初日の作品では、「何もない」「田んぼが多い」「自然が多い」の３つの視点で作られており、単一的な視点で捉えた上越市が描かれていることがわかる。

一方、最終日の作品は、初日とは異なり、江戸時代から続く助け合いの精神が生んだ「雁木造」スキー発祥の地の「スキー場」「たくさんの野菜や身近な田畑」「豊かな自然」「温かい人々・ご近所さん同士が親しい」「温泉」「豊かな海の幸」の７つの視点で多角的に上越を捉えていることがわかる。

図4　初日・最終日の上越をイメージした作品の比較

※生徒の作品発表時の内容を踏まえ、筆者がコメントを作成



東京フィールドワーク初日作成の上越　　東京フィールドワーク最終日作成の上越

このように、東京ワークショップを通じて、「東京」「上越」を見る生徒の眼は、単一的に捉えていた街を複眼的思考で捉え、さまざ

まな角度から「東京」と「上越」を捉える視点を獲得したことが明らかになった。

2）キャリアデザイン力の効果測定結果

今回実施した越境キャリア教育の効果を測定するために、三川ら（2015）が開発した「キャリアデザイン力尺度」（改訂版）を使用した。これは、「社会形成力」「リーダーシップ力」「自己理解力」「問題解決力」「職業理解力」の5つの尺度（合計30項目）で構成されており、「4.とてもあてはまる」「3.すこしあてはまる」「2.あまりあてはまらない」「1.ほとんどあてはまらない」の4件法で自己評定を求めるものである（三川ら，2015）。また、ここで取りあげるキャリアデザイン力を構成する5つの能力の定義は、表2の通りである。

表2　キャリアデザイン力とは

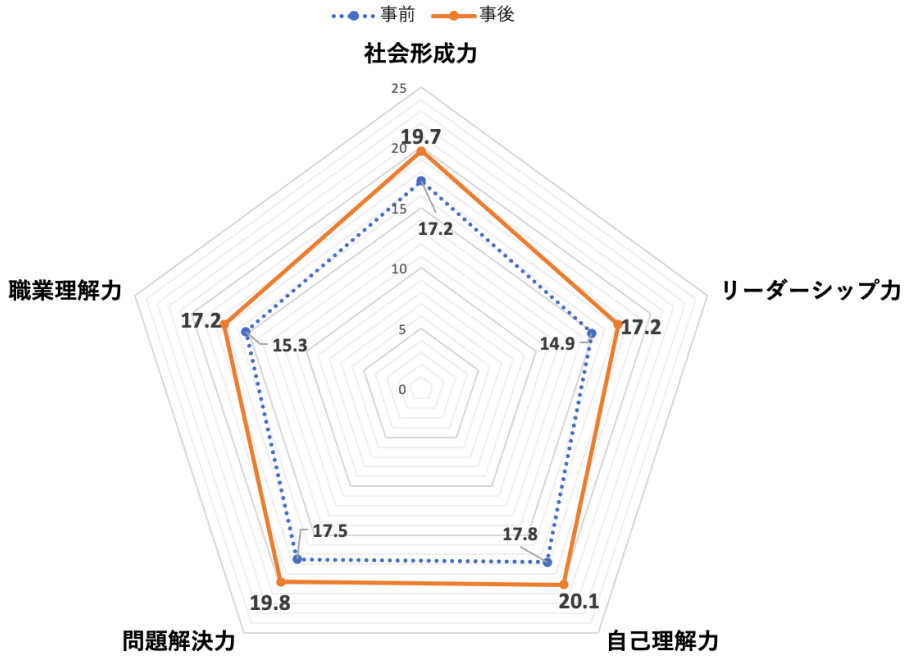
社会形成力	自らの役割や選択に責任を持ち、周囲の状況や、社会的なマナーやルールをふまえて行動するなど、社会人としての自己を形成するために必要な能力。
リーダーシップ力	自分から進んで行動し、気持ちや意見を発表するなどのほか、人に対しても積極的に働きかけて理解や協力を得ようとする能力。
自己理解力	自分がどのようなことに興味があり、どんな人生を送りたいのかを理解し、その理解を将来の目標や職業の発見に活かしていくことのできる能力。
問題解決力	問題や困った事態に直面したときに、意見や情報を集めて理解したり、状況の分析を行いながら、効果的な取り組み方やよりよい解決策を工夫する能力。
職業理解力	職業や資格の種類、またそれぞれの職業に就くために必要な能力や知識を知るなど、目標とする職業に就くための進路選択を考えていくために必要な能力。

出所：三川ら（2015）

キャリアデザイン力の効果測定は、8月の東京フィールドワーク実施前と9月の新潟フィールドワーク実施後に高校生を対象に実施した。結果は、フィールドワーク前のキャリアデザイン力を構成する5つの力の平均は16.54点に対して、フィールドワーク後の平均は18.80点であり、5つの能力全てが上昇した（図5）。東京フィールドワーク及び新潟フィールドワークでは、住み慣れた土地を離れ越境することを通じて、新たな視点と気づきや学びを獲得し、一連のフィールドワークを通じてキャリアデザインを行う上で必要な5つの力「社会形成力」「リーダーシップ力」「自己理解力」「問

題解決力」「職業理解力」の養成につながることが明らかになった。

図5　キャリアデザイン力の受講前後の変化



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4．4　考察

本研究は、学生と高校生が、自らが準拠している状況とその他の状況を往還し、日頃接点を持つことのない者同士が混ざり合い学び合う越境キャリア教育のある一定の効果を明らかにした。以下、本研究の成果として示す。

1）凝り固まった思考の解放と多角的視点の獲得

第一に、越境キャリア教育を通じて、参加者の視点を広げ、多角的視点で社会を捉えられるようになることが確認された。

高校生にとって当たり前の上越の景色も、8月の2泊3日の東京フィールドワークで五感をフル回転させながら東京を感じるほどに、上越の魅力や課題を再認識する契機となった。初日、東京駅の新幹線の改札を出た瞬間に生徒が発した「空気が汚い」という言葉や、JR 神田駅から本学までの道中で目にした神田西口商店街の雑居ビルの商業看板の数々に、「看板（情報）が多くて気持ちが悪い」

という声、初日の夜に高校生が夜空を見上げ「東京には星がない」という言葉一つひとつに、よそ者の視点で東京を捉えると同時に上越の魅力を内省していく学生たちの姿が随所に見受けられた。また、彼らの発する言葉に当たり前として捉えた日常の景色が揺り動かされ、日常の当たり前は当たり前ではないということを学生も我々教員も気づかされるシーンがワーク中何度もあり、互いに共鳴し合いながら新たな気づきを獲得した。これらの気づきを通した多角的視点の獲得は、レゴワークの作品上に形として現れた。

9月に実施された新潟フィールドワークにおいては、よそ者である学生が上越の街をフィールドワークする中で発する、地元住民との触れ合いを通じ感じる心の温かさや空気の美味しさ、商業化されていない街だからこそ生まれる癒しの空間などに関する呟きに、高校生たちは上越の魅力を再認識すると同時に、さらに新たな視点を獲得する機会となった。

2）キャリアデザイン力の獲得

第二に、越境キャリ教育は、高校生の「社会形成力」「リーダーシップ力」「自己理解力」「問題解決力」「職業理解力」の5つの力を高める教育効果があることが明らかになった。

ロシアの心理学者ヴィゴツキー（2001）は、子どもは、一人では解けない問題に大人や自分より有能な人の助けを借りながら取り組むことで発達していくと考え、こうした領域を再近接発達領域と呼んだ。越境キャリア教育におけるフィールドワークでは、学生は高校生にとってよき学びの対象者としての役割を担い、高校生一人では気づけないことにも、学生の力を借りながら気づきや学びを習得していく「発達の再近接領域」が生まれていたと推察される。

東京フィールドワークでは、「どのような視点で街を眺めると東京と上越の違いに気づけるか」「気づきのポイントをどのように整理し、最終発表へと繋げるか」、2泊3日の活動の中で新しいことに挑戦する高校生の傍には常に学生が寄り添っていた。学生は、日

頃学科のグループワークや PBL 型授業で培ってきたコミュニケーション力を発揮しながら、学びの伴走者として足場掛けを構築し、高校生の学びのサポート役を担いつつ、自らも高校生からさまざまな気づきや学びを得る相互行為の学習環境が本活動現場に生まれていたと推察される。

５．研究２　2021 年度ハイブリッド型越境キャリア教育

５．１　目的

2018 年より関根学園高等学校と実施してきた越境キャリア教育は、2020 年新型コロナウイルスの感染拡大に伴い、ICT を活用した完全オンラインによる越境キャリア教育に切り替え、ZOOM を活用し、新潟と東京を結び、フィールドワークを実施した。さまざまな制約のある中での実施となったが、ある一定の教育効果を確認した。

2021 年度のハイブリッド型越境キャリア教育は、5 月から 10 月まで約半年間、原則週 1 回（60 分）のオンライン上のワークショップ（図 6）と 8 月に 2 泊 3 日の新潟フィールドワーク（図 7)、10 月に 1 泊 2 日の東京フィールドワークを開催した。関根学園高等学校の高校生は、新しい視点で自ら生活する街、人々の営み、自然、環境について問いを立て、グループで研究し 12 月に校内で研究発表を行うことを目指した。一方、IBC の学生は、活動を通して高校生をリードしながら、高校生のハイブリッド型教育における学習効果の測定と特進コースの PR 用 WEB 動画作成に取り組んだ。

本研究では、5 月から 10 月まで実施したオンラインと対面を併用したハイブリッド型越境キャリア教育において、参加した高校生と学生の受講前と受講後の意識変容や行動変容がどのように生じ、キャリア形成能力に影響を及ぼしたかを明らかにすることを目的とする。

図6　オンラインワークショップの様子

図7　2021年新潟フィールドワークの様子

５．２　方法

関根学園高等学校の高校生 14 名（1 年生 7 名、2 年生 7 名）と IBC の学生 10 名に対して、ハイブリッド型越境キャリア教育の受講前後でどのような意識変容や行動変容、そして教育効果があったかを明らかにするため、三川ら（2015）が開発した「キャリアデザイン力尺度」（改訂版）と下村ら（2009）が開発した「キャリア・アクション・ビジョン・テスト（CAVT）」、そして 10 月の東京フィールドワーク後に学生が記述した振り返りコメントを使用した。CAVT は、ビジョンとアクションの 2 つの尺度で構成され、各 6 項目に関して 5 件法で評定する。最小値は 6 点、最大値は 30 点となる。

５．３　結果

１）キャリアデザイン力の効果測定結果

受講前と受講後のいずれのアンケートにも回答した高校生 14 名と学生 10 名を分析対象として、Wilcoxon 符号順位和検定を実施した。有意水準は.05 と定めた。高校生のキャリアデザイン力は、「社

会形成力」「リーダーシップ力」「自己理解力」「問題解決力」の4つの力に関しては、受講後に有意に上昇していた。「職業理解力」の受講前後の変化に関して、有意差はなかった（表3）。

一方、学生のキャリアデザイン力は、「社会形成力」「リーダーシップ力」「職業理解力」の3つの力に関しては、受講後に有意に上昇したが、「自己理解力」と「問題解決力」には統計的に有意な結果は得られなかった（表4）。

表3 越境キャリア教育受講高校生のキャリアデザイン力 受講前後の比較

		事前 中央値 （範囲）	事後 中央値 （範囲）	検定統計量	有意確率
キャリア デザイン力	社会形成力	20.0（11-24）	22.5（18-28）	0.0	*
	リーダーシップ力	17.5（13-24）	19.0（14-29）	13.5	*
	自己理解力	19.0（ 9 -24）	21.5（ 9-30）	7.0	*
	問題解決力	19.0（16-24）	24.0（18-30）	1.5	*
	職業理解力	17.5（13-24）	18.5（12-27）	21.5	NS

Wilcoxon符号順位和検定　　＊：P＜0.05　　NS : not significant　　（N=14）

表4 越境キャリア教育受講学生のキャリアデザイン力 受講前後の比較

		事前 中央値 （範囲）	事後 中央値 （範囲）	検定統計量	有意確率
キャリア デザイン力	社会形成力	20.0（17-22）	21.5（18-24）	4.0	*
	リーダーシップ力	18.5（10-22）	20.0（12-24）	5.5	*
	自己理解力	19.0（12-23）	20.5（12-24）	4.0	NS
	問題解決力	19.5（14-24）	19.5（15-24）	18.0	NS
	職業理解力	17.5（12-21）	19.0（11-22）	2.0	*

Wilcoxon符号順位和検定　　＊：P＜0.05　　NS : not significant　　（N=10）

2）CAVTの分析結果

受講前と受講後のいずれのアンケートにも回答した高校生14名と学生10名を分析対象として、Wilcoxon符号順位和検定を実施し

た。有意水準は.05と定めた。CAVTのアンケート12項目のうち、奇数の6項目は「ビジョン」について、偶数の6項目は「アクション」に関する設問となっている。ここでのビジョンは、将来に向けた夢や目標、やりたいことなどをどの程度明確にしているかを示し、アクションは、さまざまな活動に熱心に参加する、人脈を広げるなどの行動をとっているかを示している。

高校生の「ビジョン」得点の平均値は、受講前は21.07点であり、受講後は23.07点であった。「アクション」得点の平均値は、受講前は20.57点であり、受講後では23.71点であった（図8）。

Wilcoxon符号順位和検定の結果は、「アクション」は受講後の上昇と有意差が確認された。一方「ビジョン」は受講前後における有意差は見られなかった（表5）。

図8 高校生CAVT平均値の変化

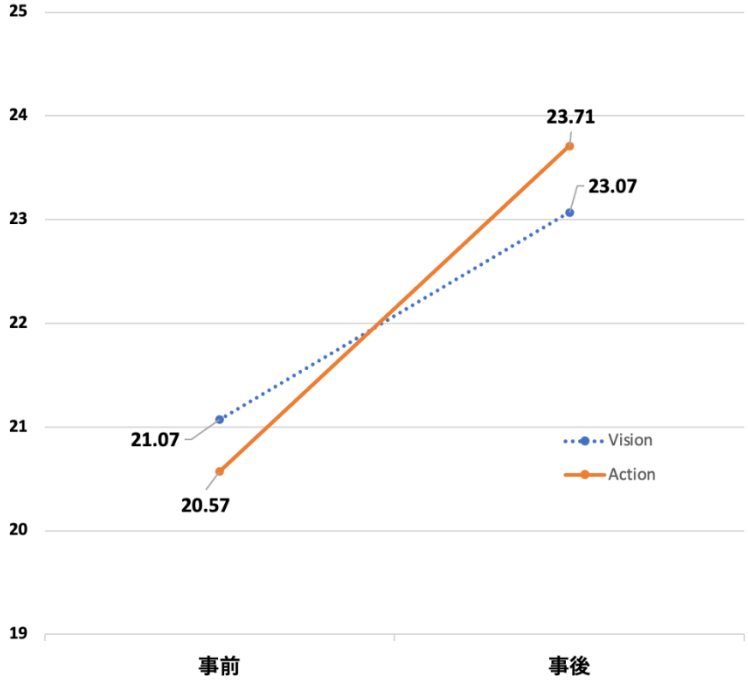

表5　高校生の越境キャリア教育受講前後におけるCAVTの比較

		事前 中央値 （範囲）	事後 中央値 （範囲）	検定統計量	有意確率
CAVT	ビジョン	22.0（ 6-27）	24.0（ 7-29）	23.0	NS
	アクション	21.5（13-26）	25.0（12-30）	10.0	＊
Wilcoxon符号順位和検定		＊：P＜0.05	NS : not significant		（N=14）

学生の「ビジョン」得点の平均値は、受講前は 20.50 点であり、受講後は 24.50 点であった。「アクション」得点の平均値は、受講前は 20.10 点であり受講後では 24.40 点であった（図 9）。

Wilcoxon 符号順位和検定の結果は、「ビジョン」も「アクション」も受講後に有意に上昇していた（表 6）。

図9　学生CAVT平均値の変化

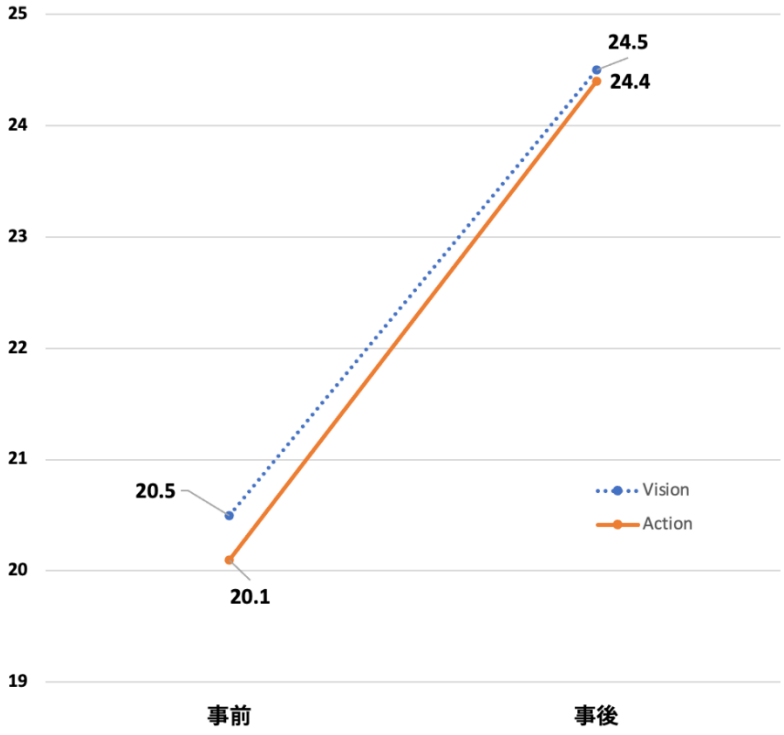

表6　学生の越境キャリア教育受講前後におけるCAVTの比較

		事前 中央値 （範囲）	事後 中央値 （範囲）	検定統計量	有意確率
CAVT	ビジョン	21.0（ 8-27）	25.5（18-28）	0.0	＊
	アクション	21.5（11-26）	25.0（14-29）	5.0	＊

Wilcoxon符号順位和検定　　＊：P＜0.05　　NS : not significant　　（N=10）

また、CAVTの設問「様々な観点から物事を見られる人間になる」を活用し、高校生と学生の多角的視点の変化に関してWilcoxon符号順位和検定を実施した。有意水準は.05と定めた。結果は、高校生の受講前後における統計的な有意の差は見られなかったが、学生は事後に有意に上昇していることが確認できた（表7）。

表7　越境キャリア教育受講前後における多角的視点の比較

		事前 中央値 （範囲）	事後 中央値 （範囲）	検定統計量	有意確率
多角的視点	高校生（N=14）	4.0（2-5）	4.0（2-5）	13.5	NS
	学生　（N=10）	3.5（2-5）	4.0（3-5）	3.5	＊

Wilcoxon符号順位和検定　　＊：P＜0.05　　NS : not significant

3）東京フィールドワーク終了時の振り返りコメントから

10月の東京フィールドワーク終了時に実施した振り返りシートの記述から、高校生の「キャリアデザイン力」を構成する5つの力とCAVTのアクションとビジョンに該当する表記を抽出しまとめたものが表8である。この表から読み取れるように、高校生にとって年上である学生は、学びの対象者であり、良き手本として高校生の「社会形成力」と「リーダーシップ力」に影響を与えていることがわかる（表8 東京フィールドワーク終了時の高校生の振り返りコメント 1-1, 1-2, 1-3, 2-2）。発信力や傾聴力、主体的に物事を進める力、リーダーシップやフォロワーシップなど、5月から10月までのオンライン上や対面での新潟・東京のフィールドワークにお

ける取り組みを通して、高校生は自らに欠けているコミュニケーション能力に気づき、できるところから真似ていく意識の変化や行動の変化がうかがえた（表 8 東京フィールドワーク終了時の高校生の振り返りコメント 1-1, 1-2, 1-3, 2-1, 2-2）。また、他者との触れ合いや見知らぬ土地へ越境し往還し、さまざまな視点で物事を捉え向き合いながら、「自己理解力」や「問題解決力」を高めていくことが記述からも明らかとなった（表 8 東京フィールドワーク終了時の高校生の振り返りコメント 3-1, 3-2, 3-3, 4-1, 4-2）。

表 8 東京フィールドワーク終了時の高校生の振り返りコメント

キャリアデザイン力	CAVT	記述抜粋
1 社会形成力	アクション	1-1 IBC の皆さんと交流するうえでコミュニケーションをする時のコツを学ぶことができました。相手との共通点を見つけることが大切だと気づきました。さらに、価値観の違いを認め合い相手のいいところを吸収していくことが大事だと思います。 1-2 IBC のみなさんと仲良くなることができて本当に嬉しかったです。この活動を通じて、こんなに仲良くなれて、たくさんの思い出が作れたのでよかったです！先輩方の東京 FW の予定が完璧で時間や行くところの順路など色々考えられていて本当に尊敬しました。私もこのような予定を順序よく立てられるようになりたいです。 1-3 この活動を通じて気づきや学びを得て、そこから次はどうしたいかを考えられたのは IBC の皆さんとの活動があったからです。先輩方の知的な言動や多くの優しさに触れ、私自信たくさん刺激を受けました。人間的な面でも今後もっともっと成長していきたいです。
2 リーダーシップ力	アクション	2-1 「積極性やリーダーシップはある方で、それができるからこそまとめるのは楽しい」と中学の頃までは感じていました。しかしそれは私の思い込みで、積極的になれていたけれど本当の意味でリーダーとしてみんなをまとめられたかと言われれば、無理やり引っ張っていたりもっと言い方に気をつけるべき点があったり、上手なやり方があったのではと思います。1 人で全部をするのではなく仲間にたくさん頼って、よりいいものを作っていく姿勢が大切なのだと分かりました。さらに言えば、よく観察をしてその人その人の得意分野を見極め、グループの力が最大限発揮できるように話し合いを導いていく力がリーダーには必要であると思いました。自分がどのポジションだと力を発揮できるのかを知り、どんなポジションでもある程度はオールマイティにできるようになることが目標です。そして、みんながみんなやる気に満ちているわけではないし各事情がある中で正の方向へ持っていけるフォローも私の課題です。 2-2 神田生の方々は話を聞く姿勢、案内の仕方やとても目を見て話してくれること、これは自分に活かせることなのでは？と思いそれも学んだことなのですごくありがたいと思っています。
3 自己理解力	ビジョン	3-1 今回私にとって初めての試みで最初はよく掴めずにいましたが、様々な活動を通して自己理解の深め方、広い視野を持つ素敵さ、グループワークの進め方、自分に足りていない点などに気づくことができました。 3-2 明るくなったねと言われる事が多くなって人の良いところ性格を深く知ることができ、そこは私に取って学びになりとてもありがたいです。 3-3 まとめ活動や各課題に対するグループワークでは、改めて自分の得意な点、不得意な点、仲間の凄さに気付かされました。
4 問題解決力	アクション	4-1 この活動を通して学んだことは、物事をいろいろな角度から読み取ることができるようになったということです。東京に行ったときに私が意識していたことは「もし」という言葉です。もしこの建物が倒れてきたらどのくらいの被害が出るのだろうか、もしここに大雪が降ってきたらどうなるんだろうか、など「もし」という言葉を大事にしてこの活動に取り組みました。そうすることで色々な視点から物事を読み取ることができるようになりました。 4-2 上越よりビルも圧倒的に高く、コロナ禍なのに人通りがとても多かったのがとても印象的で、ビックリしました。東京と上越を比較することで、上越市の課題や、反対にその魅力も見つけることが出来ました。例えば、人通りが多く繁盛している「秋葉原」や「渋谷」と上越を比べ、上越には特に大きな店がなく、人が来づらいという課題を見つけました。反対に、上越の魅力はマナーがしっかりしている所だと気付かされました。東京だと車が通っていてもおかまいなしに道路を渡る人や、道で騒がしくしている人などが多々見られましたが、上越ではそういうことはありません。人が少ない分、そういうことも少ないのかなと思いました。
5 職業理解力	ビジョン	5-1 例えばマンダラートでは、「私ってこんな風に興味関心を持っているんだな」とか「こんなにも感謝することがあるんだな」などと普段はなかなか意識しないポイントに目を向けることが出来ました。 5-2 ハンバーガーの企画では、どうやったら上越の人が買ってくれるのか、逆にここだと集客が見込めないかも…などというように自分たちの地域について考える機会ともなりました。もっと知識や情報を集めてアイデアを温めていったら実際に実現し盛り上げられるかもしれないと思うと、自分達や上越に可能性を感じました。

このように越境キャリア教育は、高校生のキャリアデザイン力やキャリア形成における意識変容や行動変容を促したことが明らかとなった。

学生における教育効果がうかがえる記述としては、キャリアデザイン力を構成する5つの能力の中でも、特に「リーダーシップ力」

表 9 東京フィールドワーク終了時の学生の振り返りコメント

キャリアデザインカ	CAVT	記述抜粋
1 社会形成力	アクション	1-1 予定と変わる部分も多くありましたが、その度に逆算していかに関根の皆さんを楽しませられるか考えて動けたのではないかと思います。活動当初はタイムマネジメントに苦戦していたので回数を重ねることによって身についたのではないかと思います 1-2 想像以上に高校生が良い反応をしてくれて安心しました。東京の何を見せれば「気づきが沢山あり学ぶことができるのか」と考えた時にとても悩んだのですが、「同じ線なのに 1 駅違うだけで人の種類や街の雰囲気が違うことをわかってほしい」と言うのを軸にして考えた結果山手線一周という結論になりました。高校生の反応を見た時に私たちのプランは良い考えだったのではないかと思いました。
2 リーダーシップ力	アクション	2-1 一番印象に残っているのは、FW が終わった後に生徒の一人が涙をながしてくれたことです。まだ対面で数回しか会っていないのにも関わらず、毎日真剣な眼差しで常に真面目に取り組んで、私たちが作った企画をしっかりと楽しんでくれていたんだなと言うのがしみじみと伝わってきました。 2-2 対面で実施出来た喜びが大きかった。自分たちが仕掛けた東京の魅力に実際に気づいてもらい、街を歩き等身大で見る東京スカイツリーに登り、高い視点からの東京何より私たちも楽しんで参加できた。生徒のほとんどが初めての東京であり、彼らの瞬間に立ち会えたことも嬉しかった。 2-3 まず一番に思うのは、無事に行うことができた安堵と嬉しさです。当初は 9 月に予定されていた東京フィールドワークが新型コロナウイルスの影響で 10 月、11 月と延び、関根の皆さんに東京に来ていただくことができないのではないかという不安がありました。オンライン開催でも対応できるように準備はしていたものの、やはり実際に来るのとオンラインの画面越しで見るのでは感じられるものに差がある様に感じ、せっかくなら五感を存分に使って楽しみながら吸収してもらいたいという想いが強くありました。また、僅か 2 回しかない対面の機会がなくなってしまったらもう会えないかもしれないという寂しさもありました。なので、対面での実施が決まった時は非常に嬉しかったです。また、当初は 2 年生のうちの数人は来られないとのことでしたが最終的に全員参加で行えたことも嬉しく思うと同時に、関根学園の生徒の保護者の方々が参加の同意をしてくださったことが非常に有り難く、その分も生徒たちに良い経験をして帰ってもらえる様努めようと強く思いました 2-4 私が今回東京フィールドワークで感じたことはまず、何よりの達成感です。関根の皆さんがどこに行っても何を食べても目をキラキラさせて、周りをみわたしながら歩いている姿を見て、こちらもやりがいを感じました。私も歩きながら改めて高田に訪問させていただいた時のことを思い出しながら歩くように意識していましたが、私とはまた違った観点や私の目の届かない気づきが多く、感心しました。渋谷や表参道の街並みに好奇心を膨らませる子もいれば、日暮里の昔ながらの街並みを見て表情がパァッと明るくなり興味を持つ子もいて、一人一人の個性も同時に感じられました。
3 自己理解力	ビジョン	3-1 印象的だったのは彼らの五感の反応が早かったこと。見慣れている東京でも彼らにとっては目新しく、品川では見る景色、原宿・神田商店街では場所のにおい、渋谷では沢山の音、驚きと興奮した面持ちで、ここはどこなのか、なぜこんな匂いがするのかなどを私たちに問いてくるシーンが多かった。そして「上越では～」と比較が続き、東京との違いを気づかせてくれた。目を輝かせながら東京での学びを吸収しようとする彼らの姿勢は私達に学びの楽しさを教えてくれた。 3-2 私も上京してから、五感を使うという授業などを受けてきて、新潟と東京の違いを沢山見つけて来たと思っていたのですが、高校生と回ることでまた新たな発見ができました。
4 問題解決力	アクション	4-1 オンラインでの約 3 ヶ月は間違えてはいなかったと実感出来てよかったです。私たちの考えた予定は少しハードスケジュールで、行けなくなってしまった駅も数駅あったのですが、体調などを気にしながら高校生に合わせて進めてよかったかなと思います。急に山手線が見合わせになってしまい、近くの地下鉄に乗り換えたり、東京の交通機関の便利さを私も実感しました。駅ごとの街を歩いている人の違いや、見えるもの、音、匂いなど、私も上京してきて感じたことが沢山あるので、会話をしながら色々な気づきを与えられたかなと思います。終始きらきらした眼差しをみられてとても嬉しかったです。 4-2 1 日目の後、皆疲れている中で高校生に渡すメッセージカードに載せる写真を選んだり、ムービーに使う写真や動画を選んでいました。私と目黒さんはホテルに宿泊していたのでムービー制作を主に担当していたのですが、BGM を入れられなかったり、素材探しがとても大変で悪戦苦闘でした。夜 12 時にコンビニへ夜食を買いに行き、スープとおやつを食べながら作業を進め、寝たのは午前 2 時半。ムービーを作り終わるまでにとても時間がかかってしまいましたが、それだけ高校生への思いが強いからこそ、高校生との信頼関係も築くことができたと感じました。
5 職業理解力	ビジョン	5-1 渋谷の人通りの多さや立ち並ぶ店舗のターゲット層などエリアごとに変わる街そのものと人の色といった私達が仕掛けた部分から、道路脇にある配電盤の装置や駅のホームの造りなど普段私達が見落としてしまうものまで見ていて、関根のみんなが様々な視点から感じる上越との違いを見つけている気付く力の高さに改めて驚かされました。二日間を通して煌びやかな街だけでなく人の暮らしを感じられるエリアに行くことでよりリアルな東京を見てもらうことができたように感じます。

に関する記述が多く見受けられた（表 9 東京フィールドワーク終了時の学生の振り返りコメント 2-1, 2-2, 2-3, 2-4）。

この要因としては、5 月から 10 月まで実施した越境キャリア教育の活動において、学生が毎週のオンラインワークショップをリードし、高校生のキャリア形成を促すワークショップを企画運営した点が影響していると考えられる。

日頃、学内や学外において、リーダーとしての役割を担う機会の少ない学生も、本活動においては、高校生にとっては頼れる年上の先輩としての役割を演じる必要があり、混ざり合い学び合う越境キャリア教育が生み出すストレッチゾーンでの学びが新たな自己成長を促したと考えられる。全体の活動を通して、常に主導的立場で取り組むことが求められることにより、「リーダーシップ力」以外の「社会形成力」「自己理解力」「問題解決力」「職業理解力」も育んでいったと考えられる（表 9 東京フィールドワーク終了時の学生の振り返りコメント 1-1, 1-2, 3-1, 4-1, 4-2, 5-1）。

5．4 考察

本研究は、オンラインと対面を併用したハイブリッド型越境キャリア教育のある一定の効果を明らかにした。以下、本研究の成果として示す。

1）高校生におけるハイブリッド型越境キャリア教育の効果

2018 年度、2019 年度の越境キャリア教育は、2 泊 3 日の日程で、東京と新潟を往還するプログラムであり、時間的制約の限られた中での教育活動であった。しかし、2020 年の新型コロナウイルス感染拡大に伴い、対面における活動中止が余儀なくされた。代替手段として完全オンラインで実施した 2 日間の越境オンラインキャリアワークショップが契機となり、翌年の 2021 年度以降は、越境キャリア教育の実施形態は、オンラインと対面を融合したハイブリッド型で実施し、実施期間も 6 ヶ月となった。

本研究結果で示されている通り、2021 年度実施したハイブリッド型越境キャリア教育は、2018 年度同様、参加した高校生と学生双方のキャリアデザイン力の向上に対して、ある一定の効果をもたらすことが確認された。

高校生のキャリアデザイン力としては、「社会形成力」「リーダーシップ力」「自己理解力」「問題解決力」が受講後統計的に有意に上昇しており、これら 4 つの力を高める教育効果があることが明らかになった。関根学園高等学校の高校生は、一連の越境キャリア教育の活動を通して、IBC の学生のサポートを得ながら自己に対するまなざしと社会を見つめる新たなまなざしを獲得した。高校生にとって年上である学生は学びの対象であり、他者とのコミュニケーションの取り方や物事に取り組む姿勢、リーダーシップの在り方など、様々な気づきを与えてくれる存在であった。そして、約半年間の活動を通して、高校生と学生の間にはラポールの関係が生まれ、より良い学びが生じる空間が構築されたと推察する。2018 年度の研究結果と同様に、2021 年度の越境キャリア教育に関しても五感を使い東京フィールドワークに取り組むことにより、夜、東京の星が見えない夜空を眺めながら上越の星空を思い浮かべ、上越の魅力に気づく学生や、東京の人々の立ち振る舞いから、上越の人々の礼儀正しさや心の温かさに気づく学生など、住み慣れた土地を離れ、よそ者のまなざしで東京を眺めた時、初めて気づかされる地元の魅力について、一人ひとりが感じ取り、地元上越の魅力を再認識することができたと考えられる。

このようにハイブリッド型越境キャリア教育の活動を通じて、オンラインによる活動と対面によるフィールドワークを併用することにより、高校生のキャリアデザイン力やキャリア形成における意識変容や行動変容を促すことが示された。

2）学生におけるハイブリッド型越境キャリア教育の効果

2021 年度のハイブリッド型越境キャリア教育における学生のキ

ャリアデザイン力は、受講後に「社会形成力」「リーダーシップ力」「職業理解力」が有意に上昇しており、これら3つの力を高める教育効果が明らかになった。

本来は、混ざり合い学び合うことのない新潟の高校生と東京の学生が、オンラインを活用し毎週放課後ワークショップを行い、コミュニケーションを深めた。そして、一連のワークを企画運営する学生は、常にワークをリードする立場を担い、毎週 PDCA サイクルを回しながら、活動に取り組んだ。これらの主体的に取り組む活動を通じて、「社会形成力」や「リーダーシップ力」を磨き、本活動で出会う他者や事物を通して、「自己理解力」「問題解決力」を深めていった。日頃は、フォロワーとして活動に参加するような学生も、本活動においては、常に高校生をリードする役割を担うため、高校生にとって頼れる年上の先輩としての役割を演じる必要が生じ、そのことが、学生の自己成長を促す一つの契機にもなったと考えられる。常に背中を見る側と見られる側双方で形成する活動空間には、混ざり合い学び合う越境キャリア教育ならではのストレッチゾーンが存在し、コンフォートゾーンからストレッチゾーンへ学生自らが移行した際、新たな自己成長の機会が生まれていたと推察する。

本活動に参加する学生は、全員卒業後の進路は就職を希望しており、ゼミ活動としての越境キャリア教育がスタートした2年生の4月の時点では、大半の学生が就職活動中であった。その後、全員が2年生の秋までには企業から内定を獲得した。梅崎・田澤（2013）は、CAVT のビジョンとアクションが共に高得点の学生ほど、学業成績が概してよく、就職活動における活動量が多く、就職の内定先に満足していると指摘しているが、2021 年度越境キャリア教育に参加した学生の就職活動は、皆、第一志望の企業から内定を獲得した。また、それら内定先の企業は、学生の間で人気の高い東証上場の通信系企業や国際物流企業、日本を代表する老舗ホテルなどであり、学生にとっては自らの思いが叶った就職活動となった。ビジョンとアクションのスコアが共に高い学生ほど、毎回の活動の振り返

りの質も高く、就職先に関しても就職難易度の高い企業からの内定を獲得していた。本活動は、就職活動と並行し取り組む時期も重なったため、キャリアデザイン力を構成する 5 つの力の一つである「職業理解力」も自然と押し上げたと考えられる。

6. 総合考察

越境キャリア教育とは、自らが準拠している状況とその他の状況を往還し、日頃接点を持つことのない人々が混ざり合い学び合う活動を通じ、今後の自身のキャリア形成につながる気づきや学びを獲得する教育である。

本研究では、2018 年度と 2021 年度に実施した高校生と学生が混ざり合い学び合う越境キャリア教育の効果を明らかにすることができた。そこでは、越境キャリア教育に参加した高校生と学生は、互いに影響を与え合いながら活動全般を通して、キャリアデザイン力を獲得すると同時にキャリア形成に必要な意識変容と行動変容を生み出していることが示された。また、2021 年度の越境キャリア教育では、ハイブリッド型教育としてオンラインを活用したワークを約半年間実施しながら、対面によるフィールドワークも開催したことにより、従来よりも生徒と学生間のラポールの関係はより強固なものが形成されたと考えられる。その結果、互いの役割認識もより強く認知され、高校生は良き学び手として、学びの手本としての役割を担う IBC の学生からコミュニケーションやリーダーシップのあり方などを学びとる姿があった。一方学生は、良き先輩として、高校生の気づきや学びをリードできる先輩を自らイメージし、自身の学びや成長のストレッチゾーンへ踏み出し、自己成長に取り組む姿が確認できた。また、高校生と学生が混ざり合い学ぶ現場では、学生の力を借りながら気づきや学びを習得していく「発達の再近接領域」が生まれ、協働的な取り組みの中で足場掛けを行うようになっていたと推察される。

このように 2018 年度、2021 年度に実施した越境キャリア教育

は、キャリアデザイン力を形成する 5 つの力と CAVT から明らかになったアクションとビジョンに関して、ある一定の教育効果が確認できた。

本研究では、「地域を越え」、「学校種を越え」、「世代を越え」実践する越境キャリア教育の効果に関して記述してきた。今後は、日々教育の現場で実践されているキャリア教育と越境キャリア教育の効果を比較検証し、越境キャリア教育にどのような意味があるかを明らかにしていくことが課題であると考える。引き続き越境キャリア教育を実践しながら、検討を加えていきたい。

参考文献

池田政隆（2020）「専門学校におけるキャリア教育の実践―事例専門学校神田外語学院」『新版キャリア教育概説』日本キャリア教育学会（編）東洋館出版社, 102-103

石山恒貴（2013）「実践共同体のブローカーによる、企業外の実践の企業内への還流プロセス」『経営行動科学』26（2）,115-132.

石山恒貴（2018）『越境的学習のメカニズム―実践共同体を往還しキャリア構築するナレッジ・ブローカーの実像』福村出版

石山恒貴・新目真紀・半田純子（2016）「インストラクショナルデザイン理論に基づくインターンシッププログラムの学習効果」『人材育成研究』12（1）, 99-120.

梅崎修・田澤実（2013）『大学生の学びとキャリア―入学前から卒業後までの継続調査の分析』法政大学出版局

香川秀太（2012）「看護学生の越境と葛藤に伴う教科書の『第三の意味』の発達―学内学習-臨地実習間の緊張関係への状況論的アプローチ」『教育心理学研究』60, 167-185.

香川秀太・青山征彦編著（2015）『越境する対話と学び―異質な人・組織・コミュニティをつなぐ』新曜社

金田大樹（2018）「主張北辰」『関根の教育』117, 関根学園高等学校（編）
下村英雄・八幡成美・梅崎修・田澤実（2009）「大学生のキャリアガイダンスの効果測定用テストの開発」『キャリアデザイン研究』5, 127-139.
中原淳（2012）『経営学習論―人材育成を科学する』東京大学出版会
三川俊樹・石田典子・神田正恵・山口直子（2015）「高等学校におけるキャリア教育・職業教育の効果に関する研究（2）―キャリアデザイン力尺度の再検討」『追手門学院大学心理学部紀要』9, 69-84.
L.ヴィゴツキー（2001）『新訳版思考と言語』柴田義松訳, 新読書社

TEACHER PD AND TRAINING FOR EFFECTIVE ICT USE IN THE CLASSROOM

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ABSTRACT

This article investigates the efficacy of providing asynchronous online Teacher Professional Development (TPD) compared to what is presently provided by the EIC program at Kanda Institute of Foreign Languages in Tokyo (KIFL). The article identifies the drawbacks and limitations of current teacher professional development and the disservice of continuing with the mandatory and ad-hoc face-to-face professional development methods employed at KIFL. Examples of asynchronous face-to-face, on-demand, and asynchronous professional development are discussed. These examples come from empirical research, business models, and pedagogical approaches. From these examples, a framework for implementing asynchronous online professional development is discussed. This framework does not neglect the current effectual face-to-face TPD activities but suggests improvements to them. This article offers empirically tried-and-tested information for understanding the benefits of incorporating asynchronous TPD. Furthermore, guidelines are provided for choosing what professional development training is better delivered in communicative synchronous meetings or through asynchronous methods, on-demand. Tools, integration methods, and a framework for offering asynchronous TPD are also presented.

INTRODUCTION

Information and Communications Technology (ICT) has been widely used in educational practice overseas for many years. In recent years, ICT has received a tremendous amount of interest in Japanese education. One driving force behind this focus on ICT is the “one device for each student GIGA project”. This interest is reflected in Japanese education policies that encourage the use of ICT in education and the resultant need for teacher professional development (TPD).

One recognized example of online TPD includes the 2016 National Education Technology Plan in the United States. The Future Ready Schools® (FRS) helps innovative educators ensure that each student, regardless of where they live in the USA, graduates from high school with the agency, passion, and skills to be a productive, compassionate, and responsible citizen. Each student deserves to graduate from a school that provides (All4Ed, 2022): a personalized and robust student-centered learning environment where students learn in and out of traditional school settings; learning experiences that prepare students for an increasingly technology-driven workforce and the world; work-based opportunities that tap into passions, purpose, and interests for deeper engagement and multiple pathways to success in life; innovative research-based instructional strategies facilitated by caring and qualified teachers; and clear exploration

of options through which every child achieves postsecondary success. The success of delivering this promise depends on training.

The FRS website (All4Ed, 2022) features a one-stop resource center to provide educational practitioners with ongoing professional development opportunities through workshops, online chats, and other modalities. FRS provides educators with research-based tools and resources that facilitate the modernization of schools and districts that support personalized, student-centered learning. FRS tools and resources are aligned with the evidence-based Future Ready Framework and focus on instructional leadership and systemic reform. The tools and resources include:

- Research-based framework that allows for digital learning visioning, planning, and implementation
- Five-step planning process for district digital transition
- School leadership strands (district leaders, principals, technology leaders, instructional coaches, school boards, and librarians)
- Personalized professional learning webinars, blog posts, national institutes and specialized workshops (online and in person), and other resources

While the FRS provides a trove of resources, there is little evidence from teachers or their interaction with the resources or how these tools, resources, and principles are implemented. However, one example from a study of K1 to K12 schools in Australia indicates that ICT funding and training are less than effective. Although Australia is considered a leader in distance and online education, this study of eight schools (Hayes, 2007) indicated that ICT was used to support or supplement paper-based learning. In fact, many teachers had difficulty expressing their views about ICT integration. Nonetheless, one teacher commented that providing one computer per child with specialist software allowed children to interact with content independently of their teacher (Hayes, 2007). For some, computers have opened up new opportunities for learning.

Another teacher from the Hayes (2007) study noted that technology has not only changed how teachers teach but also how children learn. With integration and thoughtfully designed software, students can now achieve what they could not have done, even five years ago. Well-designed software that can be integrated into the learning process includes apps like Google Classroom, Slides, Docs, and Sheets. However, without resources, incentives, and training, teachers cannot be expected to integrate ICT in the classroom; some element of professional development is necessary. With teachers' schedules already brimming with activities and responsibilities, providing online, on-demand, or asynchronous TPD is an alternative solution.

Examples of TPD that are currently available to teachers at KIFL include Duolingo, SeeSaw, English Teachers in Japan (ETJ) material, and British Council material. The KIFL English for International Communication (EIC) department established a website in 2019 that serves as a resource center. While these in-house and third-party examples and resources are useful, they are not particularly aimed at Japanese education or the needs of any single organization. Furthermore, these sites do not particularly develop the teachers' skills in ICT pedagogy or provide any indication of utilization or usefulness, nor do they provide any Web 2.0 functionality such as chats or other interactive modalities where students can provide lesson material, examples, or express a public voice.

Over the last two decades, the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) intensified its support of ICT and how it should be used in the classroom. One of the most obvious changes to learning with technology and ICT is the "one device for each student" GIGA project. This program was introduced in 2018 along with the promise of high-speed Internet and the provision of adequate training for educators to have the techniques to teach pupils how to master digital tools and learn online. The promises and plans of implementation were assessed in 2020. As of June that year, only 15 percent of classes were online (Japan Times, 2021).

Other national strategies, such as e-Japan Strategy, New IT Reform Strategy, and the e-Japan strategy 2015, have also been implemented during this millennium. However, a pre-COVID report from the Organization for Economic Co-operation and Development (OECD) indicated that Japan was lagging behind other countries in the uptake of ICT in education (Caldwell, 2020; OECD, n.d.). While the move to online learning created a surge in both interest in ICT and the necessary TPD to implement changes in pedagogy and learning and despite the overwhelming research and empirical evidence indicating the benefits of ICT in education, the resistance to change and the recent willingness to revert to face-to-face lessons threatens any further advances in ICT pedagogy.

The advantages of using ICT in education and its capacity to enhance learning are widely accepted. ICT adds value to teaching and learning by enhancing learning effectiveness through interaction, increased interest, gamification, self-discovery, alignment with learning styles, collaboration, and more (Henderson, 2020). However, the wider teaching community still needs to discover these benefits, and they still need to be convinced to seize the opportunities ICT offers.

One reason for this reluctance is the often-overlooked practice of integrating ICT into the written corrective feedback process. In the unstructured interviews conducted by the authors, the results indicate that many teachers accept ICT as a support for language learning but made no reference to its use in formative or summative assessment, which is not an isolated case. Over the past few years, the authors have delivered numerous workshops on integrating ICT into formative and summative assessments. The resounding comments from participants are that there is little return on time invested in implementing ICT and that they were not aware of effective ICT pedagogy or how to use it effectively for corrective feedback.

Although research into ICT use in schools is now approaching its fiftieth year, many teachers remain under-trained and under-supported in implementing and integrating ICT into the learning process. During the first three decades, the effectiveness and applications of ICT and its impact on learning were of interest, a necessary process in advancing the field. More recently, however, the focus has shifted to where ICT fails to support previous learning enhancement claims. Studies of how teachers in a range of settings utilize ICT to mediate student learning experiences indicate that ICT is largely being integrated (cf. utilized) in ways that support and supplement existing classroom practices (Hayes, 2007). The unresolved debate over the effectiveness and efficiency of ICT is whether ICT should be supporting the delivery of a traditional or a radically different vision of pedagogy based on soft skills and new digital literacies (Livingstone, 2012).

The less-than-desirable uptake of ICT in education is inadequate training teachers receive, and ICT is often relegated to merely a support role in the classroom. Successful integration of ICT requires fundamental shifts in the core activities of schools and includes new teaching practices

(Hayes, 2007). The examples discussed in this article suggest some ways in which these shifts may be initiated and sustained. Until now, ICT is largely being integrated into ways that support and supplement existing classroom practices of delivery. The affordances of ICT integration are overlooked or not made aware to teachers. Therefore, we commence this discussion by approaching teacher professional development (TPD) and then present time-saving options of formative, ipsative, and summative assessment.

LITERATURE REVIEW

Teacher Professional Development

Until now, KIFL teachers attend compulsory "TPD" at the commencement of each semester. This teacher preparation day is followed by ad hoc voluntary teacher meetings, usually no more than twice a semester. All of these teacher meetings have been held either face-to-face, online, or hyflex, depending on the health regulations at the time. While these meetings provide essential information for understanding the administration of the curriculum, they provide limited teacher professional development. These "TPD" provide limited instruction on ICT use, how to support student ICT use, or how to integrate ICT into the learning process. The only assessment of teachers' uptake of this "training" is indirect through student feedback, teachers' voluntary self-assessment, or monitoring of the teacher syllabus administration through Google Classroom. Any further appraisal of the effectiveness of the synchronous meetings and their contribution to professional development is beyond the reach of this paper. However, in the future, it should be formally investigated. Furthermore, the adoption of asynchronous professional development has not yet been discussed with teachers or in planning meetings.

Asynchronous TPD

While TPD is generally accepted as an essential practice for sustainable development in industry, TPD in education is less common. Furthermore, the benefits of providing asynchronous online TPD in both sectors have only recently become an option. Functionally, asynchronous online TPD provides greater flexibility and the capacity to offer a wide range of resources to teachers (Hu et al., 2021). For learners, research shows that asynchronous technologies provide collaborators time to deliberate and reflect, providing opportunities to evaluate comprehension and foster critical thinking (Oztok et al., 2013), resulting in increased quality of interaction (Brierton et al., 2016) and productive social interactions. Furthermore, providing asynchronous online TPD is more cost-effective than traditional on-site TPD (Hu et al., 2021).

When we consider KIFL part-time teachers' busy schedules, limited learning resources in English, and the vast differences in academic training, experience, and learning styles, online asynchronous workshops should be considered an effective way to deliver TPD. Additionally, synchronous workshops can sometimes result in less reliable adoption of training outcomes due to individuals' different learning styles.

Individual Learning Styles

One of the most overlooked advantages of asynchronous online TPD is that trainees or students can adopt a learning style that best suits their individual learning styles (Fishman et al., 2013). Although the concept of learning styles is somewhat controversial, learning styles can be conceived as describing how students process learning (Renandya, 2020). Furthermore, millennial learners' learning styles have been categorized as team learning, experiencing, and using technologies in learning (Hani & Lismay, 2020). It is little wonder that learning styles

are almost universally not ignored by managers and supervisors contemplating PD and training for adults in the workplace (see SEFE Marketing & Trading, n.d.).

PD and training models include similar learner-style considerations. Fishman's et al. (2013) seven different learning styles are an extension of Fleming's (2022) VARK model, which shares some familiarity with Howard Gardner's (1983) multiple intelligences. To improve the delivery of content or training, the different backgrounds of individuals should be considered. Each individual's background both molds and is molded by their learning styles (Kolb, 1984), their social culture, and their organizational culture (Meyer, 2014). It is little wonder that individuals attending the same training session can leave with distinctively different learning experiences, even if they have similar levels of education, training, and experience.

Kolb's Four Learning Styles

Kolb (1984) first established a theory of experiential learning and a learning style inventory from his definition of four different learning styles. Kolb's four stages should be considered during the design phase in TPD. The four stages include Concrete Experience, Reflective Observation of the New Experience, Abstract Conceptualization, and Active Experimentation.

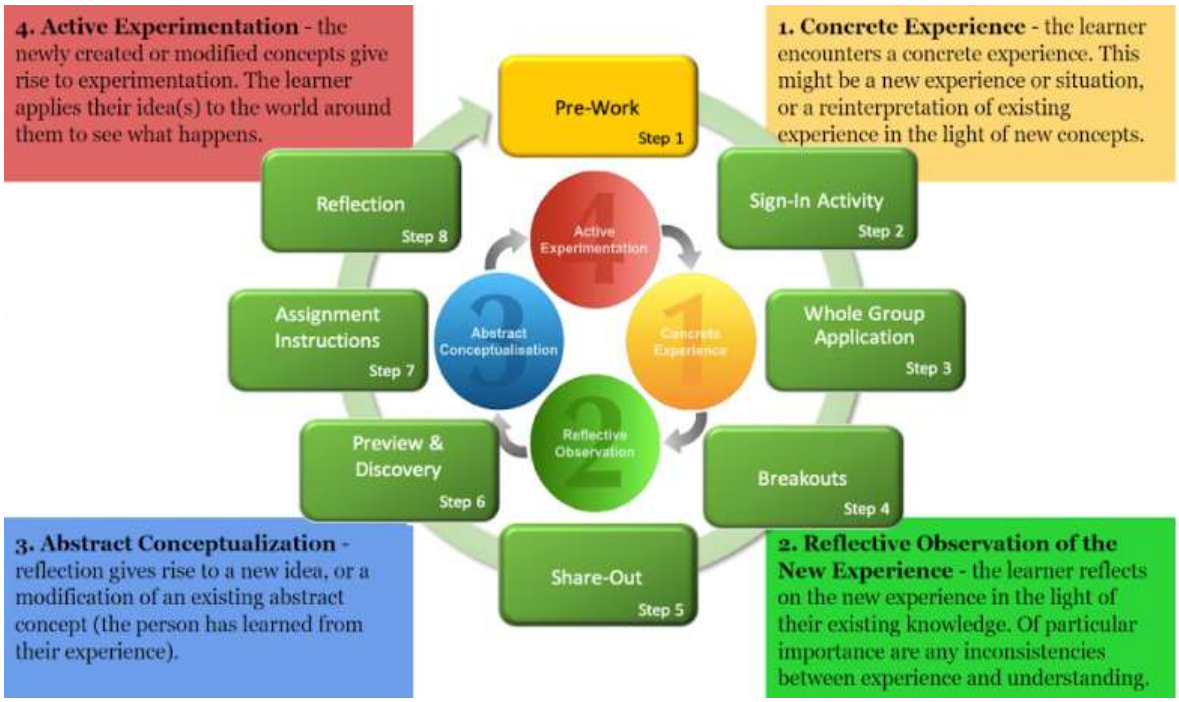
The first stage, Concrete Experience, is a stage where the learners actively experiment with a concept. In a lesson, this stage might include examples, awareness raising, or direct instruction. The second stage is Reflective Observation, where the learner consciously reflects on that experience. During the lesson, this would include discussion with peers and teachers and thinking about contrasts, conflicts, or areas of agreeance. After these two stages, the input should start to become proceduralized and have greater success in entering implicit memory. During the third stage of Abstract Conceptualization, the learner attempts to generalize a model of what is experienced. In a lesson, this could involve reporting the contrasts and similarities that peers expressed during the discussion. These reports should be available to the class, and the instructor should draw attention to the main features. In the fourth stage, Active Experimentation is where the learner applies the learned model to a new experiment. This could be an independent task given as homework - not homework to test independent learning, as in the traditional model, but the kind of homework where students bring back their experiences for further discussion. This final process should be incorporated into any well-designed curriculum and approach to syllabus administration that incorporates brain-based learning.

The rationale for presenting Kolb's four-stage learning model is that it can be used in planning, delivering, and assessing learner development. The concepts behind the learning styles and experiential learning experience enable trainees and students to translate information into real and practical concepts or theories. However, these four stages are easy to manage in synchronous situations and are effective. The problem is then, where does asynchronous learning fit in? The answer can be found in Fethi and Marshall's (2018) Synchronous Online Flipped Learning Approach (SOFLA®).

Approach - Asynchronous Input Instruction and Training

SOFLA® is a flipped learning approach that links synonymously with Kolb's (1984) model discussed earlier. The model is flexible in that it can be divided into two lessons. The important feature of asynchronous TPD is that the pre-work can be performed at any time, and teacher/supervisor monitoring can be administered during the remaining cycles (see Figure 1).

Fig. 1. *The SOFLA® 8-Step Cycle Against Kolb's Four Stage Model*



Notes. Pre-work and Reflection can be performed asynchronously. Adapted from "JALT: SOFLA® in Japanese Class [Conference Presentation Slides]. SOFLA® Synchronous Online Flipped Learning Approach" (Slide-5), by K. Saito & H. W. Marshall. Copyright 2021, by Kazuko Saito, City University of New York, NY USA. Four Stage Model adapted from "Experiential learning: Experience as the source of learning and development", by D. A. Kolb. Copyright 1984, Prentice Hall.

The pre-work activity (Step-1) is not for homework per se, but for work that needs to be shared and developed during the subsequent class. Kolb (1984) refers to this step as Active Experimentation. In the process of continual development, it is building upon previous knowledge or migrating tasks into further fields or transitional genres. Therefore, pre-work contains an element of homework and revision. The idea is, during this pre-work step, students experience the task and share it with the group on their return.

The following two steps (i.e., Sign-In Activity and Whole Group Application) are a form of shared learning, which can include reflection on previous knowledge, discussion about the pre-work or priming. Regardless, these all form an opportunity for scaffolding, peer learning and correction, and collaboration with peers. These steps not only provide an opportunity for those students who neglect to do the pre-work or think that this step is not important to be involved in, but also raise their awareness of the importance of preparation (i.e., it is embarrassing and awkward not to be involved). These steps loosely relate to Kolb's Concrete Experience and Reflective Observation of the New Experience stages. The whole group application is where the teacher directs learning or raises awareness.

Steps four and five (i.e., Breakouts and Share-Out) are where new information and skills are gathered and used for building upon previous knowledge and directing learning towards the target for that lesson. This equates to Kolb's Abstract Conceptualization. That is, the students have to use their resources to "fill the gaps" in the acquisition of new knowledge. The target can be completing a project or a part of a project, performing a task or reaching some target.

Either way, instructors should know where they want the students to be by the end of Step-6 (i.e., Preview and Discovery) and plan backwards to provide scaffolds.

The final three steps (i.e., Preview and Discovery, Assignment Instructions, Reflection) provide places for instructors to adjust thinking, raise awareness, and most importantly, ask students/participants to reflect on their learning cycle from steps one through seven. This reflection follows a Share, Help, Ask, Comment (SHAC) protocol (Fethi & Marshall, 2018). The SHAC protocol provides teachers sufficient structure to provide peer feedback in a way that is readily accessible and likely to elicit high involvement in the process. This reflective process can be attended online, asynchronously, or synchronously in interactive spaces such as chat rooms and discussion forums.

This section has collected the teaching approaches and learning styles into a framework that can utilize both synchronous and asynchronous delivery. The framework is an adaptation of the SOFLA® model. Therefore, some of the terminologies have been modified to fit asynchronous TPD. The remainder of this paper discusses the problems and solutions to implementing asynchronous PD for both teachers and students.

TEACHER VOICES FROM THE CLASSROOM

This section begins with a discussion about the problems teachers face with online teaching. The method of implementing TPD is then discussed, which includes the aim, material, preparation approach, example, and discussion.

Recently, Goto and Dusza (2020) investigated the perceived strengths, weaknesses, and challenges of teaching online by English teachers living in Japan. Sixteen teachers from various educational places, including KIFL, completed a survey about their perceptions of hybrid and hyflex teaching and the challenges of implementing ICT in EFL classrooms during the lockdown. The results showed that teachers were concerned with the following obstacles: a) technical issues (i.e., connectivity problems), b) a lack of interaction between students, c) teachers' frustrations with observing students online, d) dealing with online distraction, and e) teacher reluctance of using technology, due to a lack of knowledge or an unwillingness to change.

The survey provides evidence of the worries educators face when attempting to integrate ICT into their teaching practice, including pedagogical, cultural, and motivational problems. The main reason is that teachers need to learn more about using technology to monitor, control, motivate, or guide students. One common complaint is that it is difficult for teachers to know student engagement when their camera is turned off. Face-to-face teaching advocates claim that in the classroom, teachers can get a bird's eye view of their students working as they walk around the classroom and provide guidance directly. These teachers claim that monitoring student engagement is extremely difficult and more challenging than walking around the classroom. However, this claim indicates that the apps and learning technology still need to be integrated (i.e., it is not providing immediate feedback to the students or teacher). For example, KIFL students have their own devices, and even when teachers walk around the classroom and monitor students' work, teachers admit that students are playing games, sending messages to each other, or doing other disengaged activities during class time. Therefore, technology alone may not be the problem, but the learning environment, approach, or material might be.

One solution that has been successful in almost all teaching modes is integrating technology into the learning process. Integration means that the technology is used in such a way that learning would be severely hampered if the technology were removed (Son, 2020). This level of technology integration in the language classroom requires significant time, effort, and continual professional development. The following section provides an example of how technology can be integrated to provide enhanced communication, knowledge development, and assessment of learning. Furthermore, the following examples can be used for professional development.

EXAMPLES OF IMPLEMENTATION FROM THE CLASSROOM AT KIFL

Aim

This study of classroom practice details the four things that should be planned into lessons when we consider the learner as a customer (i.e., the receiver of quality products and whom we want to return for more services). Naturally, in any lesson, there are learning goals, but this lesson provides a framework for designing lessons that collect formative assessment data for the lesson facilitator to direct learning, and for students to self-reflect and learn from their peers.

Background

The following approach is offered in response to the problems mentioned earlier in this article. This approach is intended to alleviate the negative impact of the following:

- Technology breakdowns, apps malfunction, and connectivity problems
- Challenges in fostering interaction and collaboration between students
- Challenges in engaging students and making the technology essential to learning
- Difficulty of monitoring students working on the material and directing their learning

Materials

One of the most daunting tasks of teaching is the material choice and development. Furthermore, working with technology requires the material to be intuitive enough so as not to interfere with the learning process (Son, 2020). In the example provided, Google Suit is used, in particular, Google Sheets, Google Docs, Google Slides, and Google Sites.

Preparation

Before commencing delivery, students and teachers need training to understand the benefits of using technology in pedagogy and how technology affects learning. The technology used inappropriately can have the same effect as using inappropriate teaching methods in various settings.

There are various methods to collect student responses in Google Classroom, and each potentially affects the learning experience and, subsequently, the mental process. Additionally, how the material is used and shared affects the collaborative experience and consequently the memory process. These methods include the functions offered in Google Classroom, such as Class comments, making a document for each student, and shared documents, which are detailed in Table 1.

Table 1. *List of ICT Apps and Their Pedagogical Function*

App Name	Pedagogical Function
Class Comments	Class comments do not facilitate constructivist knowledge or sharing because students host their work when completed, not during the authoring process.
Class Comments w/follow-on questions	Follow-on questions allow teachers to conduct meta-analyses and scaffold the students according to the requirement of the task/lesson.
Shared Google Sheets	Allow students to record performance and material encountered (i.e., readings, essays, interviews, and site searches that were used for learning).*1
Shared Google Docs	Each shared doc has a page for enough students to provide responses. The first page always provides an exemplar. The teacher uses this exemplar as a rubric to explain the main points that will be assessed and the weighting on these points (undergrads cannot comprehend rubrics without explicit instruction).*2
Individual Google Docs	Individual Google Docs are used for final, individual assessment and for the teacher to assess task transfer and skill acquisition (i.e., the activity should test if the lesson provided students with adequate training and ability to perform autonomously).*3
Shared Google Slides	Shared Google Slides are used to collaborate during individual, group, or class activities. In this fashion, students and teachers can refer to others' work to raise awareness and provide general, specific, and indirect feedback to individuals and the class, depending on the need.
Shared Google Sites	Google Sites are used for journaling information and final assessment (i.e., after drafts in the previous Google Suit apps). Journaling or making a portfolio function as a reflective activity provides memory reactivation. Making a portfolio helps develop digital literacy. Also, the portfolio can be used as an extension activity for reporting, presenting, or discussion.

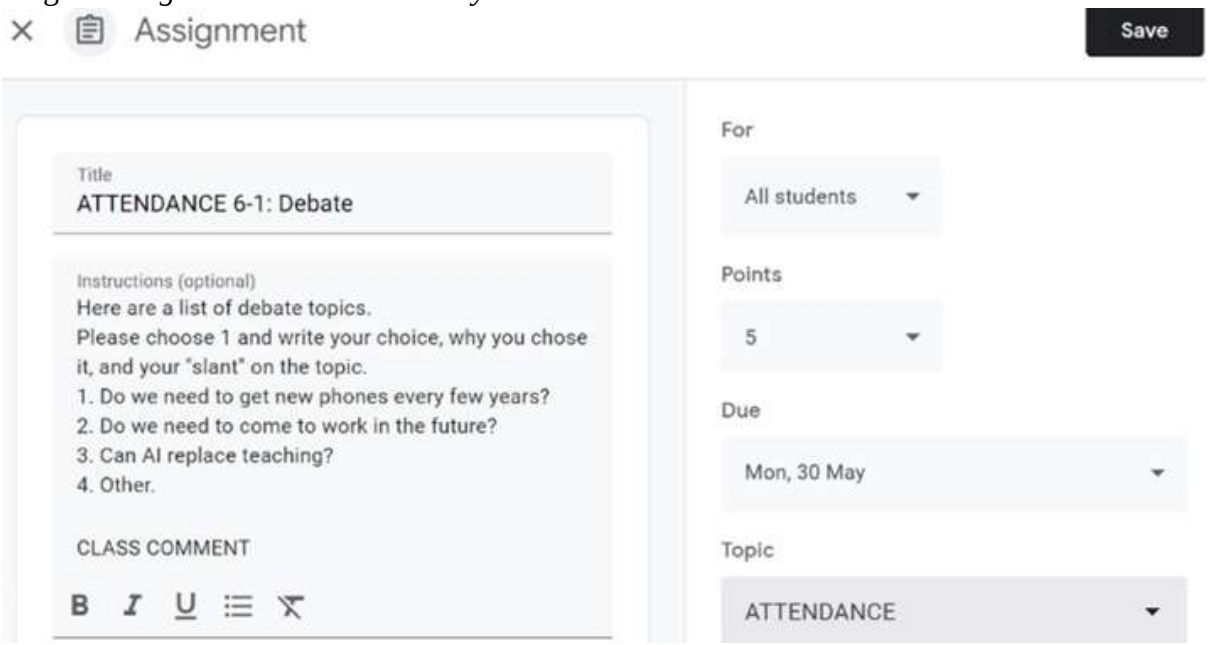
Note. *1 Shared Google Sheets are the databases students use to populate their Google Sites later and throughout the semester. *2 Teachers use rubrics to allocate marks against performance. *3 Teachers may explicitly indicate the marks allocated to each part of the exemplar provided in the Google Doc.

The pedagogical functions mentioned above are employed in the approach discussed below. The most important point is understanding the effect of each function and the affordance it offers to collaborative learning, reflection, and Communicative Language Teaching (CLT).

Approach

Although Japanese students use the digital environment outside of school and for purposes other than learning, their experience is largely unconnected to school use (OECD, n.d.). Similarly, although curriculum and material are often flouted as being authentic and student-generated, the material used for learning and generating ideas rarely uses the Internet appropriately for educational purposes. This is not for lack of desire or knowledge about the Internet or how to access it. Rather, students, and possibly some teachers, are more concerned with seeking technologically enhanced material that does the teaching and assessment for them. Furthermore, some apps are used merely to provide fun activities that teachers assume provide some incidental learning. Nevertheless, professional development offered at KIFL has not provided explicit guidelines and training to encourage teachers to adopt learning approaches that provide the access to digital content and collaboration through ICT. The following approach attempts to address these deficits.

Fig. 2. *A Sign-In Attendance Activity*



In the Sign-In Activity (i.e., Google Class Attendance Activity), the teacher starts with a question that prompts students to talk about a selected topic and raise their awareness of the topic's background (i.e., the gap, Ellis, 2003). The teacher posts this question on Google Classroom. Students have to communicate with each other in order to construct their own questions to ask the teacher in the Class comments. In the process, they are given academic vocabulary and schematic knowledge to discuss the topic. This activity serves to provide input and language scaffolding. The students share their comments in the Class comment for the class to see, which is discussed with the whole class in the next step (i.e., Step-3 Whole Group Application). Table 2 shows examples of student comments.

Table 2. *Student Samples of an Attendance Activity*

Student Name *1	Response
Teacher	Teacher provides an example with explicit instruction and awareness raising.
Renae	*"For me, I think I don't need it, cause I'm using the iphone 8. And then, I can live enough with it now* [sic]. *I think it depends on people tho* [sic], *so there is a* [sic] *people who wanna use* [sic] *iphone that has the latest function, something like it can take really good picture* [sic] *and so on."*
Yura	"*We chose "Do we need to get new phones every few years?" Because in fact, some companies launch new phones every year. People want to get a* [sic] *new devices and functions. In the future, we don't need smartphone* [sic]. *Because IT technically is going to develop now. Someday, it will be a part of me."*
Kaho	"*I choose* [sic] *the topic 3: Can I replace teaching? I think people can replace teaching. When I went to Haneda Airport I saw many Automatic check-in machine* [sic] *and I could check-in and got* [sic] *on the airplane without talking to people. I thought robots will* [sic] *take our jobs and I worried about it. So, I think the increasing use of artificial intelligence will mean people will lose their jobs in the future."*

Notes. *1 Student names are pseudonyms.

As these responses are submitted, Google Classroom updates the stream instantaneously. In this manner, the teacher can encourage student participation by interacting with the incoming

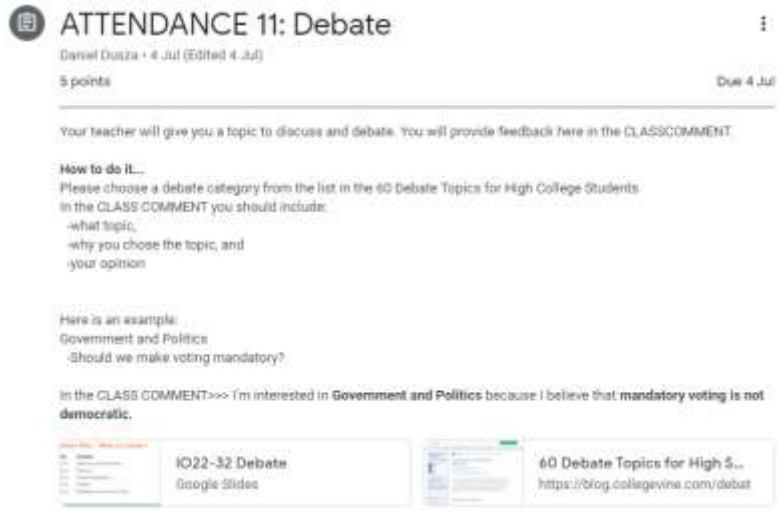
comments. From the attendance activity, the teacher should be able to gauge individual interests, communicability, and willingness to participate.

Creating motivation for students to engage with activities and submit the work in the limited time frame requires consistent, repetitive learning approaches. Student anxiety and a fear of embarrassment are reduced by repeating activities, but the activities need to be explicitly essential to participation in the remainder of the lesson. To create motivation to engage with the activity and lower the anxiety or embarrassment of submitting their substandard work, instructors should feature select student submissions and ask non-participants for their contributions. It takes some students two or three weeks to realize that participation is necessary.

The Breakout and Share-Out consist of a group task where students write a report about a debate topic. Reports can take many forms. One example of a report is discussing an activity or topic with a peer and then reporting the content of that discussion for other students to observe. This observation provides reluctant students with the necessary example to encourage them to participate, thereby reducing their level of anxiety. The development of this approach would be to discuss the debating process and write a report on that process (see Vygotsky, 1987 about the correlation between private speech and social speech). Furthermore, the report could include statistics generated from the members of the debate (e.g., how many people and how many people were for or against), or the statistics from the facts presented by either or both teams. The following Figure 3 shows examples of student-generated reports based on the three levels of task requirement (i.e., basic report, process report, and detailed report).

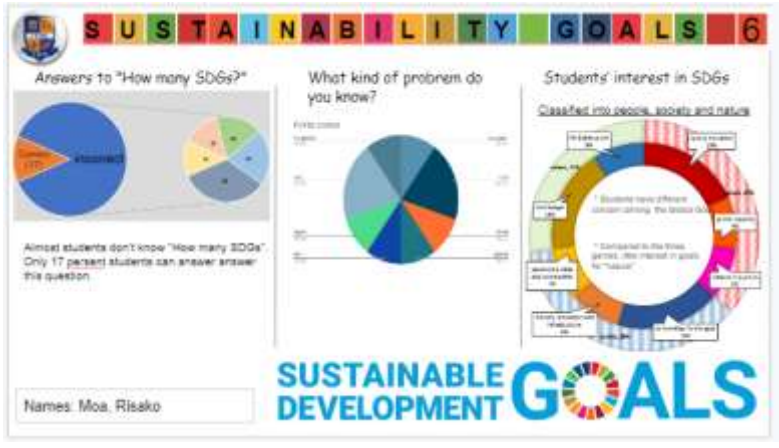
Fig. 3. *Student Samples of a Debate Topic*

Basic report *1



Process report *2

Detailed report *3



Notes. *1 Low level corresponds to CEFR A1-A2 (KIFL). *2 Intermediate level corresponds to CEFR A2-B1 (KIFL and University). *3 Upper intermediate corresponds to CEFR B2 (University).

Regardless of content, students are provided with ample opportunities to source knowledge from material online. From this knowledge, every activity requires students to use ICT to share new knowledge.

Asynchronous Work

Pre-work activities can include a vast array of pre-existing videos, activities, and even textbook activities. However, more engaging examples include Edpuzzle, LinkedIn Learning, and SeeSaw ambassador and pioneer training. Additionally, teachers and instructors can make training videos and presentations that can be accessed in students' and participants' own time. Ideally, these activities should be made available in a manner that the administrators can assess student involvement. Edpuzzle, Google Forms, Survey Monkey, and presentations presented in parts that require participants' engagement with the material can achieve this level of monitoring.

Reflection activities are easily collected through shared Google Docs, other survey collection methods, or Google Class comments. Each has its own pros and cons, depending on the situation. To assist participants that find it difficult to visualize or reply, shared Google Docs allow others to view exemplar responses from peers. The downside is that some students may copy responses; this action is more productively considered an attempt and a stage of learning more than mere copying. Naturally, the teacher/presenter should respond to copying with questions regarding content, not action. In this manner, the "culprit" would be less likely to repeat the action and make efforts to modify and paraphrase in the future, a more advanced skill. Using Google Class comments facilitates examples presented chronologically. It also allows students to delete and re-send comments. The downside, again, is similar to Google Docs.

Using survey devices is more appropriate for anonymous and private responses. Some response devices facilitate instant responses to answer data, while others can have these response data displayed after completing the survey or at some later time. For people who work better with examples, it may mean there would be more responses that are less specific or miss the intended purpose of the questions.

SUMMARY AND RECOMMENDATIONS

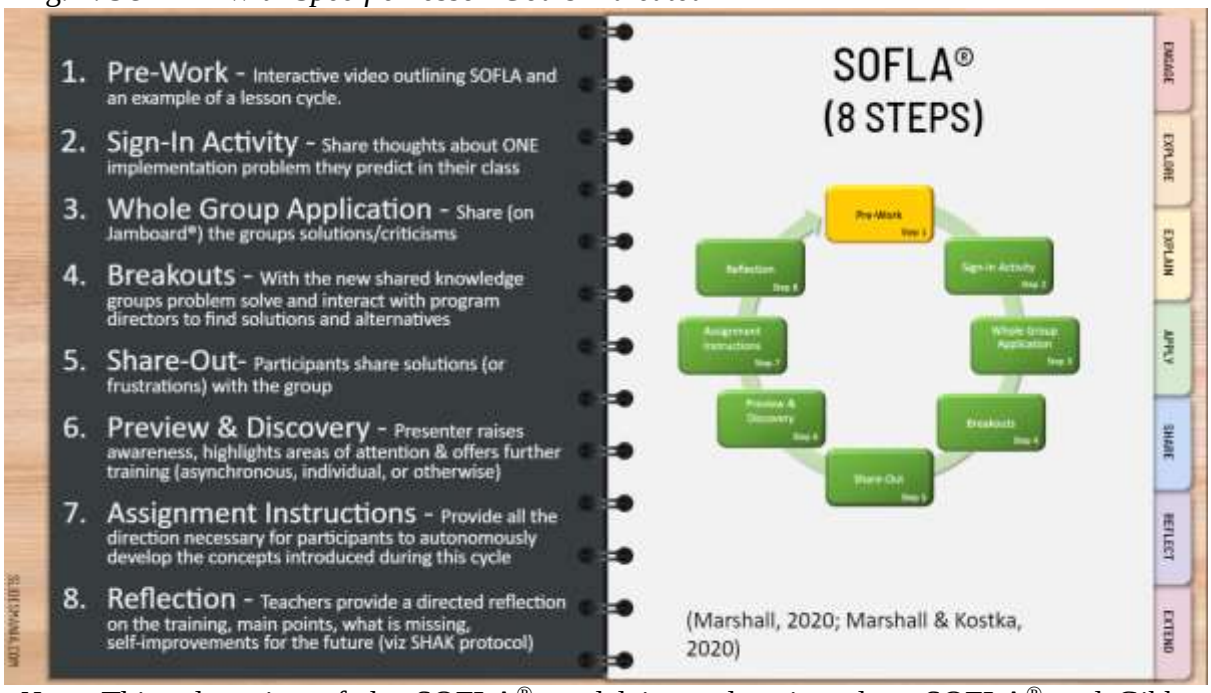
"There are some who unwittingly distinguish the classroom from the "real world." To teachers and learners, the classroom is a world as real as any other in which they live. The successful classroom will prepare learners for the world even as the world impacts the classroom" (Gregersen & MacIntyre, 2017, p. 1).

In industry, successful professional development occurs in the workplace. Therefore, with the help of ICT and content-appropriate practice, pedagogy should provide a similar level of "real world" experience for teachers and students. However, from the survey (Goto & Dusza, 2020), teachers indicated there were problems with ICT regarding integration and implementation. Previous research also indicated that training was inadequate, did not have a specific application, and there was little support from educational facilities to invest in ICT TPD.

The "weakness" investigated in this paper was that ICT is not integrated into the learning process, and instructors were not using asynchronous PD during appropriate stages in learning. This article identified that supervisors and trainers should be able to collect data from all parts of ICT training. Therefore, asynchronous training, which could be informative, investigative, or pre-emptive, needs to be accessible and accountable. During the synchronous training, teachers should be provided opportunities to share knowledge and solve integration problems at the establishment, course, and class interface. Skilled trainers can then redirect this collective knowledge into further or future training, delivered asynchronously and assessed from

classroom practice in a similar, asynchronous manner. For example, monitoring Google Classroom management, materials, assessments and interventions. The following illustration (see Figure 4) and instructional delivery plan (see Table 3) provide an explicit example of how to deliver training for "How to teach through Ted Talks and Gibbs reflective cycle for project-based learning".

Fig. 4. *SOFLA® With Specific Lesson Goals Indicated*



Note. This adaptation of the SOFLA® model is used to introduce SOFLA® and Gibbs reflective cycles to teachers. Adapted from "JALT: SOFLA® in Japanese Class [Conference Presentation Slides]. SOFLA® Synchronous Online Flipped Learning Approach" (Slide-5), by K. Saito & H. W. Marshall. Copyright 2021, by Kazuko Saito, City University of New York, NY USA.

Table 3. *Approach to Training Teachers in ICT Integration in the Curriculum*

Training Stage*[1]	SOFLA® Step	Description
Stage 3: Abstract Conceptualization*[2]	Entry*[3]	Pre-training: Prepare the asynchronous material and send an Email explaining the publication date (when will the training be available). This material builds on previous knowledge, provides new information that elicits investigation and development, and provides each participant with the opportunity to bring a unique understanding to the subsequent class.
	Step-7: Assignment Instruction	
	Step-8: Reflection	One week before the Professional Development (PD) day, the asynchronous activity is posted with an invitation Email explaining the asynchronous PD can be taken at any time prior to the PD day (two or three days before is better for memory).
Stage 4: Active Experimentation	Step-1: Pre-Work	Two days before, remind those who did not respond to attend to the asynchronous PD (Set up the asynchronous PD to include reporting and confirmation Emails).
Stage 1: Concrete Experience	Step-2: Sign-In	Participants are given a stimulus to share what they will bring to the class in Step-3. This could be sharing experiences in relation to the pre-work. The whole group application gives the group a chance to share their discussion with the class or instructor. At this point in the SOFLA® cycle, formative feedback is used to guide what happens in the following two steps. Instructors can raise awareness, direct attention, scaffold where necessary, or even provide instruction where necessary.
	Step-3: Whole Group Application	
Stage 2: New Experience Reflection	Step-4: Breakouts	In Breakouts, the peer learning and knowledge/skill-building process is exercised in a somewhat directed manner. The learning that takes place in the groups is shared again with the class, in view of the watchful gaze of the instructor who is guiding the direction of learning.
	Step-5: Share-Out	
Stage 3: Abstract Conceptualization	Step-6: Preview and Discovery	At this stage, the instruction focuses on the training main points that participants have discovered through the previous steps and any missing information can be provided. The provision does not necessarily have to take place in the present training but could be assigned or learned in the following asynchronous activity.
	Step-7: Assignment Instruction	Assignment instructions should provide all the necessary information to complete, develop, and implement the new or additional knowledge and skills the TPD provided. The assignment instructions should also include the expectations and activities that will be experimented with in the following two steps.
	Step-8: Reflection	Reflection includes the entire process, from TPD initiation, asynchronous activities, and progressive knowledge.

Note. *[1] Training Stage according to experiential learning that assumes experience as the source of learning and development (Kolb, 1984). *[2] Assumes that teachers have come into the training cycle with some previous knowledge or prior experience. *[3] The SOFLA® cycle can be entered from virtually any step; in this activity, it starts at Step-7.

CONCLUSION

This article discusses the efficacy of providing teacher professional development (TPD) through asynchronous ICT. Examples of asynchronous professional development from industry indicate that collaborative and cooperative learning styles are beneficial for implementing change and fostering efficiency and effectiveness through professional development. Although asynchronous professional development is universally adopted in industries where performance is more critical to production, educators need to be more amenable to asynchronous training. The workplace observations and literature presented in this article indicate that instructors need to be more aware and conversant with the advanced affordances provided by learning through technology. However, teachers needed to be more open about the need to be trained in tech-integrated pedagogy or even how tech-integrated pedagogy benefits learning. Hence, teachers needed to show more interest in monitoring, assessing, and adjusting through integrated ICT due to their experience and subsequent preference for didactic and non-communicative, tech-supported lesson delivery. To address this recognized deficit in professional development, this article provides a theoretical framework, approach, and method based on the SOFLA® flipped learning approach and Kolb's Four Stage Model with integrated ICT. Explicit examples of modifying learning approaches through integrated technology are also discussed. The discussion about the SOFLA® model indicates where, when, and how knowledge is built, shared, and produced during the learning cycle.

With appropriate ICT integration, the instructor can monitor and adjust the learning process through the technology and provide necessary corrective feedback at the point of need. Achieving this level of integration, monitoring, and collaboration requires hours of appropriate TPD; the one-hour TPD provided at the beginning of each semester needs to be increased. Therefore, asynchronous TPD was discussed as a solution to providing a readily available source of training that could be collectively shared and built upon during the short time allocated for TPD. Furthermore, the examples of lessons integrating technology with pedagogy show how teachers can implicitly build their knowledge on the TPD and become more proficient at using the technology progressively throughout the semester. In this way, a community of sustainable professional development is established among the entire learning community (i.e., administrators, teachers, and students). The frameworks and approaches offered in this paper can reduce the time taken to discover how technology influences learning and how integration can be productive in the classroom.

REFERENCES

All4Ed. (2022). *Future Ready Schools®*. https://all4ed.org/future-ready-schools/

Brierton, S., Wilson, E., Kistler, M., Flowers, J., & Jones, D. (2016). A comparison of higher order thinking skills demonstrated in synchronous and asynchronous online college discussion posts. *North American Colleges and Teachers of Agriculture (NACTA), 60*(1), 14-21. https://www.jstor.org/stable/nactajournal.60.1.14

Caldwell, M. (2020). An investigation into the perceptions of Japanese university educators on the use of ICT in an EFL tertiary setting. *Computer-Assisted Language Learning Electronic Journal, 21*(2), 1-16. http://callej.org/journal/21-2/Caldwell_2020.pdf

Ellis, R. (2003). *Task-Based Language Learning and Teaching*. Oxford University Press.

Fethi, K., & Marshall, H. W. (2018). Flipping movies for dynamic engagement. In J. Mehring & A. Leis (Eds.), *Innovations in flipping the language classroom* (pp.185-202). Springer. https://doi.org/10.1007/978-981-10-6968-0_13

Fishman, B., Konstantopoulos, S., Kubitskey, B. W., Vath, R., Park, G., Johnson, H., & Edelson, D. C. (2013). Comparing the impact of online and face-to-face professional development in the context of curriculum implementation. *Journal of Teacher Education, 64*(5), 426-438. https://doi.org/10.1177/002248711349441

Fleming, N. (2022). *The VARK modalities.* VARK Learn. http://vark-learn.com/introduction-to-vark/the-vark-modalities/

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences.* Basic Books.

Goto, M., & Dusza, D. (2020). *Virtual Voices: Teachers' perceptions of online teaching during COVID-19* [Unpublished manuscript].

Gregersen, T. S., & MacIntyre, P. D. (Eds.). (2017). *Innovative practices in language teacher education: Spanning the spectrum from intra-to inter-personal professional development (Vol. 30).* Springer. https://doi.org/10.1007/978-3-319-51789-6

Hani, U. U., & Lismay, L. U. (2020). The Learning Style of Millenial Students at English Education Department of Iain Bukittinggi. *The Journal of English Literacy Education: The Teaching and Learning of English as a Foreign Language, 7*(2), 84-91. https://doi.org.10.36706/jele.v7i2.12982

Hayes, D. N. (2007). ICT and learning: Lessons from Australian classrooms. *Computers & Education, 49*(2), 385-395. https://doi.org/10.1016/j.compedu.2005.09.003

Henderson, D. (2020). Benefits of ICT in education. *IDOSR Journal of Arts and Management, 5*(1), 51-57. https://www.idosr.org/wp-content/uploads/2020/02/IDOSR-JAM-51-51-57-2020.-1.pdf

Hu, D., Yuan, B., Luo, J., & Wang, M. (2021). A review of empirical research on ICT applications in teacher professional development and teaching practice. *Knowledge Management & E-Learning, 13*(1), 1–20. https://doi.org/10.34105/j.kmel.2021.13.001

Japan Times. (2021). *Japan's GIGA School Program equips students for digital society*. https://www.japantimes.co.jp/2021/03/22/special-supplements/japans-giga-school-program-equips-students-digital-society/

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development.* Prentice Hall.

Livingstone, S. (2012). Critical reflections on the benefits of ICT in education. *Oxford review of education, 38*(1), 9-24. https://doi.org/10.1080/03054985.2011.577938

Meyer, E. (2014). *The culture map: Breaking through the invisible boundaries of global business.* Public Affairs.

OECD. (n.d.). *Learning Compass 2030*. https://www.oecd.org/education/2030-project/teaching-and-learning/learning/learning-compass-2030/

Oztok, M., Zingaro, D., Brett, C., & Hewitt, J. (2013). Exploring asynchronous and synchronous tool use in online courses. *Computers & Education, 60*(1), 87-94. https://doi.org/10.1016/j.compedu.2012.08.007

Renandya, W. (2020). *Eight principles for teaching and learning language*. Willy's ELT Corner. https://willyrenandya.com/8-core-principles-for-teaching-and-learning-language/

SEFE Marketing & Trading. (n.d.). *Different learning styles in the workplace explained: Everything you need to know*. https://www.sefe-mt.com/careers/blog/different-learning-styles-in-the-workplace-explained-everything-you-need-to-know/

Son, J.-B. (Ed.). (2020). *Technology-enhanced language teaching in action.* Asia-Pacific Association for Computer-Assisted Language Learning (APACALL). https://www.apacall.org/research/books/5/

Vygotsky, L. S. (1987). Thinking and speech. In R. W. Rieber & A. S. Carton (Eds.), *The collected works of L. S. Vygotsky. Vol. 1. Problems of general psychology* (pp. 39-285). Plenum.

TOEIC(R) L&R テストのスコアアップにおける品詞理解度の重要性

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The Importance of Understanding English Parts of Speech to Increase Scores on TOEIC L&R(R) Test

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要旨

TOEIC L&R は国内の主要な英語テストであり、本学でもそのスコアが履修条件の目安や単位認定の対象となっている。スコアアップには受験時の時間管理が重要とされ、中でも Part 5 を短時間で解答する文法・語彙力が必要である。本稿では、TOEIC650 演習の授業において、Part 5 の解答スピードと正答数を上げるために、出題率の高い品詞問題の理解度を深めながら語彙力を上げる目的で実施したワークの効果を、学生の TOEIC スコアとアンケートで検証する。

キーワード：TOEIC L&R、単語学習、品詞理解、スコアアップ

１．はじめに

TOEIC&LR は国内の英語テストの中で主要であり、ある調査では 87.9%の企業が採用時にそのスコアを参考すると回答している（※１）。本学においても、単位認定の対象や（※２）、奨学金制度の対象資格となっており（※３）、スコアの取得は学生にとって非常に有益と言える。しかしながら、そのスコアアップにはある程度の学習時間が必要で、500 点の学習者が 650 点を取得するのにかかる時間は 340 時間とされており（Trew, 2007）、毎日 90 分間学習したとしても約８ヶ月を要する。本稿の筆者が担当する「TOEIC650 演習」は、前期・後期とも学習期間は約４ヶ月であり、その間での 650 点取得が単位認定の評定となっているため、学生は短期間でのスコアアップが必要となる。効率的なスコアアップのためには、リーディング・テストでの時間配分が重要で、特に Part 5 を 10 分間で解答することが望ましい（ヒルキ・相澤・前田, 2018）。そのためには、30 問ある Part 5 のうち、８問を占める品詞問題（加藤, 2022）を１問あたり数秒で解答し、スピードアップを図ることが有効である（ヒルキ・相澤・前田, 2018）。本稿では、英語学習の重要な部分を占める

語彙学習として、授業内で毎回単語テストを実施し、品詞問題を反復して解くことにより、品詞の理解を深め、Part 5 の解答時間を短縮することを目的にワークを行い、その結果を学生のアンケートと受講前、受講後のスコアで検証した。検証期間は 2022 年度前期授業（2022 年 4 月～7 月）である。

２．TOEIC L&R テストとは

ETS によって開発・制作されている TOEIC プログラムのテストの一つで英語におけるリスニングとリーディングの力を測定する（ETS, 2021）。

２．１　形式と問題数、所要時間

TOEIC　L&R には公開テストと IP テストの 2 種類がある。公開テストはリスニング、リーディングともいずれも 5 点刻みで、5～495 点、トータル 10～990 点のスコアで評価される。リスニングは 45 分間で 100 問、リーディングは 75 分間で 100 問が出題される（ETS, 2021）。IP テストはオンライン形式のものがあり、本学は現在オンライン IP を採択している。オンライン IP の場合、リスニングは 25 分間で 45 問、リーディングは 37 分間で 45 問が出題される（※４）。授業の中では、公式認定証が発行される公開テストの対策に重点を置いた。

２．２　Part 5 とは

Part 5 は短文穴埋め問題と称され、1 箇所が空所になった英文を読み、4 つの選択肢の中から最も適切なものを選んで不完全な文を完成させる問題で、公開テストでは 30 問（ETS, 2021）、オンライン IP テストでは 12 問出題される（※４）。公開テストの 30 問の内訳は、文法問題が 18 問、語彙・その他が 12 問である（加藤, 2022）。

２．３　品詞問題とは

公開テストの Part 5 では毎回 7～9 問の品詞問題が出題され、同じ綴りで始まる派生語が選択肢に並んでいる問題のことを言う。品詞問題は基本的に空所の前後を見て解くことができ（ヒルキ・相澤・前田, 2018）、Part 5 で出題される文法問題の半数近くを占めるため、品詞問題をいかに速く正確に解答するかがポイントとなる（加藤, 2022）。授業では、品詞問題は 1 問あたり 5 秒で解くことを目標とした。

２．４　時間管理の重要性

リスニングセクションは放送される問題に沿って解答していくため、基本的には時間管理は不要である。しかし、リーディングは受験者に解答スピードが委ねられるため、時間管理はスコアアップに必須のスキルである。具体的にはPart 5 が 10 分間、Part 6 が 10 分間、Part 7 が 55 分間が効果的とされる（ヒルキ・相澤・前田, 2018）。

３．2022 年度前期「TOEIC650 演習」

３．１　授業

2022 年度前期の「TOEIC650 演習」は同一内容の「TOEIC650 演習 B」「TOEIC650 演習 C」「TOEIC650 演習 D」の 3 クラスを、4 月～ 7 月の間毎週 1 回 90 分授業を 15 回実施した。毎回の授業の進行を表 1 に示す。

表 1　授業内容

所用時間	内容
5 分間	発音練習、出席確認
5 分間	品詞の理解と接尾辞学習
10 分間	「ボキャブラリー 990」 100 例文の音読 ペアワーク
5 分間	単語テスト
10 分間	例題によるテスト攻略法解説、音読による復習
45 分間	「公式問題集 8 」 TEST 1 の実施、解説 音読による復習
5 分間	画像による頻出単語音読学習
5 分間	宿題（公式問題集の音読と筆写・ミニ模試の実施）の確認

３．２　受講生と受講資格

受講資格は開始前のスコア 650 点未満であり、3 クラスの履修登録者数は合計 46 名であった。本稿のスコア検証では、受講資格条件を満たしかつ開始前と終了時のスコアが確認できた受講生 28 名を対象としている。

３．３　期末の評価方法

期末の評価方法は、クラス開始以降、TOEIC L&R 公開または学内で実施のIP テストを受験し、650 点を超えた場合、単位取得とする。

３．４　教材

クラスでは主に 2 冊の教材を使用した。TOEIC 学習に関しては「公式TOEIC Listening & Reading 問題集 8」（ETS, 2021）（本稿では公式問題集と呼ぶ）、単語学習に関しては「新 TOEIC TEST 出る順で学ぶ ボキャブラリー 990」（神崎, 2009）（本稿ではボキャブラリー 990 と呼ぶ）を採択した。公式問題集は、TEST 1 を授業用、TEST 2 を自主学習の模擬テスト用とした。ボキャブラリー 990 は 990 個の頻出単語とその例文が収録され、頻出度毎に章が分かれている。この検証では、公式問題集に関する学習に関しては特に記述せず、ボキャブラリー 990 を使用した単語学習について焦点を当てる。

４．単語学習

４．１　学習範囲

第 2 回～第 14 回まで、ボキャブラリー 990 の最頻出の章から開始し毎回100 個ずつを学習範囲とした。990 まで学習した後は 401～復習を行った。

４．２　音読

音読指導は外国語としての英語学習に不可欠とされており（鈴木、門田2012）、授業内ではネイティブスピーカーのスピードに慣れるために、ボキャブラリー 990 に収録されている音源を使用し 100 単語を 50 単語ごとに区切って、例文のオーバーラッピング・リーディングを行った。

４．３　ペアワーク

外国語学習におけるペアワークの利点には、学習者の発話時間の増加、自発的学習の促進、クラスルームの雰囲気の改善などが挙げられる（Harmer, 2001）。授業では、オーバーラップ・リーディングの後に、ペアで 1 分間ずつ交代で学習範囲の単語を日本語で問い、英語で答えるクイズを出題しあうワークを行った。

４．４　単語テスト

授業運営には Google Clasroom を活用し、単語テストは Google Forms で作成した。単語テストは毎回 20 個の単語をターゲットとし、ボキャブラリー990 の文章を使用して Part 5 形式の短文穴埋め、4 択の解答形式とした。品詞理解を徹底するため、毎回 20 問中 5 問程度の品詞問題を混在させた。単語テ

ストの実施時間は、タイマーで 20 問で 5 分間を設定し、品詞問題は 1 問 5 秒以下、それ以外は 20 秒で解く時間管理を目的とした。

５．調査内容

５．１　TOEIC スコアの比較

分析対象とした 28 名の受講生の、受講開始前のリスニングスコアは 245 点～390 点、リーディングスコアは 155 点～320 点、トータルは 405 点～645 点であった。また、終了時のリスニングスコアは 325 点～445 点、リーディングスコアは 195 点～355 点、トータルは 570 点～745 点であった。受講開始前と終了時の平均スコアと伸びを表２に示す。

表２　TOEIC スコアの比較

	リスニング	リーディング	トータル
開始前の平均スコア	326.3	244.3	570.5
終了時の平均スコア	379.1	283.8	662.9
スコアの伸び	＋52.8	＋39.5	＋92.4

注：数字は四捨五入しているため合算してもトータルと一致しない場合がある。

28 名のうち、23 名がトータルで 5 点～165 点スコアアップし、４名が 5 点～75 点スコアを下げた。1 名はスコアに変化がなかった。

５．２　スコアの伸びと品詞の理解度の相関関係

分析対象の学生の品詞の理解度を測るため、第２回から 14 回まで実施した単語テストの品詞問題の正答率を算出した。正答率が 50%以下の学生はいなかったため、50%～69%の学生をⅠ群、70%～79%をⅡ群、80%以上をⅢ群とし、リーディングスコアの伸びと品詞の理解度の相関関係を検証した。

表３　品詞問題の正答率とスコアの伸び

	リーディングの平均点	スコアの伸び
Ⅰ群 50～69%	237.7	16.6
Ⅱ群 70～79%	283.3	31.7
Ⅲ群 80%～	289.3	43.6

この結果から、単語テストの品詞問題で正答率が低かったⅠ群と、高かったⅢ群のスコアの伸びには27点の差がついており、品詞の理解がスコアアップに重要であることがわかる。

５．４　学生アンケート

第12回目の授業内で実施し、3クラスで32名の学生から回答を得た。表４にアンケート結果を示す。

＜単語学習に関するアンケート＞

（１）単語学習教材は語彙力向上に
　　効果的だと思う　どちらとも言えない　効果的ではない

（２）単語テストはスコア向上に
　　効果的だと思う　どちらとも言えない　効果的ではない

（３）単語テストによって品詞の理解は
　　進んだ　どちらとも言えない　進んでいない

（４）単語テストによってPart 5の解答スピードは
　　上がった　どちらとも言えない　上がっていない

表４　アンケート結果

質問	はい	どちらとも言えない	いいえ
（１）単語学習教材は語彙力向上に効果的か	93%	6%	0%
（２）単語テストはスコア向上に効果的か	90%	9%	0%
（３）単語テストによって品詞の理解は進んだか	56%	28%	16%
（４）単語テストによってPart 5の解答スピードは上がったか	53%	47%	0%

注：数字は四捨五入しているため合算しても100%にならない場合がある。

＜自由回答欄にあった品詞理解に関する学生の意見＞

品詞理解に関して、以下のような意見があった。

「この授業を受講し始めてから、品詞をより意識するようになりました。」
「品詞についてもう少しだけゆっくり説明してほしいです。」
「単語学習のスピードが少し早いので１つの単語につきもう数秒時間をかけてほしい。」
「もう少し品詞理解ができるようにしたい。」

６．まとめと今後の課題

本稿の検証目的である、TOEIC L&R テストのスコアアップにおける品詞理解度の重要性に関しては、授業で実施した単語テストでの品詞問題の正答率と、リーディングスコアの伸びから、品詞の理解はスコアアップに重要であることが確認できた。また、アンケート結果からも、90%以上の学生から、単語学習と単語テストはスコア向上に効果的であるとの回答を得た。しかしながら、単語テストによって Part 5 の解答スピードが上がったと実感している学生は約半数に止まった。また、期末時までにスコアがアップしなかった学生もおり、クラス全員に品詞の理解度を高めてもらえたとは言い難い。事実、アンケートにおいて 16%の学生が、単語テストによって品詞の理解は進まなかったと回答した。これは、受講開始前のスコアでわかるように、リーディングスコア 155 点～320 点というバラツキのある学生たちに、一律の文法解説を行ったため、受講終了時まで理解度に差が出たと考えられる。

今後の課題としては、授業の中での品詞の説明や接尾辞学習の所要時間を増やし、各学生の理解度を把握しながら授業を進め、単語テストの品詞理解度が低い学生には個別に指導を行うなど、受講生全員がより深く品詞を理解し、解答のスピードアップに効果を及ぼすことのできる授業運営を行うこととする。

参考文献

ETS（2021）『公式 TOEIC Listening & Reading 問題集 8』国際ビジネスコミュニケーション協会

Harmer, Jeremy (2001) The Practice of English Language Teaching. England. Pearson Educational Limited.

Trew, Grant (2007). A Teacher's Guide to TOEIC ® Listening and Reading Test Preparing Your Students for Success. Oxford: Oxford University Press.

TEX 加藤（2022）『TOEIC L&R TEST 出る問特急　金の文法』朝日新聞社

ロバートヒルキ・相澤俊幸・ヒロ前田（2018）『TOEIC L&R テスト　直前の技術』株式会社アルク

神崎 正哉（2009）『新 TOEIC TEST 出る順で学ぶ ボキャブラリー 990』講談社

鈴木寿一・門田修平（2012）『英語音読指導ハンドブック』大修館書店

※１　ビジネスで求められる英語力＆TOEIC の活用実態

https://www.iibc-global.org/toeic/toeic_program/value/ae_feature.html

※２　神田外語大学資格一覧と単位認定
https://www.kandagaigo.ac.jp/kuis/cms/wp-content/uploads/2022/07/shikaku2023.pdf

※３　奨学金詳細
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MAKING AND LANGUAGE: MAKER EDUCATION AND SITUATED VOCABULARY ACQUISITION

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ABSTRACT

As makerspaces proliferated in the 2010s, educators quickly noticed the potential educational applications of the spaces. Makerspaces are areas containing a variety of tools and materials for design, building, and innovation. Kalil (2013) remarked that makerspaces "promote values that are ends in themselves, such as creativity, problem-solving, collaboration, and self-expression" (p. 14). As a result, an educational approach called Maker Education was developed to leverage the observed benefits. This approach situates learning of content and skills within a process of completing iterative hands-on projects. Maker Education has also tentatively been shown to be effective for language learning (see Alley, 2018; Dubreil & Lord, 2021). However, at the time of writing, there is still insufficient data to drive widespread adoption in language learning contexts. Therefore, this paper will present a research study designed to explore the effects of a carefully designed Maker Education activity on English language learners' linguistic output, specifically their vocabulary use and sentence structure. Participants completed a learning module designed to explore sustainable production and consumption practices (SDG12), which culminated in an electronics disassembly and repair Maker Education activity. Directly following the activity, participants completed open-ended reflections about their experiences. The reflections were analyzed using vocabulary profiling and natural language processing software to look for patterns and situational vocabulary use. The data show that Maker Education can be an effective tool for promoting situated language acquisition.

INTRODUCTION

The demands of a global workforce and the role of English as a lingua franca have made English language education a fixture of worldwide compulsory education. In countries like Japan, English education has gradually moved earlier and earlier into children's educational careers. No longer an exception, fluency in English is becoming an expectation as English proficiency alone is not sufficient for students to excel or stand out in the competitive global labor pool. In Japan, this is of particular concern, as many institutes of higher education focus primarily on language instruction. To remain

viable in modern times, many stakeholders believe that these institutions must now offer language instruction “plus alpha” (Ku et al., 2021). This alpha, or something extra, sometimes takes the form of additional languages, soft skills, or additional subject knowledge. In part, this has led to the popularity of content integrated language instruction approaches like Content and Language Integrated Learning (CLIL), which seek to teach both language and content simultaneously. Government mandates focusing on the importance of developing STEM (Science, Technology, Engineering, Mathematics) competence (Ritz & Fan, 2015) have also complicated the issue for language focused institutions. As a result, tertiary English educators are buffeted by an increasing number of demands and may find themselves in teaching contexts radically different from traditional settings.

Recently, the Maker Education approach has been garnering attention as an innovative way to meet many of the demands placed on modern education. Maker Education is grounded in the principles of constructivism and constructionism and focuses on engaging learners in creating artifacts through an iterative design process (Martinez & Stager, 2019). While hands-on active learning is not a new concept, Maker Education differs from Project Based Learning (PBL) and other seemingly similar pedagogies by focusing on student agency, iteration, growth, and learning from failure rather than on assessing a final product (Hsu et al., 2017). This special focus means that for Maker Education to be successful, changes must be made to established instructional and assessment models. Initially, this made it difficult for educators to assess the effectiveness of Maker Education, but recently researchers have explored using evidence-based embedded assessment to combat this issue. These researchers have demonstrated that Maker Education can be effective as a means of developing problem-solving skills, critical thinking, communication and collaboration skills, and content-area specific knowledge (Murai et al., 2019).

Specifically, the potential application of Maker Education for language teaching and learning has also been noticed by educators. Initially, in makerspaces, areas containing a variety of tools and materials for design, building, and innovation, it was observed that the necessity of communication and feedback created a context where language use was both motivating and effective for English language learners (Murphy, 2018). Furthermore, Dubreil and Lord (2021) remark that “the potential is real in the area of second language and culture (LC2) education, and especially within Computer-Assisted Language Learning (CALL) approaches” (p. ii). In his account of developing a language learning Maker Education course, Alley (2018) notes that the authentic context created by the approach was a powerful motivating factor for students to learn the target language. It is this contextualized language learning that is perhaps one of the greatest potential assets of a Maker Education approach for language education. Specifically, this aligns with research about situated language theory, which recognizes the importance of “providing high real-world relevance and an opportunity for learners to

see the consequences of their every action in the context" (Uz Bilgin & Tokel, 2019, p. 949). Maker Education's focus on constructing knowledge through the acts of design and making seems to be an ideal way to operationalize this kind of meaningful learning.

Maker Education may be a good fit for language learning contexts that must focus on not only language acquisition, but content knowledge and skills development. However, at the time of writing, there is little evidence to confirm its effectiveness in language learning contexts. To investigate this approach in tertiary language education, the researcher designed a study focusing on participants' language production during a Maker Education learning module. The study focused on answering this key question: Can Maker Education be used as a part of language learning curriculum to support language acquisition? This question was investigated by focusing on vocabulary acquisition through the following research questions:

RQ1. Do participants use content specific vocabulary in their language production?
RQ2. Are the vocabulary words produced specific to the task completed? Do they match the target language identified by the instructional designer?

METHODOLOGY

Participants (N=63) were all 1st and 2nd year university students majoring in English at a private 4-year institution in Japan. Participants completed informed consent as per university guidelines based on international standards. Participant English proficiency levels ranged from CEFR B1 to B2.

The study was implemented as a part of the curriculum of a course focused on developing academic reading skills. This course was deemed appropriate for a Maker Education intervention, as the unit would fit well within the established course objectives and subject matter. The unit focused on Sustainable Development Goal 12: Responsible Consumption and Production through the lens of the right to repair movement. Authentic reading texts were sourced that covered SDG 12, the right to repair movement, and the best practices for disassembling and repairing electronics. Lesson plans were created that led to the Maker Education component, a disassembly and repair activity. This activity was selected as it not only connected perfectly to the target content but is considered a quintessential Maker Education activity (MakerEd, 2015; Valente, 2019).

Additionally, to confirm that the activity and unit design could be confidently classified as Maker Education, the researcher strictly ensured that the lesson met core principles identified in Maker Education literature. These included principles such as ensuring that the participants had agency in how they completed the project, providing opportunities for collaboration, and making reflection a part of the design process (MakerEd, 2015).

A selection of donated electronic devices was made available, and participants were tasked with disassembling and reassembling the device(s) of their choice. A wide variety of tools were provided to assist them in completing their task. Participants were randomly assigned into pairs to facilitate collaboration and communication. While one member of the pair worked on the device, the other organized parts, gave advice, or utilized resources to troubleshoot problems. Facilitators ensured that students exchanged roles frequently.

Directly following the activity, participants completed an open-ended reflection about their experiences. The reflection was completed immediately after the activity to ensure that the reflections were fresh in the participants' memory. The reflection prompt asked participants to describe their experience and reflect upon it but did not contain any target vocabulary or direct references to the activity itself. The form used for data collection was designed to only accept responses longer than 150 words to ensure adequate reflection depth and length in accordance with literature (see Kyle & Crossley, 2015).

ANALYSIS

Identifying data were first removed from the reflections and alphanumeric codes were assigned to each. Following these preparations, the text files were run through textual analysis software. First, the reflections were parsed using SiNLP (Crossley et al., 2014) to examine general characteristics of the reflections including overall length, type token ratio (TTR), sentence length, and word length (Table 1).

Table 1. Descriptive Statistics (Averages) of Reflections

Tokens	Types	TTR	Letters per word	Paragraphs	Sentences	Words per sentence
179.14	107.41	0.60	4.25	1.52	13.02	14.21

SiNLP was also used to examine the extent to which target language was used in the reflections. A list of target vocabulary was created by compiling a corpus of the unit materials used leading up the activity. The list of target vocabulary contained 31 types. Analysis indicated that words from this list constituted an average of 5.2% of the total vocabulary in each reflection. The average amount of target words used per reflection was 9.42 (min 0, max 24), with at least one target word used in 98% of the reflections (62). Next, the reflections were checked for grammaticality and correct mechanics using the NLP tool GAMET (Crossley et al., in press), finding an average of 0.61 errors per 100 words.

Finally, AntWordProfiler (Anthony, 2022), a vocabulary concordancing program, was used to analyze the vocabulary level and complexity of the reflections. Nation's BNC COCA lists (Nation, 2016) were used to ascertain the range and degree of specialization of the vocabulary because of their specificity for language learning and superior lexical coverage (Dang et al., 2022). Note that vocabulary items become less frequent and more specialized as the list numbers increase (Table 2). If a list number is omitted, words from that list were not found in participant reflections.

Table 2. Vocabulary Profile Results of Reflections

List	Token (%)	Cumul. Token %	Type (%)	Cumul. Type %	Group (%)	Cumul. Group %
1	9846 (86.3%)	86.3	791 (61.8%)	61.8	493 (55.96%)	55.96
2	849 (7.44%)	93.74	221 (17.27%)	79.07	162 (18.39%)	74.35
3	351 (3.08%)	96.82	120 (9.38%)	88.45	91 (10.33%)	84.68
4	36 (0.32%)	97.14	25 (1.95%)	90.4	24 (2.72%)	87.4
5	20 (0.18%)	97.32	13 (1.02%)	91.42	12 (1.36%)	88.76
6	12 (0.11%)	97.43	9 (0.7%)	92.12	9 (1.02%)	89.78
7	12 (0.11%)	97.54	6 (0.47%)	92.59	4 (0.45%)	90.23
9	2 (0.02%)	97.56	2 (0.16%)	92.75	2 (0.23%)	90.46
10	24 (0.21%)	97.77	4 (0.31%)	93.06	2 (0.23%)	90.69
11	65 (0.57%)	98.34	5 (0.39%)	93.45	1 (0.11%)	90.8
12~17	7 (0.07%)	98.41	8 (0.40%)	93.85	5 (0.57%)	91.36
31*	58 (0.51%)	98.92	12 (0.94%)	94.79	12 (1.36%)	92.72
32	5 (0.04%)	98.96	2 (0.16%)	94.95	2 (0.23%)	92.95
33	32 (0.28%)	99.24	13 (1.02%)	95.97	10 (1.14%)	94.09
34	22 (0.19%)	99.43	3 (0.23%)	96.2	3 (0.34%)	94.43
Offlist	68 (0.6%)	100.03	49 (3.83%)	100.03	49 (5.56%)	99.99

*List 31 contains proper nouns, 32 contains marginal words, 33 contains transparent compounds, and 34 contains abbreviations/acronyms

Vocabulary specific to the context of the right to repair activity can be observed starting in list 2, (screw, repair, battery, cable, electric). From list 3 onwards the vocabulary become more specific, including academic words and many lexical items specifically related to STEM subjects. The most frequently used vocabulary from lists 3-34 are presented in Table 3 in descending order by range with their corresponding frequencies.

Table 3. Most Frequent Vocabulary by Range and Frequency

List	Word	Range	Freq.	List	Word	Range	Freq.
3	device*	43	100	3	component*	6	13
11	disassemble*	30	65	3	moreover	6	6
3	electronic*	13	22	3	communicate	5	11
3	complex	12	15	3	distinguish	5	7
3	assemble*	11	17	3	construct	5	7
10	reassemble*	10	16	33	screwdriver	5	5
3	importance	9	10	5	dismantle	4	4
34	PC	7	16	7	decompose	4	4
33	laptop	7	15	7	substrate	4	4
3	cooperate	7	8				

*Denotes words that were unit target vocabulary

DISCUSSION

The current study was designed to examine if integrating Maker Education activities into language learning curricula was an effective way to support language acquisition. The results provide some interesting insight, though there are some caveats that limit their broad applicability. Overall, participant reflections featured average lexical complexity, with 79% of types used from the first two BNC-COCA word lists, and the remainder from lists containing less frequently used word types. However, the data is interesting with regards to the target and situational vocabulary. Recall that participants were never instructed or prompted to use the target vocabulary, yet high incidence was found in the reflections. Moreover, these words were used with a high degree of accuracy. That said, the reflections did not employ all the target vocabulary; some target words such as *consumer* and *production* did not appear in any reflection, perhaps because they were too abstracted from the task at hand. Words such as *disassemble* and *device* were used frequently as they were directly connected to the activity completed. The vocabulary were both highly contextualized and also specific to content area subjects like science and engineering, which are traditionally outside of the scope of social sciences education.

However, there are some clear limitations to the study. First, the participant population was small (N=63), limiting the scope of the results' applicability. The participants' language level, background, and current program of study may also have influenced the results. At the institution where the study took place, there is a heavy focus on reflection as part of the university wide curriculum, which may have had an influence on the quality of reflections. Additionally, it must be noted that participation in the maker

activity did not ensure that all participants used a large quantity of target language in their reflections; the degree of the target language used varied from reflection to reflection. Educators seeking to ensure that all students receive similar benefits from an activity could reinforce target language through pre or post activity instruction. Furthermore, this study only measured language output directly following a Maker Education activity. Perhaps a more meaningful study of situated vocabulary could be conducted by recording participant interactions while they are engaged in an activity, as the language used would be more immediately connected with their ongoing process.

CONCLUSION

This study tentatively demonstrates the feasibility of implementing Maker Education into language learning curricula and illustrates some of its potential for promoting meaningful situated language use. Maker Education seems to provide a meaningful context in which language is needed as a core part of the making process. Additionally, the language is meaningfully connected with the subject area knowledge required to complete the activity. In this way, Maker Education seems to integrate well into approaches that combine content and language learning like CLIL. In Maker Education, language is central to more than just describing or reflecting on the creative process, it is the means of problem solving through collaboration, and the vehicle for exploring creative solutions to problems. As such, it is a holistic approach to teaching that should continue to be explored in language teaching and learning contexts.

REFERENCES

Alley, W. (2018). Making English speakers: Makerspaces as constructivist language environments. *Mextesol Journal*, *42*(4), 1–8. https://hdl.handle.net/20.500.12552/4904

Anthony, L. (2022). AntWordProfiler (Version 2.0.1) [Computer Software]. Tokyo, Japan: Waseda University. Available from https://www.laurenceanthony.net/software

Crossley, S. A., Bradfleld, F., & Bustamante, A. (in press). Using human judgments to examine the validity of automated grammar, syntax, and mechanical errors in writing. *Journal of Writing Research.*

Crossley, S. A., Allen, L. K., Kyle, K., & McNamara, D.S. (2014). Analyzing discourse processing using a simple natural language processing tool (SiNLP). *Discourse Processes, 51*(5-6), 511–534, https://doi.org/10.1080/0163853X.2014.910723

Dang, T. N. Y., Webb, S., & Coxhead, A. (2022). Evaluating lists of high-frequency words: Teachers' and learners' perspectives. *Language Teaching Research*, *26*(4), 617–641. https://doi.org/10.1177/1362168820911189

Dubreil, S., & Lord, G. (2021). Make it so: Leveraging maker culture in call. *CALICO Journal*, *38*(1), i–xii. https://doi.org/10.1558/cj.42531

Hsu, Y. C., Baldwin, S., & Ching, Y. H. (2017). Learning through making and maker education. *TechTrends*, *61*(6), 589–594. https://doi.org/10.1007/s11528-017-0172-6

Kalil, T. (2013). Have fun–learn something, do something, make something. In M. Honey & D. E. Kanter (Eds.), *Design, make, play: Growing the Next Generation of Stem Innovators* (pp. 12-16). Routledge. https://doi.org/10.4324/9780203108352

Ku, E. K., & Furukawa, G. (2021). "EFL + α": Attitudes towards English use in Japan around necessity, value, and ability. *International Journal of TESOL Studies*, *3*, 153–168. https://doi.org/10.46451/ijts.2021.10.06

Kyle, K., & Crossley, S. A. (2015). Automatically assessing lexical sophistication: Indices, tools, findings, and application. *TESOL Quarterly*, *49*(4), 757–786. https://doi.org/10.1002/tesq.194

MakerEd. (2015). *Makerspace playbook: Youth edition*. https://makered.org/wp-content/uploads/2015/09/Youth-Makerspace-Playbook_FINAL.pdf

Martinez, S. L., & Stager, G. (2019). *Invent to learn* (2nd ed.). Constructing Modern Knowledge Press.

Murai, Y., Kim, Y. J., Martin, E., Kirschmann, P., Rosenheck, L., & Reich, J. (2019). Embedding assessment in school-based making. *ACM International Conference Proceeding Series, 2019*, 180–183. https://doi.org/10.1145/3311890.3311922

Murphy, P. H. (2018). School libraries addressing the needs of ELL students. *Knowledge Quest*, *46*(4), 60–65. https://files.eric.ed.gov/fulltext/EJ1171688.pdf

Nation, I. S. P. (2016). *Making and using word lists for language learning and testing*. Amsterdam: John Benjamins.

Ritz, J. M., & Fan, S. C. (2015). STEM and technology education: international state-of-the-art. *International Journal of Technology and Design Education*, *25*(4), 429–451. https://doi.org/10.1007/s10798-014-9290-z

Uz Bilgin, C., & Tokel, S. T. (2019). Facilitating contextual vocabulary learning in a mobile-supported situated learning environment. *Journal of Educational Computing Research*, *57*(4), 930–953. https://doi.org/10.1177/0735633118779397

Valente, J. A., & Blikstein, P. (2019). Maker education: Where Is the knowledge construction? *Constructivist Foundations*, *14*(3), 252–262. https://constructivist.info/14/3/252

XREADING: EFL BEGINNER PERCEPTIONS ON THE VIRTUAL LIBRARY IN IMPROVING THEIR READING COMPREHENSION AND FLUENCY

MARY JANE MALLARI

ABSTRACT

This paper examines the potential of Xreading, a virtual library (VL), as a supplementary learning tool for improving the reading skills of EFL beginner students at a specialized technical college in Tokyo, Japan. In the course syllabus of the EF (English Foundations) lower-level class, students were expected to read a maximum of 30,000 words and a minimum of 6,000 words in the first semester, which runs for three months. This study investigated EFL beginner students' perceptions of using Xreading as a learning tool to improve their reading comprehension and fluency. There was a total of two classes (36 students) taking the EF courses under the researcher's wing. The researcher collected the data using a qualitative approach; participant observation was conducted during the planning phase and the study duration. The second method used was a semi-structured interview at the end of the semester. The researcher analyzed the main themes of the participant's behaviors and responses. The data analysis revealed that Xreading is a very convenient digital platform for students to access books based on their level. It also helped them improve their vocabulary, reading fluency, and comprehension skills. Furthermore, most students prefer reading aloud and group reading in class, and some consider using Xreading VL at home daunting and uninteresting. The result of the study indicated that there is an opportunity for teachers to utilize Xreading more efficiently by reinforcing group activities such as sequencing, as well as reading-aloud exercises that can create a more active learning experience while using Xreading.

Keywords: *Extensive Reading, Task-Based Approach, Xreading, Reading Aloud*

INTRODUCTION

In the epoch of the emergence of a digital classroom, the use of online educational apps, digital platforms, and websites in an EFL classroom has dramatically encouraged and shifted the educational practices of teachers and students, influencing the learning process from teacher-centered to student-centered. Craig and Paten (2007) state that digital resources assist language learners in improving their speaking skills, vocabulary, and reading comprehension. Furthermore, Warschauer and Healey (1998) emphasized that integrating digital technologies in the English language classroom allows for individualization in large classes, facilitates multimodal practice, encourages collaboration, and increases the "fun" factor for learning. Sudirman (2019) also states that learning resources are cast-off not only as traditional as textbooks that accrue in the library but have developed into multimedia-based learning resources and are widely used and developed in education. There are different perceptions of online applications and web-based instructional materials and whether it promotes learner autonomy or student-centeredness. The researcher

needed to investigate the practices in her classroom to determine whether one of the digital platforms she utilizes is helping the teacher's students improve their language learning regarding reading fluency and comprehension. This study focuses on the digital platform Xreading, a virtual library (VL), utilizing this platform as part of the English Foundation (EF) level four class course requirements.

The purpose of this study is three-fold: 1.) To determine, based on the student's perceptions, whether this digital platform genuinely helps develop and improve students' reading skills and fluency. 2.) Are the required number of words set by the department adequate for students' reading skills level 3) What recommendations can be drawn by the researcher based on the student's perceptions at the end of the semester?

BACKGROUND OF THE STUDY

One of the goals of the English department is to promote a digital classroom and use innovative technologies that can enhance students' learning experience in the school. All students have their iPad, and teachers have full access to the campus wi-fi and access to data, if necessary, in the English Foundation (EF) classes for first-year students. The syllabus includes an Xreading component which comprises 20% of the student's final grade for each semester. When she conducted this research, the researcher had EF level four classes, meaning these students are falling around A1- A2 in Cambridge English. The required number of words to read for these students is between 6,000 ~ and 30,000 words in one semester (three months). The student should have an average quiz score of 90% in all reading assessments. The researcher believes it is necessary to measure the contribution of this component in the curriculum. Evaluating students' perceptions of Xreading is needed to assess whether this digital platform is beneficial in an EFL beginner learning experience.

LITERATURE REVIEW

Extensive reading in an EFL classroom

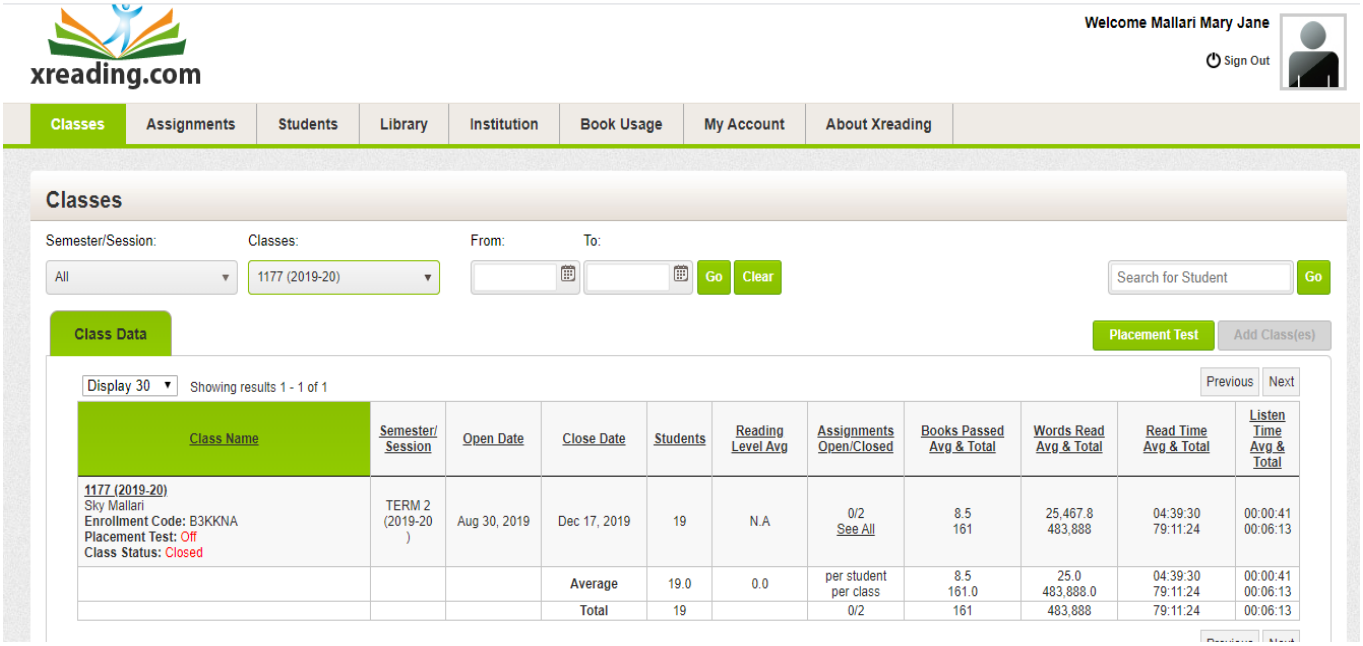
Day (2011) states that extensive reading is a form of foreign language instruction in which students read large extents of beginner's texts. Helgesen (2005) explains that extensive reading is a strategy where the goal is for students to read a lot of easy and entertaining readers. Bomford and Day (2004) proposed that easy books develop speed and reading articulation. Extensive reading (ER) can improve all four skills, even speaking and listening, because of the amplified exposure to English vocabulary and discourse. ER has come to be regarded as an effective way to encourage second language acquisition through autonomous learning and exposing students to a wide range of topics and incomprehensible texts. Day (2011) emphasized that ER focuses more on the general meaning of information and experience. Thus, reading texts are selected to students' level of language ability, and students should be given the freedom to choose based on their topical interest. Graded readers, texts whose vocabularies, language patterns, and sentences have been simplified within a level-based system, are generally used types of reading selections in ER. Day and Bamford (1998) state that the main principle behind using ER in a language learning context is that learners will progressively improve their proficiency in the target language through reading an immense quantity of texts. In a review of the research on ER, Day (2011) presents the advantages of ER to the following: general reading ability, reading fluency and proficiency,

vocabulary familiarity and scope, writing ability, affect (motivation and attitude), speaking ability, listening ability, and knowledge of gram ar. Deusen (2011) emphasized that there is no singular way to conduct an ER activity in an EFL class. In some instances, learners are free to choose their books. In other cases, group readings of the same book may also be an option. Alternatively, the teacher may select one book for the whole class to read.

What is Xreading (VL) platform?

XReading is a digital platform where students can access hundreds of books. It is commonly known as a virtual library (VL). The system has been established to make it more available for students and extensive programs easier for teachers to manage and evaluate learning progress. Its learning management system (LMS) is devoted exclusively to ER. A one-year license enables access to all books in the library and the post-reading quizzes. The LMS allows teachers to efficiently monitor and evaluate students' reading through the classes page.

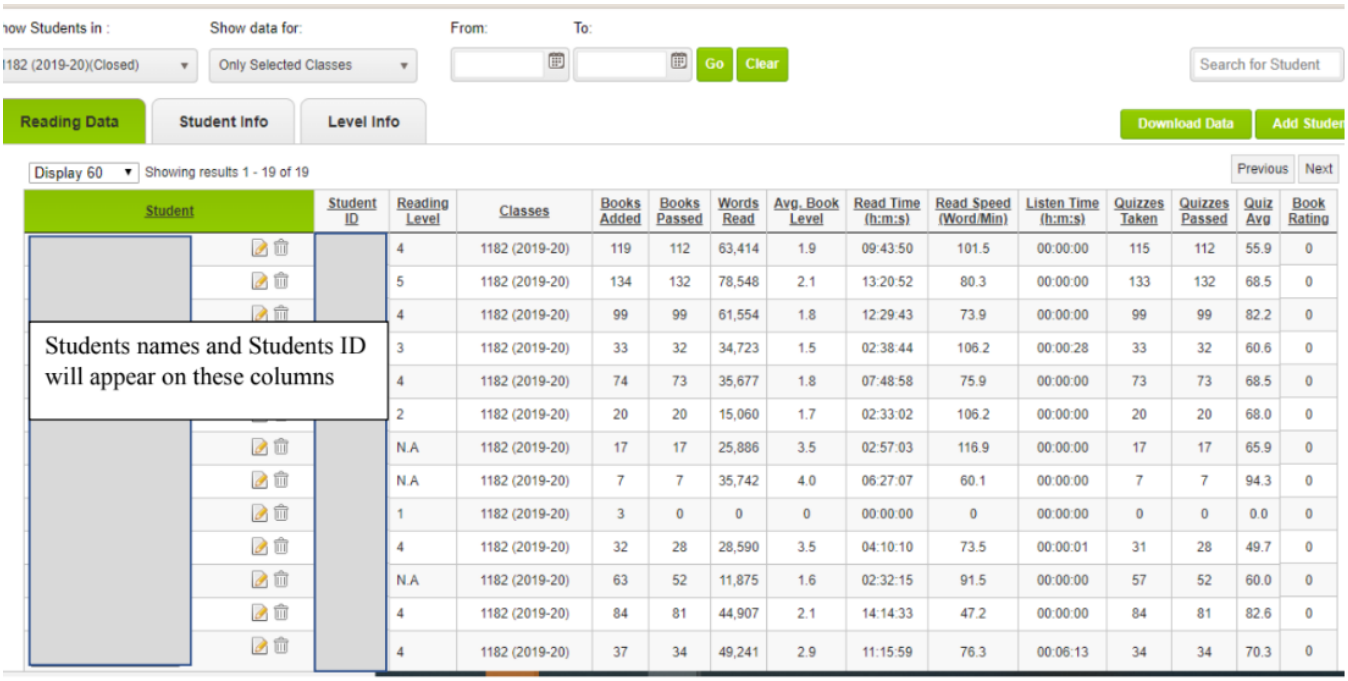
Table 1



Advantages of Xreading for Teachers

A teacher can check how many books students have read, the book and reading level of each student, how many words a student has read, what percentage of each book has been read, how much time, and hours they spent reading, the student's words per minute (WPM) reading speed, and quiz results. (see Figure 2). Although beneficial, the outline shows only average scores. As a result, if a student couldn't finish a book or experienced technical difficulties, for instance, a website bug, their average results for WPM or percentage completed would be affected. For example, the student's actual reading ability and whether they are genuinely reading (e.g., high WPM may suggest that a student is just browsing pages instead of reading them. Suppose the students read at the suitable book level apparent through quiz averages, WPM average, and reading history).

Table 2
Xreading Learning Management System (LMS)



Student	Student ID	Reading Level	Classes	Books Added	Books Passed	Words Read	Avg. Book Level	Read Time (h:m:s)	Read Speed (Word/Min)	Listen Time (h:m:s)	Quizzes Taken	Quizzes Passed	Quiz Avg	Book Rating
		4	1182 (2019-20)	119	112	63,414	1.9	09:43:50	101.5	00:00:00	115	112	55.9	0
		5	1182 (2019-20)	134	132	78,548	2.1	13:20:52	80.3	00:00:00	133	132	68.5	0
		4	1182 (2019-20)	99	99	61,554	1.8	12:29:43	73.9	00:00:00	99	99	82.2	0
		3	1182 (2019-20)	33	32	34,723	1.5	02:38:44	106.2	00:00:28	33	32	60.6	0
		4	1182 (2019-20)	74	73	35,677	1.8	07:48:58	75.9	00:00:00	73	73	68.5	0
		2	1182 (2019-20)	20	20	15,060	1.7	02:33:02	106.2	00:00:00	20	20	68.0	0
		N.A	1182 (2019-20)	17	17	25,886	3.5	02:57:03	116.9	00:00:00	17	17	65.9	0
		N.A	1182 (2019-20)	7	7	35,742	4.0	06:27:07	60.1	00:00:00	7	7	94.3	0
		1	1182 (2019-20)	3	0	0	0	00:00:00	0	00:00:00	0	0	0.0	0
		4	1182 (2019-20)	32	28	28,590	3.5	04:10:10	73.5	00:00:01	31	28	49.7	0
		N.A	1182 (2019-20)	63	52	11,875	1.6	02:32:15	91.5	00:00:00	57	52	60.0	0
		4	1182 (2019-20)	84	81	44,907	2.1	14:14:33	47.2	00:00:00	84	81	82.6	0
		4	1182 (2019-20)	37	34	49,241	2.9	11:15:59	76.3	00:06:13	34	34	70.3	0

Advantages of Xreading VL to the students

Milliner and Cote (2014) state that students can use the Xreading library at any given time due to the broad range of access to digital devices. The system also provides more flexibility for borrowing books. Students can also access feedback on their reading progress through the system.

The most beneficial use of Xreading for students are:

- The availability of books that can be classified based on their skill level and accessed anywhere at any given time if there is an internet connection.
- The student can monitor their progress by checking their profile of what books they have read, how many WPM, and what level they are currently reading based on their reading phase.
- The students can also assess their comprehension skills based on their quizzes.

Project-Based Learning

Dooly and Sadler (2016) define project-based learning (PBL) as a systematic teaching practice that engages learners in knowledge and skills through a stretched inquiry process structured around multifaceted, authentic questions and design. Hixson, Ravitz, and Whisman (2012) pointed out that when teachers implement PBL methods, they dedicate more class time to imparting 21st-century skills. Tsiplakides & Fragoulis (2009) also state that integrating project-based learning into language learning provides opportunities for learners to communicate with real people. Hence, PBL offers an active component in some passive areas of learning, such as reading. Haines (1989), Tsiplakides and Fragoulis (2009) also emphasized that students participate in purposeful communication to complete activities where they can use language in a relatively natural context.

METHODOLOGY

This study aimed to determine the effectiveness of Xreading (VL) as a supplementary learning tool in improving reading comprehension, reading speed, and fluency among EFL beginners. The study used a qualitative methodology to explore EFL beginners' perceptions of using Xreading. The researcher conducted participant observation to observe students' attitudes. At the same time, they carry out the project-based learning (PBL) implemented by the researcher at the beginning of the semester. Becker and Geer (2007) state that participant observation can be utilized in such a way that it serves as a yardstick against measuring the comprehensiveness of data collected in other ways. This model lets us know what data or information we might have missed when we use another meth ds. Another methodology integrated with this study was a semi-structured interview to gather feedback from the students after they conducted the activity. Raman and Yamane (2014) point out that a semi-structured interview is the most suitable strategy to elicit perception toward understanding a phenome n. The researcher transcribed and analyzed the interviews and concluded based on the recurring themes of the student's responses.

Participants

The participants of this study were the classes under the researcher's coverage. She has two English Foundation (EF) classes. Class A comprised nineteen students, sixteen female and three male students, while Class B formed sixteen students, fourteen female and two male students. The total participants of this study were thirty-five students. Their mother tongue is Japanese, and their English level proficiency is along A1-A2 of the Cambridge English scale.

RESEARCH DESIGN

The study was implemented in two phases; the first phase was planning, and the second stage was implementation. The study was designed following the PBL method. The duration of the study was for three months.

Planning Phase

For each class, the researcher asked the students to group themselves evenly; each group had three to four members. Class A came up with five groups, while Class B had four. The teacher then demonstrated and assisted the students in logging in to their Xreading accounts individually. After briefly explaining how to access, navigate and utilize the platform. The teacher gave the students time to familiarize themselves with using the Xreading platform.

Project Phase Implementation

When the students were already familiar with navigating the Xreading (VL) platform individually, the teacher instructed the groups to decide on a book they wanted to read for the class session. The VL they are utilizing are already customized to their level. Since this is an EF level four class, the books to choose from are from a minimum of two minutes to five minutes to read.

Reading Aloud Exercise, Activity 1

The group must decide which book they will read aloud in the session. The teacher instructed them to record and upload their voice or video recordings (whichever they prefer) in the Google Classroom files.

Story Sequencing, Activity 2

The teacher instructed the students to relay the story through pictures and narrate what happened in the story in sequence. They chose to screenshot a photo from the book or use the sketchpad app, whichever they preferred. In this activity, the students must record a video for visual storytelling. They must upload the video to the class see saw app, the classroom app for video projects and presentations. These two activities were conducted in one class session every two weeks for three months.

FINDINGS AND DISCUSSIONS

The first tool utilized in the planning phase was the participants' observation. To enable her to obtain information on the learners' behavior, The teacher instructed the students to access the Xreading webpage only in English to observe participants' attitudes toward exposure to an all-English platform. The teacher engaged in direct conversations with the students and answered questions about navigating the Xreading and the project they were tasked to do. While the groups planned the project, the researcher was taking notes about the common behaviors of learners in this phase. At the end of the participant's observation, the researcher arrived at these common behaviors:

1. Students' attitudes towards using Xreading (VL) were a mix of enthusiasm and anxiety. Most of the class was well-versed in navigating digital platforms and found it easy to learn how to sign up and navigate through Xreading. On the other hand, some students found it daunting to sign up and navigate the web page and ostensibly were intimidated by the platform. They seek help from the teacher for most parts.
2. The exposure to an entirely English platform was visibly intimidating for Japanese students. While most students have experience in signing up with different websites and apps, their previous encounters with digital media were all generally assisted by the availability of converting the web or app languages in their mother tongue, Japanese.
3. The group collaboration enabled students to assist one another in navigating the system. When they find their peers having a difficult time, it allows them to communicate more with their members.

During the project implementation phase, the students were engaged in getting the project done by assigning a task for each member, collaborating, and deciding how to proceed with the project.
The students are more conscious and proactive in correct pronunciation during the reading-aloud phase. Another finding of the researcher in this observation was that the higher-level students could identify their group member's mistakes leading them to peer correct. Russell and Spada (2006) emphasized that EFL learners can assist each other, particularly with accuracy and f rm. From observation, each member would practice first on their own. They will read as a group and practice, each will listen attentively to the other to catch any mistakes, and the student reading the part of the text will seek help from her group members when she stumbles upon a problematic word or phrase as she is reading. Tomkova (2013), in her research on error correction in speaking practice, pointed out that peer correction allows cooperation and mutual help and makes students more independent from teachers. In the first few weeks of this activity, students actively seek help from the teacher and ask about the meaning of vocabulary they don't understand. Eventually, as this activity repeated several times in three months, the students learned to utilize digital apps such as

Google Translate to help with complex vocabulary and play aloud the word pronunciation using digital apps like Meriam or Oxford dictionary.

Semi-Structured Interviews

The researcher highlighted some of the recurring themes from students from classes A and B. She transcribed the recorded interviews she gathered during the post-project phase and sorted out several articles:

Themes	**Excerpts from Transcripts**
Learning and acquiring new vocabulary through group reading and meetings, the required Thirty thousand words at the end of the semester	"*It was tough, I think 30,000 words were too much, but I learned Many new words from Xreading*". (Student C – Class A) *"The stories are fun and easy to understand, the vocabularies were simple, but when I choose a long book, I find it difficult to understand, so I try to use google translate or a dictionary for some words."* (Student F – Class A) "*My friends help me when I don't understand the words and tell me what the story is when we have group readings, and I understand it"* (Student D – Class B)
Reading Fluency at the end of the semester.	"*I can read faster now, and I'm comfortable in reading simple books in English",* (Student G- Class A) *" I want to work in a Hawaii hotel in the future; I think reading fast is important, so I think Xreading is a good practice for me. We don't have this exercise in high school, but sometimes reading long books is boring, so I choose short un books".."* (Student E – Class B)

	"I read slowly in the beginning because I don't understand many words, but I think I read faster now, and I know how to scan now to get a little idea of the text." (Student F - Class A)
Reading Comprehension after Xreading	*"The books I've read were easy and simple, straightforward, straightforward, so I think some of them are boring; Io read alone; I like when we read and record in groups.* (Student M- Class B)
	"*I like learning English, so I tried to read Moby Dick for children; it was a little difficult for me, but I understood the story, but it was difficult for me to tell the story to you when you asked me what the story is about, I think I need to improve more my communication skills"..."* (Student K – Class A)
	" I think Xreading it s a very nice website, and I read many books this semester and can understand more books now." (Student G- Class B)
I think using Xreading in the EF class	*"Xreading is a good website for the class. It was difficult for me to access it in English. I change it to Japanese when I'm reading at home alone."* (Student M- Class A)
	"It's very nice and cool! I read many books from it." (Student L – Class B)
	"I think it is tough and boring when we read at home, and I have a part-time j, ob, so I don't read a lot; I can't finish finishes 30,000 words.".

(Student N – Class A)

Learning and Acquiring new Vocabularies through Extensive Reading

Helgesen (2005) pointed out that extensive reading is a significant facet of any English as a Foreign/Second Language learning program. Krashen (1989), cited in Liu and Zhang (2018), emphasized that students can build vocabulary knowledge through extensive reading. It is believed that students may encounter unfamiliar words when reading independently, which brings prospects to deduce words in specific contexts and thus learn their meanings. Sato (2012) supported this in her study about vocabulary acquisition through extensive reading and pointed out that ER is noteworthy and should be taken with significant concern. Learning the usage and meaning of words by coming across them incidentally develops inferencing skills which is a prevailing contributor to vocabulary growth. The general theme of the student's responses in the interview conducted by the researcher was that they learned much new vocabulary through reading a lot of both simple and challenging books; they also tried to understand the new languages they came across with other digital platforms such as google translate and online dictionaries and application. Knight (1994) stated in his study about vocabulary acquisition through extensive reading that students who used a dictionary while engaged in extensive reading activities learned more words and could comprehend better than those who infer from context. In the researcher's observation, the students who mentioned using a dictionary while reading often had better quiz scores on their evaluation boards.

Reading Speed and Fluency after Extensive Reading

Hazenberg & Hulstijn (1996) pointed out that the progress of fluent reading skills is a gradual process that can only be attained through extensive experience. Hulstijn (2001) also emphasized that reading fluency is mainly influenced by frequency, recency, and regularity practice. According to Day and Bamford (2002), ER develops reading fluency and improves reading speed. As students are tasked to read many reading materials, the rate becomes significant as it enables the enjoyment and comprehension of materials. Schmidt (2002) stated that many EFL lecturers in Japan had used ER in their classes, signifying that they instinctively know that their students need a large quantity of English. Iwahara (2008), in her study of developing reading fluency amongst Japanese high school students, concluded that ER as fluency instruction should be integrated into English class curricula ms. ER offers an avenue for students to become fluent readers by being exposed to English through text, thus increasing their vocabulary size, syntactic knowledge, and reading rate. The researcher analyzed the class summary results at the end of the semester and evaluated the reading WPM as stated in the student's record ds. The average reading WPM of EF level four classes ranges from one hundred to one hundred fifty-two ds. Their assessment scores based on this WPM usually range from percent to one hundred percent. It can be inferred that the students reading speed and fluency based on these factors improved. However, it can't be generalized since the LMS doesn't indicate whether the students had only taken the quiz once or if they had retaken the examination to get a passing score.

Nevertheless, the actual WPM can't be tricked since; if it goes way higher than their reading level, it could be very apparent that the student may have been skipping pages or just browsing the b ok. The teacher regularly checked the Xreading results weekly through the LMS and called out students who tried to utilize this technique to immediately point out to them that doing so would

void the purpose of this tool. Based on her class observation, the researcher concluded that extensive reading has challenges regarding student management. When there are independent reading assignments, students may come up with different attitudes toward approaching the task. Some factors come into play that can interfere with genuine learning among the students. For instance, their desire to satisfy the course requirements is much more than their desire to comprehend what they are read ng. Thus, if a course requirement is too difficult for their level, it may also affect their learning progress.
Furthermore, if too much independence or autonomous learning is given, students may not be able to respond well to the newly introduced learning system. As Kannan and Mcknish (2000) pointed out in their study about issues on ESL/EFL learning, students may be able to appreciate the flexibility and the independence provided in the self-access, self-directed system. However, they may also have psychological and pragmatic problems using this new learning method.

Reading Comprehension after Extensive Reading activities.

According to Cho and Krashen (1994), reading is accountable for much of our capability in reading comprehension, writing style, vocabulary, and grammatical compete for e. This was supported by Day and Bamford (2002) also argued that ER advances learners' understanding of the construction of sentences in English composition, which fosters the development of their reading comprehension.

As the researcher analyzed the common theme of students' responses in the post-project interview with the participants, most of their responses revolved around being able to comprehend more quickly than they did at the beginning of the semester. Furthermore, they can also get the gist of the story at the minimum level, which infers that they can acquire the skill of scanning as they progress toward the semester. On the other hand, most students feel more positive about group reading exercises than individual readings at home. Participants think that there is more interaction involved in it. They get to seek help from their classmates immediately when they feel stuck or confused in terms of vocabulary and point blank at the gist of the story they are reading.
Sequencing activity, as incorporated in the group projects, also assisted them in better understanding the story. The collaborative task enables them to help each other realize the main points of the story, article, or book they were reading. According to Reutzel (1985), as cited by Moss (2005) in his study about literacy construction, the skill to sequence events in a reading text or book, or article is a crucial comprehension strategy, particularly for narrative books, understanding the meaning of a text rely mainly on the ability to comprehend and locate the details, the order of events, in a larger context, following the beginning, middle and end of the story.

Supporters of ER propose that students should be encouraged to read extensively inside and outside the language classroom. For instance, Grabe (2009) argued that readers' contextual familiarity and reading comprehension could be boosted through ER. Day and Bamford (2009) also pointed out that learners' attitudes towards reading would improve when they are given text materials written or adapted to match their level. On the contrary, while eighty percent of participants felt optimistic about group reading in the class, only twenty percent of students felt confident about independent reading at home. Eighty percent felt intimidated by reading alone, and motivational issues came into play. The themes of the participant's responses lean towards idleness or having no time to put effort into reading. The researcher feels this is one of the areas that could be addressed when implementing extensive reading.

The Use of Xreading (VL) as a Learning Tool in class.

Ricardo and Yunus (2018) pointed out that incorporating ICT (information, communications, and Technology) platforms in teaching and learning offers boundless prospects for learners to engage more in the lesson as it creates a fun environment and motivates learning. As these researchers had emphasized, "The use of ICT tools should not be underestimated in language learning, especially where ICT plays a role in education in this 21st century. ICT can influence learners' learning, and teachers must improve and adapt it in their teaching." (Ricardo and Yunus, 2018, p. 6). The participants responded that Xreading as a supplementary tool in their EF courses is generally favorable. Much of their feedback goes about the convenience of navigating it, the ease of access, and the availability of books. It can be intimidating for some students but through routine usage and helping them navigate through it. Eventually, the platform becomes familiar to them. The data that shows the summary of the books they read, WPM, how long they spent reading, and their current level based on their reading phase help them to become conscious of how they perform in terms of their reading proficiency. The researcher also concludes that the availability of this information to the students promotes autonomous learning.

CONCLUSIONS

The central tenets discussed in this study bring about three pedagogical implications ns. First, Xreading, as a learning tool for improving reading comprehension and Fluency amongst EFL beginners, offers a pragmatic approach to facilitating ER-focused activities. It is also very efficient in monitoring each student's progress using its MS. It also allows students to access hundreds of books they can access anywhere. Furthermore, it also fosters independent reading skills and autonomous learning and provides extensive quantitative data that can be used to research the benefits of extensive reading further. Second, Xreading is a digital learning tool that offers many opportunities for teachers to facilitate, enhance, and promote appreciation for reading because of the abundance of tools and books that one can utilize.

On the one hand, students can also be intimidated by the VL and may feel lost during this self-directed learning. Thus, the teachers must reinforce familiarity with the VL and give regular guidance on proceeding with the reading assignment. Finally, this study implies integrating ICT with teaching strategies such as PBL. ER can bring about positive attitudes toward acquiring reading comprehension and Fluency for EFL beginners. The teacher must be well-versed in using the tool introduced and ready to guide the students as they proceed with its usage. As Ricardo and Yunan (2018) pointed out, employing ICT in education should not be a nuisance for teachers but instead an opportunity to foster better teaching and learning experience.

REFERENCES

Becker, H., & Geer, B. (1957). Participant observation and interviewing: *A comparison. Human Organization, 16*(3), 28-32. DOI:10.17730/HUMO.16.3. K687822132323013

Brown, H. D. (2001). *Teaching by principles: An interactive approach to language pedagogy (*2nd ed.). New York, NY: Addison Wesley Longman. Charleston, WV: West Virginia Department of Education, Division of Teaching and Learning, Office of Research.

Cho, K. and Krashen, S. (1994). Acquisition of vocabulary from the Sweet Valley Kids series: Adult ESL acquisition. *Journal of Reading, 37(8),* 662-667.

Craig, D. V., & Patten, K. B. (2007). E-literacy and literacy iPods, popular culture, and language learning. *International Journal of the Book, 4*(1), 69-74.

Day, R. & Bamford, J. (1998) *Extensive reading in the second language classroom*. Cambridge: Cambridge University Press.

Day, R. (2011) *Extensive Reading: The Background. In Bringing Extensive Reading into the Classroom* (pp. 10-21). Oxford: Oxford University Press.

Day, R. R. and Bamford, J. (1998). *Extensive reading in the second language classroom.* Cambridge: Cambridge University Press.

Day, R. R. and Bamford, J. (2002). Top ten principles for teaching extensive reading. *Reading in a Foreign Language,14(2),* 136-141.

Deusen, B.V. (2011) A Micro evaluation of five tasks for extensive reading. (Master's Dissertation) *Asian EFL Journal Theses*. 27-54.

Dooly, M., & Sadler, R. (2016). Becoming Little Scientists: Technologically Enhanced

English Lessons: A Case Study. *Malaysian Online Journal of Educational Technology, 2*(3), 11-19

Grabe, W. (2009). *Reading in a second language: Moving from theory to practice*. Cambridge: Cambridge University Press.

Hazenberg, S. & Hulstijn, J. (1996). Defining a minimal receptive second-language vocabulary for non-native university students: An empirical investigation. *Applied Linguistics, 17*, 145-3.

Helgesen,M.(2005). Extensive Reading Reports – Different bits of Intelligence, Different Levels of Processing. *Asian EFL Main Quarterly Journal 7*(3) 25-33.

Hixson, N.K., Ravitz, J., & Whisman, A. (2012). Extended professional development in project-based learning impacts 21st-century teaching and student achievement. Project-Based Language Learning. *Language Learning & Technology, 20*(1),54-78

Hulstijn, J. (2001). *Intentional and incidental second language vocabulary learning: A reappraisal of elaboration, rehearsal, and automaticity*. In P. Robinson (Ed.), Cognition and Second Language Instruction (pp. 258–286). Cambridge: Cambridge University Press.

Iwahara, Y. (2008) Developing reading fluency: A study of extensive reading in EFL. *Reading in a Foreign Language, 20*(1), 70-91

Kannan, J. & Macknish C. (2000). Issues Affecting On-line ESL Learning: A Singapore Case Study. *The Internet TESL Journal, 6(*11). 20-25

Knight, S. (1994). Dictionary uses while reading: The effects on comprehension and vocabulary learning for students of different verbal abilities. *The Modern Language Journal, 78,* 285-299.

Liu, J., & Zhang, J. (2018). The effects of extensive reading on English vocabulary learning: *A meta-analysis. English Language Teaching, 11*(6), 1-15.

Milliner, B., Cote, T. (2014). Effective extensive reading management with Xreading. *The Language Teacher 38*(6), 32-34.

Moss, B. (2005) Making a Case and a Place for Effective Content Area Literacy Instruction. *The Reading Teacher 59*(1):46-55. DOI: https://doi.org/10.1598/RT.59.1.5

Raman, K., & Yamat, H. (2014). Barriers Teachers Face in Integrating ICT during English Lesson; A case study. *Malaysian Online Journal of Education and Technology 2*(3), 11-19

Rosszell, R. (2006). *The role of extensive reading in second language vocabulary acquisition*. In K. Bradford-Watts, C. Ikeguchi, & M. Swanson (Eds.), JALT2005 Conference Proceeding. Tokyo: JALT, 394-407.

Russell, J. & Spada, N. (2006). The effectiveness of corrective feedback for the acquisition of L2 grammar. *Synthesizing research on language learning and teaching and teaching*, (pp 133-164). Amsterdam: John Benjamins Publishing Company.

Sato, F. (2012). Vocabulary acquisition through extensive reading. *Accents Asia, 6*(1), 52-69.

Schmidt, K. (1996). Extensive reading in English: Rationale and possibilities for a program at Shirayuri Gakuen. *Sendai Shirayuri Gakuen Journal of General Research, 24*, 81–92

Schmidt, R. (2002). *Longman dictionary of language teaching and applied linguistics*, 3rd Ed. Pearso, Education. London.

SiRicardo, T.S., Yunus, M. (2018). Learners' Perceptions on the Effectiveness of VideoScribe on Improving Listening and Speaking in Rural School of Sarawak. *Asian EFL Journal. 20*(8) 56-68.

Suhirman, L. (2019). EFL Teachers' Perception on the Use of Online Learning for Debriefing Pre-Condition of Teacher – Certification in Papua. *Asian EFL Journal 23*(3.3), 327-349.

Tomkova, G. (2013). Error correction in spoken practice (Doctoral dissertation, Masarykova univerzita, Filozofická fakulta). Retrieved from https://is.muni.cz/th/261663

Tsiplakides, I., & Fragoulis, I. (2009). Project-based learning in teaching English as a foreign language in Greek primary schools: From theory to practice. *English Language Teaching, 2*(3), 113-119.

Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. Language Teaching, 31(2), 57-71. doi:10.1017/S0261444800012970

KANDA CENTRE FOR ONLINE INTERCULTURAL EXCHANGE

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ABSTRACT

Online international exchange programs have become increasingly popular in recent years, particularly in the wake of the Covid-19 pandemic. Such programs provide students with the opportunity to learn about different cultures and perspectives, and to develop the 21st-century skills that are essential for success in today's globalised world. Additionally, online international exchange programs can be designed to align with the United Nations' Sustainable Development Goals (SDGs), which aim to promote sustainable development and combat poverty, inequality, and environmental degradation. By participating in an online international exchange program, students should aim to develop a deeper understanding of the challenges facing the world today and learn how to work together to create a more sustainable and equitable future while developing friendships and relationships that they would otherwise not have the opportunity to create.

INTRODUCTION

In light of the ever-increasing globalisation of our world, we contend that it is essential for students to not only acquire proficiency in a foreign language, but also to develop an understanding of the cultural distinctions and commonalities that exist between societies. At Kanda Institute of Foreign Languages (KIFL), we strongly believe that language is not merely the acquisition of vocabulary, grammatical competencies or complex sentence formation, but rather that a student's motivation to learn a foreign language comes from understanding a particular country's traditions, music, food and not least its people. This is especially true for those students wishing to work or interact with people from different cultures or backgrounds. Designed to help our students actively participate and thrive in this environment, the Kanda Centre for Online Intercultural Exchange at KIFL perfectly reflects our motto: ***"Languages are the foundation to link the world in peace."***

Founded during the Covid-19 pandemic, the centre has four main objectives:

1. Provide students with a global outlook suitable for the 21st century.

2. Provide students with an easy-to-access forum allowing them the opportunity to share and learn about the traditions, knowledge, and surprises of different cultures.
3. Help students better develop skills for the 21st century - collaboration, creativity, communication, and critical thinking.
4. To help create a world based on peace and understanding.

WHY DID WE CREATE THIS PROGRAM?

Before the Covid-19 pandemic, homestays, study abroad, and weekend trips to foreign cities such as Seoul and Jakarta were a mainstay in our students' life and study habits. However, an immediate consequence of the Covid-19 pandemic was to render such activities nearly impossible, denying students the opportunity of travelling to a new city, experiencing different cultures, and making new friends.

The challenge was to continue providing students with exposure to foreign cultures and languages, particularly those of Asian countries. Luckily, KIFL, with its Asian and European language program, has already

established strong connections with universities in various nations and regions, including Indonesia, Vietnam, Thailand and other Asian countries.

Such strong relations, therefore, presented us with the unique opportunity to create an online program, coupled with the fact that our students now possessed a good understanding of Zoom and online learning due to being required to take online classes at the start of the Covid-19 pandemic. Consequently, we established our first online cultural exchange in the spring of 2021 with students from Budi Luhur University (BLU) in Jakarta, Indonesia. Made up of ten students from BLU in Jakarta and ten students from KIFL in Tokyo.

WHAT IS THE AIM OF THIS PROGRAM

As mentioned in the introduction, the program has four main objectives. In this section, we will examine each of these objectives in more detail.

1. ***Provide students with a global outlook suitable for the 21st century.***

Traditionally, our students have been encouraged to broaden their global perspective through various forms of communication with native English speakers. This includes direct engagement with native English teachers,

class-based projects, and participation in institution-run study abroad or volunteer programs. Additionally, students are provided opportunities to converse with guest tutors through an English Conversation Lounge. By engaging in these opportunities, students are able to not only improve their language proficiency, but also gain a deeper understanding of different cultures. These interactions with individuals from diverse backgrounds allow our students to become active members of the global community, gaining valuable insight and knowledge that cannot be obtained solely from books or online resources. Through such direct communication with people from other countries, students should come to realize that global issues and challenges affect real individuals, just like themselves, and thus become more motivated to become active and confident global citizens.

2. ***Provide students with an easy-to-access forum allowing them the opportunity to share and learn about the traditions, knowledge, and surprises of different cultures.***

Traditionally Incorporating research and presentation assignments centered on different cultures and countries into the curriculum has been a somewhat effective pedagogical approach for fostering a global perspective among students. Through such assignments, students were

encouraged to engage in in-depth research on the customs, traditions, history, and current issues of a particular culture or country. This process not only deepens their understanding of the subject matter, but also enhances their critical thinking and research skills. Furthermore, by presenting their findings to their classmates, students have the opportunity to improve public speaking and presentation skills. Thus, incorporating culture and country-focused research and presentation assignments into the curriculum has been found to be a valuable tool for promoting global awareness.

However, by connecting online with students of a similar age from different cultures and backgrounds, students can learn first hand about different perspectives and ways of life, which can broaden their understanding of the world. Additionally, such exchanges provide opportunities for students to learn about new customs, traditions, and even new languages (one of the sessions involved students teaching each other common youthful expressions), which can be a unique and enriching experience. Furthermore, interacting with people from different cultures can also expose students to new ideas and perspectives, which can challenge their existing beliefs and broaden their understanding of the world.

While such a program does provide numerous benefits to students, there are also associated risks and uncertainties. In order to mitigate these risks, this program has been designed to provide a safe, easily accessible forum for youth to engage in positive interactions within a controlled environment.

3. Help students better develop skills for the 21st century - collaboration, creativity, communication, and critical thinking.

Teaching 21st-century skills in the classroom is essential for preparing our students for success in the modern world. These skills, such as critical thinking, problem-solving, communication, and collaboration, are not only important for academic success but also for success in the workforce.. Additionally, 21st-century skills should help students to be adaptable and resilient in the face of an ever-changing world, as shown most recently during the Covid-19 pandemic. In short, by teaching 21st-century skills, educational institutions are equipping students with the tools they will need to be productive and successful members of a global society. By actively taking part in this program students must work together in an online environment, dealing with the vagaries and challenges of

communicating online. They must collaborate and show their creativity and critical thinking skills while working jointly on a project related to one of the Sustainable Development Goals (SDG's). SDGs are a new, universal set of goals, targets and indicators that United Nation member states will be expected to use to frame their agendas and political policies over the next 15 years. Prior to the Covid-19 pandemic the core English curriculum for all second year students at KIFL was focused on the discussion, understanding and creation of solutions to certain SDGs, before finally asking students to present their conclusions in English.

4. To help create a world based on peace and understanding.

Very simply, this program hopes to promote a more peaceful future by bringing young people together to form friendships and see beyond the stereotypes. During the course, students come to understand each other, and we encourage them to maintain these friendships after the course has ended. We also hope to organise events and reunions to bring these students together to meet in person in the future.

WHAT COUNTRIES ARE PART OF THIS PROGRAM?

This program initially started with our co-founders at BLU University in Indonesia. From that first term, we have added participants from the following Institutions:

- **International Education Center, Hanoi University - Vietnam.**
- **Soongsil University - South Korea.**
- **Myongji University - South Korea.**
- **National Cheng Kung University - Taiwan.**
- **Acharya Institute of Technology - India.**
- **Burapha University - Thailand.**

A special, one-time event was hosted during November 2023, in which students from Ukraine participated. Over 100 students from Bory Grinchenko University, The National Aviation University, and the Ukrainian Catholic University took part in this event.

WHY DO OUR STUDENTS JOIN THIS PROGRAM?

Prior to enrollment in the program, informational sessions are conducted for prospective students, both virtually and in-person. These sessions serve to outline the primary advantages of the program.

- Meet and interact with students from other countries.
- Improve your English communication skills.
- Introduce Japanese culture to international students and learn about their culture from them.
- Participate in an international Zoom course.

In addition, the informational sessions highlight that the program offers opportunities for students to enhance their competency in the core skills taught in the main English language program, as well as in 21st century skills.

- Cultural understanding
- Communication
- Collaboration
- Critical Thinking

CHALLENGES

Designing an innovative program presents various obstacles and requires careful management of multiple components. One significant challenge

is the integration of technology. On occasion, our partners from developing countries have reported difficulties with internet connectivity, although this is an infrequent occurrence.

While our students all have very high English abilities, understanding the various dialects can be challenging, especially for students who have mainly learned English from “native speakers.” We encourage students to see this challenge as a learning experience and remind them that in their future working lives, they will have to communicate and collaborate with speakers of many varieties of English. Another challenge is managing the time differences and the different academic schedules of the various universities.

PROGRAM CURRICULUM AND PROJECT EXAMPLES

The curriculum for this 10-week program is built around students discussing cultural differences and examining the various SDGs through the lenses of their individual countries. In the first two sessions, we mainly focus on helping the students break the ice and get to know each other on a personal level. From week 3, each lesson will feature a warm-up discussion about various topics (part-time jobs, hobbies, music, etc.) and then move to a specific SDG topic (sustainability, health, etc.). During the week before each session, the students are encouraged to do some

reading and research about their own countries' approaches to those issues.

By doing so, the students are better prepared to share their various perspectives in group discussions. For example, students in Japan may discuss their country's efforts to combat the declining birth rate, whereas students in developing countries may talk about their countries' efforts to slow population growth. We hope that by seeing these issues from different perspectives, students will be able to gain a more global perspective.

In the latter half of the course, the students collaborate on a project. The students work in multi-national teams and choose a specific issue to research. They then present the results of their research in a poster project. The students then present their posters in the final lesson. (See Figure 1)

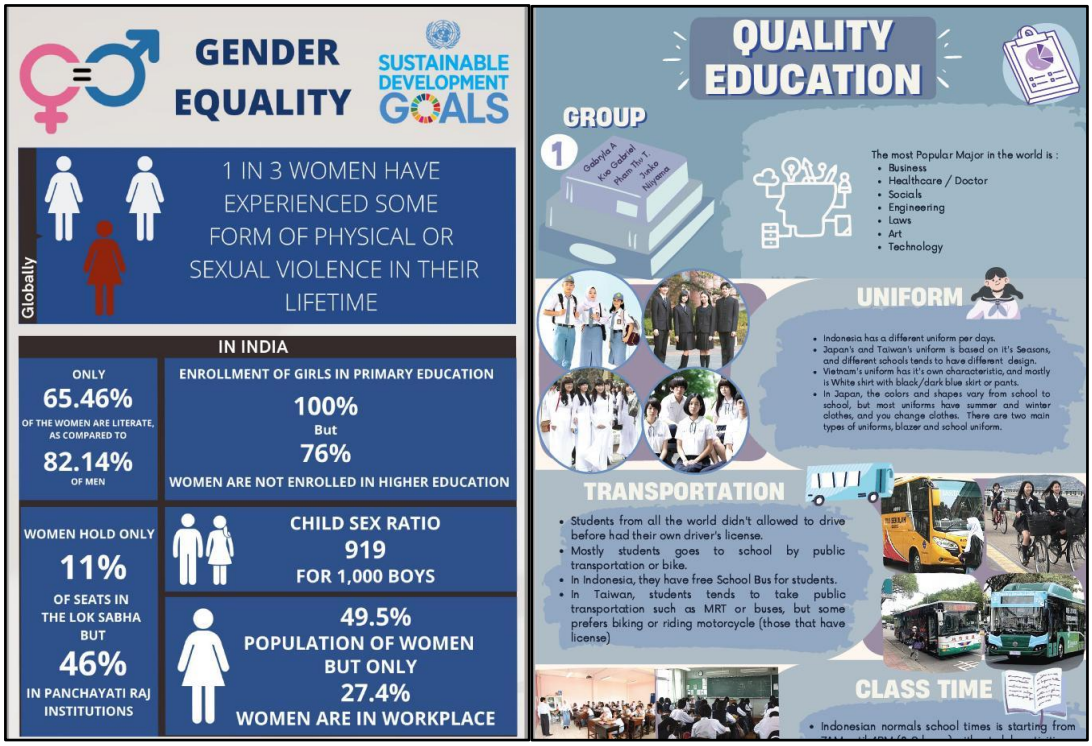

Figure 1

GOING FORWARD

As the Covid-19 pandemic becomes a ‘fixture’ of our everyday lives and online classes are replaced by the traditional face-to-face classroom, initiatives such as online international exchange programs must remain relevant and appealing. However, the central appeal of the exchange program, in short, connecting young people with their peers across the world, is no less vital now than it was before or during the Covid-19 pandemic. Thus, the Kanda Centre for Online International Communication aims to continue to offer students the opportunity to meet, engage with and become friends with young people from different cultures

and countries. In the immediate future, the Kanda exchange program aims to offer students in Ukraine the opportunity to meet and share the traditions of their culture with students from Japan and other Asian countries. As a result of the current on-going war in Ukraine, giving these students the opportunity to share their culture with audiences across Asia would be a true representation of the KIFL motto, “Languages are the foundation to link the world in peace.”

POTENTIALS OF USING #TRENDING TOPICS FROM TWITTER IN SPEAKING TASKS IN EFL CLASSROOMS

MARY JANE MALLARI

ABSTRACT

Social media, such as Twitter over the recent years has sparked interest amongst EFL teachers who want to integrate such content and tools in the EFL classroom to stimulate students' interest in the class. This study aimed to answer the potential of using trending topics from Twitter in speaking activities in class. The researcher used a qualitative research design through class action research using a task-based approach. There were 20 participants from the course English Communication Skills II and English Foundation classes in the fall semester. The data were collected by class observation and semi-structured interviews. The study's results demonstrated that the use of trending topics from Twitter in speaking activities has a high potential for increasing students' interest, motivation, engagement, and expressing confidence. The study also reflected that social media, such as Twitter, can be integrated into the EFL context using a practical pedagogy. On the other hand, social media competence training for teachers is crucial to enable teachers to have the confidence to bring these platforms into class.

Keywords: Speaking Skills, EFL, Task-based approach, Twitter Topics.

INTRODUCTION

Bygate (2001) emphasized that EFL teachers have long known that proficiency in speaking skills is significant for many second language learners. Yet, teaching this essential macro skill is crucial for many teachers because of the intricacy of spoken interaction and the need for agreement on what principled approaches should be adopted. Baldauf (2012) argued that the ability to speak English has become much more critical in many educational structures in recent years. For instance, Mc. Murray (2018) noted that the "Japanese Ministry of Education, Culture, Sports, Science, and Technology (MEXT) advocates implementation of Active Learning programs in all subjects in hopes of promoting interactive discussion of contemporary issues." (p.28). Despite these efforts, in the Japanese EFL context of learning English, teachers regularly ask why most Japanese students still can't speak English at the university. In addition, what makes the circumstances more complex is students' lack of interest or motivation when speaking activities are introduced in class. Namaziandost, Rahimi, Esfahani, and Ahmadi (2019) pointed out that learners of the twenty-first century would be driven to learn if the learning experience is exciting

and entertaining, given that social media is consuming most of the student's time and attention, it can be perceived to be an educational tool if used to its advantages.

The purpose of this study is to propose a pragmatic approach to teaching speaking skills by investigating the potential of using social media such as Twitter to increase the interest and motivation of students to engage in speaking activities in class.

Therefore, this study is designed to answer the research question:

1. What are the potentials of using social media such as Twitter in speaking tasks in the context of Japanese EFL learners' classes?

LITERATURE REVIEW

Social Media in the Classroom

Negrila (2015) states that the amplified popularity of digital platforms and social media networking has obliged educational practitioners to integrate them into classroom activities. As an effect of student engagement in social media, activities, and lessons anchored towards them seemed more successful than the traditional EFL learning approach. In addition, Nasri and Biria (2017) explicate that the overwhelming acceptance and usage of social media among learners and even teachers proved itself as a fruitful tool for education. Haigh (2010) and Levy (2009) studies show that the use of technologies, social media, and digital platforms in teaching languages has an increased advantage in the development of grammar, vocabulary, reading, writing, pronunciation, listening, and speaking skills. Namaziandost and Nasri (2019) emphasized that as education foundations embrace social media, they need to augment the constructive effect of such technologies to bring them into pedagogy to make teaching and education active and pragmatic in the new era of teaching.

Twitter in Language Learning

Twitter is a microblogging platform introduced in 2006 and is currently one of the most widely used social media platforms globally. In Japan, Coca (2018) concluded that Japan is the only country where Twitter is used more frequently than Facebook, with an active forty-five million users. Therefore, student exposure and familiarity with this social media platform are high. It has also been used mainly to discuss specific topics and issues, eventually collecting millions of unique ideas and topics in the form of hashtags (#). Lomicka and Lord (2011) view that Twitter can assist language learners from a collective community and language skills. They can gain a new language enjoyably and collaboratively. From the (SLA) standpoint, Twitter can motivate EFL learners as they are used to doing things on computers, smartphones, and other digital media.

Sah (2015) concluded that Twitter could have a constructive impact on EFL settings due to the positive benefits of integrating it into the classroom. The primary advantage is that it can engage learners, change classroom dynamics, and connect people using a common topic.

Task-based Approach

Nunan (2006), in his task-based pedagogical approach, emphasizes the following principles: a necessity-based approach to content selection, an avenue of opportunities to use English, an improvement of the learner's experiences as significant causative elements to

classroom learning, and the relation of speaking situations to real-world English. Ellis (2009) states three phases. Ellis (2009) further pointed out that the pre-ta task-based methodology, Pre-task, during, post-task ask, and post-task, is not a must but is crucial to ensure maximum language development.

RESEARCH METHODOLOGY

The research process methodology included four major sections: research framework, participants, TBL tasks, research instruments, and data gathering process and analysis.

Research Framework:

To establish an understanding of the foundation of the study, the research framework is displayed below:

Figure 1

Research Framework

Participants

The was a total of twenty participants in this study. Ten students were selected from the researcher's English Communication Skills II class at a Japanese university and ten from her English Foundation class at a technical college. The student's ages are between 18 and 21. Their English Proficiency levels are in the A2~ low B1 of the Cambridge English Scale.

This study was anchored on class action research employing the TBL approach. The tasks implemented by the teacher were as follows:

Task 1: Pre-Task phase

Participants were separated into two groups with five members each for each speaking session. The teacher instructed that this was an English-only activity and that no Japanese should be spoken during the entire movement. The teacher established the English Only Policy (EOP) at the beginning of the semester, and students were already familiar with the rule when this speaking activity was conducted. The teacher introduced the topic and asked students to either log in or open their Twitter app and browse through the issues they were interested in. The students were given about five to seven minutes for this task.

Task 2: Planning

In the next phase, the teacher instructed the students to choose three trending topics from Twitter that their group was most interested in. They should prepare to give their comments or opinions about the issues and other information they want to share. The group speaking task should last at least three to four minutes, and everyone must share their opinions. The teacher informed

the students that there would be a timer during the study; she gave the students at least six to seven minutes for planning and preparation.

Task 3: During Task Phase - Speaking Activity

The teacher, at this point, told the students to prepare the first speaker in their groups and that the activity would start. She set the timer on and let the students proceed with the training. She observed the students, joined some conversations and tried to assist students with vocabulary as well as answer questions from the students. The teacher, at this point, takes field notes and writes her observations for reference in the feedback session right after the speaking session; she also identifies the language structure and expressions that she noticed the students lacked and needed to carry out the speaking task better next time.

Task 4: Post Task

At this stage, the students have already learned the language structures and expressions for giving opinions. The teacher asked the students to go in groups with five members each and did the same pre-task and planning phase and the same speaking activity context based on the trending topics the student chose. She gave the same time allowance for each step. This task was repeated once a week over the course of one month.

RESEARCH INSTRUMENTS

The two main types of research instruments used to acquire data for the findings of the study were as follows:

1. Classroom Observation

In this study, the researcher took field notes during the several phases of the TBL approach and classified her observations based on students' approach to carrying out the task about their attitude and motivation about speaking engagement. As Dodiya, Kapadiya, and Malviniya (2014) emphasized, classroom observations have primarily extended the scope of research, significant areas of practice, practical problems in language learning, and application in various educational entities.

2. Semi-structured Interviews

To find precise answers to the research question posed at the beginning of the research as well as gain an in-depth understanding of student's perspectives regarding the use of Twitter trending topics in class, three interview questions were used: 1.) Which category from the trending topics on Twitter are you interested in? (e.g., news, sports) 2.) What factors motivate you to engage in the speaking activity? 2.) What areas of speaking skill did you realize you need to improve? Patton (2002) states that interview data are used and analyzed to identify codes and categorize the recurrent patterns, following the content analysis procedure. It also allows students to have the freedom to express their thoughts without restraint. The structured interview was done mainly in English, and when the students struggled to express their views, they could use Japanese to convey their meaning entirely. Thus, the researcher had to translate some of these responses.

DATA COLLECTION AND ANALYSIS

The data was collected for 15 weeks of course study for English Communication Skills II and English Foundation classes. The researcher analyzed the field notes taken during classroom observation and categorized them into recurring themes, and the semi-structured interview was conducted during the final speaking activity. It was examined based on the typical responses of the participants in the interview questions to arrive at the conclusions for the study's research questions.

FINDINGS AND DISCUSSIONS

The significant findings were presented by the structured interview results integrated with the classroom observation analysis. The discussion was summarized together with the outcomes.

Table 1

Top three trending topics students were interested in

Table 1: Top three trending topic categories students are interested in

No. of Participants	Trending Topic Category	General Responses
12	**KPOP** **e.g.** #BTS #KPOP #blackpink #kpopfan #kpopdance #kpopshoutout	*"It is interesting because I love BTS"*– Student A *"Most of my classmates like KPOP even boys so we can talk about it"* – Student B
5	**INSTAGRAMMABLE CAFÉ AND PLACES** **e.g** #foodporn #instasweets #sakurastarbucks #gongcha #harajukucafe #tapioca	*"We like Instagram, we usually look for cafés we can go and take photos, so it's interesting to talk about it"* – Student F *"I can recommend and also know places or cafes that I have not tried yet"* – Student C
3	**TOKYO OLYMPICS** e.g #Tokyo2020 #JPathletes #HanyuYuzuru #Tokyo #2020 #marathon	*"We can talk about the Olympics because it is a very popular topic and everyone knows about it, we can share ideas and also news"* – Student G *"We are very excited for the Olympics and we can see many tourists, I will work for airline company next year, so I want to be updated"* – Student M

1. ***What category of trending topics from Twitter are you most interested in? Topics about pop culture are relatable for most students.***

The data from the interview revealed that for most students, pop culture topics such as KPOP are exciting and relatable; they can talk about it freely and enjoy the conversation without needing to do in-depth research beforehand. It serves as a common ground for a pleasant conversation where they can share what they know and acquire information from their peers without the pressures of having a definite right or wrong response. Topics such as Instagram-worthy cafes and places amplify students' interests because of their visual appeal; according to interview responses, students desire to recommend and ask for recommendations during the

speaking activity, increasing their talk time. Current news relatable to their country is also on their list, such as the Tokyo Olympics. since this is a socially related topic, they are bombarded with information from news, Twitter, and other social media. Furthermore, the pride of being the host country motivated them to talk about it. As Madya, Hamied, Renandya, Coombe, and Basthomi (2018) emphasized, EFL content should be based on what students feel is necessary. The teacher should utilize ways to bridge learning tasks' content to students' interests, experiences, and real-world situations. Cheng and Dornyei (2007) state that learning tasks should have a variety of attractive elements that can increase the student's inquisitiveness. Davies (2019) argues that if the classroom material relates to their real world, relatable topics, and real life, students will engage more deeply in the conversation since it has high practical relevance. The researcher's observation notes supported this; during the pre-task and planning phase, students were very well versed in using Twitter and well-oriented on the trending topics; students were excited to browse and share the issues they wanted to talk about and were minimally distracted, student engagement was high, and they can proceed with carrying on the task with minimal guidance.

2. ***What factors motivate you to engage in the speaking activity?***

Personal Interest is the leading factor, followed by peer and teacher engagement.

Table 2

Top three factors that motivate the students to engage in speaking activities

Table 2: Top three factors that motivate the students to engage in speaking activities

No. of Participants	Factor	General Responses
8	**PERSONAL INTEREST**	*I'm interested about the topic and I know some information about i so I can join the conversation"* Student N *"It's very fun when we talk about topics from Twitter, I browse Twitter all the time, our books sometimes have boring and difficult topics so I can't share a lot"* – Student E
7	**PEERS**	*"Most of my friends like talking about the topic so it was easy for me to join"* – Student P *"We laugh a lot during conversations about KPOP or Café's and I like it when my peers recommend something to me"* – Student K
5	**TEACHER ENGAGEMENT**	*"If the teacher knows about the topic like BTS its very fun to ask her questions about it"* – Student H *"When Teacher join the group conversation it makes me comfortable to talk to her, also I can ask questions"* – Student M

The student's responses show that the main factor that motivates them to engage in the speaking activity is personal interest; participants believed that their intrinsic curiosity and the extent of their knowledge about the topic enabled them to share and collaborate with their group.

The second factor is peers; most students stated that they find the activity enjoyable because they can share the same interests with their peers, and most students in the group are also interested. This creates a less stressful environment for a speaking task. Lile (2002) pointed out that intrinsic motivation is essential for learning. For that to develop, the educator must learn to decrease the anxiety most students feel during their learning process; most students find it challenging to perform in a stressful environment. Julkunen (1989), as cited by Clement, Dornyei, and Noel (1994), emphasized that there is high potential relevance in dynamic classroom factors; research confirmed that situation-specific factors significantly contribute to L2 context learning.

The researcher's observation reveals that students feel exceptionally comfortable with the topics and thus feel relaxed during the activity; the students feel more at ease to ask their peers and the teacher when they can't express themselves, creating a good learning environment and support system not just from the teacher but also from their group members. The third factor is teacher engagement; students' responses detailed that the topics they were discussing made them connect more with the teacher and thus encouraged more genuine interaction. The researcher's observation notes also exemplify that during speaking activities using the trending topics from Twitter, the students are more likely to ask her questions and try to converse with the teacher. Thus, the researcher concludes that it is imperative that the teacher is approachable and they can maintain a friendly nature during this phase.

The student's responses also reveal that the attitude of teachers towards the students during crucial language learning practices such as speaking activities is critical. According to Nikitina and Furuoka (2009), students' perceptions of the three most desirable qualities for a language teacher are caring/empathetic, patient, and friendly, which are geared towards being relationship oriented.

3. What speaking skills did you realize you need to improve on?

Through the activity, students realized that they need a higher vocabulary to express themselves accurately, followed by grammatical competence and fluency.

The data from the interview exemplify the student's realization in terms of what speaking skill they need to improve on is vocabulary. Most participants struggle to find the right words to convey their thoughts, followed by grammar and fluency. In this interview data, it is essential to note that fluency comes last in the student's concern on the area of improvement. As a teacher in a Japanese EFL learning context, the researcher assumed that one of the biggest reasons students don't engage in speaking activities is their lack of confidence. However, based on the student's responses in the interview and the researcher's field notes during a classroom observation, the students were more confident and comfortable using the language despite the lack of vocabulary and grammar competence. The researcher concludes that factors such as personal interest and relevance of the topics in the daily context instigate their desire to engage in the speaking activity. This was supported by Maulina, Noni, and Basri (2019), who argue that when lecturers allow more chances for students to get in touch actively in daily conversation. The students would not doubt speaking.

CONCLUSIONS

The results of the study demonstrated three main pedagogical implications in the EFL context:

There is a potential for using trending topics on Twitter for speaking activities, but it may not be suitable for low beginners *(CEFR Level A1).*

The study's results demonstrated that using trending topics from Twitter in speaking activities increased students' interest, motivation, engagement, and confidence. It also paved the way for genuine interaction between the students and teacher and fostered a learner-centered environment. The relevance of the topics also created a pleasurable communicative activity for students where they can share their ideas with less pressure, which is one of the study's main takeaways. The researcher concludes that social media, such as Twitter, can be integrated into language learning and spark students' interest and motivation using a task-based approach. Furthermore, using social media in the context of language teaching can assist EFL teachers in designing more engaging and enjoyable lessons for students. As Namaziandost and Nasri (2019) noted, social media has become a habit among learners. Integrating this in an English class should offer an atmosphere of enjoyment and retain the student on the right path towards improving their skills. On the one hand, this activity requires a certain level of English foundation for students to be able to participate as well as understand the context of the action; traction researcher concludes that this will not be suitable for complete beginners or low beginners *(CEFR Level) A1* as the such task requires a bare minimum ability to be able to express their thoughts in the target language.

Bring the natural world into the classroom.

One of the main challenges in EFL teaching using a task-based approach is keeping the tasks engaging and relevant. The study shows that bringing the real world into the classroom by integrating social media such as Twitter can satiate students' natural curiosity, leading them to develop an interest in what activity they are doing. It can also be concluded that leveraging social media to bring materials to life and make them attractive is one of the opportunities EFL teachers can take advantage of. Hashemifardnia, Namaziandost, and Rahimi (2018) argue that using technology such as social media can produce or create learning opportunities unlike before.

Teacher Training for social media competence is highly suggested.

The main concern for integrating social media in the classroom is the need for more competence in using different platforms, web technologies, and apps by the teacher. It can be said that a large percentage of any faculty department only has a fraction of social media competent users. In conclusion, based on the study's positive results, the researcher suggests that academic coordinators or faculty heads must have their teachers undergo social media competency training or course to be capable and confident in integrating them into their classrooms.

REFERENCES

Baldauf, R. B., Kaplan, R. B., Kamwangamalu, K., & Bryant, P. (Eds.) (2012). *Language planning in primary schools in Asia*. Abingdon: Routledge

Bygate, M. (2001). Speaking. In R. Carter & D. Nunan (Eds.), *The Cambridge guide to teaching English to speakers of other languages* (pp. 14–20). Cambridge: Cambridge University Press.

Cheng, H., Dornyei, Z. (2007). The use of motivational strategies in language instruction; The case of EFL teaching in Taiwan. *Innovation in language learning and teaching 1*(1) 153-174.

Chisega-Negrila, A.M, (2015). Using social media and Learning Twitter vs. Pinterest. *Journal of Advance Distributed Language and Learning 3*(7).

Coca, N. (2018). *Why Japanese loves Twitter more than Facebook.* Retrieved from https://www.ozy.com/acumen/why-japan-loves-twitter-more-than-facebook/86545/

Davies, C. (2019). *How to Use Real-life Connections in the Classroom to Increase Engagement.* Retrieved from https://resumes-for-teachers.com/blog/interview-questions/excellent-teachers-use-real-life-connections-in-the-classroom/

Dodiya, P. (2014, February) *Classroom Observation: A Critical Analysis of Different Methods.* Paper presented at Monark Technology Conclave (MonTeC-2014) A State Level Conference on 'Research in Progress in Engineering and Technology "At Ahmedabad, India.

Education e-books.

Ellis, R. (2009). The methodology of task-based teaching. *Asian EFL Journal Special Proceedings* 6-23.

Haigh, p. (2010). *Social Network Websites: Their Benefits and Risks.* London: Optimus

Hashemifardnia, A., Namaziandost, E., & Rahimi Esfahani, F. (2018). The Effect of Using WhatsApp on Iranian EFL Learners' Vocabulary Learning. *Journal of Applied Linguistics and Language Research, 5*(3), 256-267.

Levy, M. (2009). Technology in use for second language learning. *The Modern Language Journal, 93*(1), 769-782.

Lile, B. (2002). Motivation in the ESL classroom. *The Internet TESL Journal 8(1).*

Lomicka, L., & Lord, G. (2011). A tale of tweets: analyzing microblogging among language learners. *The system,* Vol. 40, pp. 48-63.

Maulina, n.a., Nurdan, N., Basri, M. (2019). WhatsApp audio and video chat based on stimulating students' self-confidence and motivation to speak English. *Asian EFL Journal 23(6)* 181-203.

Mc.Murray, D. (2018). MEXT's New Course of Study Guidelines to Rely on Active Learning. *The Language Teacher 42*(3). 28-29.

Namaziandost, E., Nasri, Mehdi. (2019). The Impact of social media on EFL Learners' Speaking Skill: A Survey Study Involving EFL Teachers and Students. *Journal of Applied Linguistics and Language Research 6*(3), 199-215.

Nikitina, L., Furuoka, F (2009). Teacher-Student Relationship and the Conceptualization of the "Good Language Teacher": Does Culture Matter? *Asian EFL Journal 11(*2) 163-187

Nunan, D. 1987. Communicative language teaching: Making it work. *ELT Journal 4(1)*:136-45.

Nunan, D. 1989. *Designing Tasks for the Communicative Classroom*. Cambridge: Cambridge University Press.

Patton, M.C. (2002). Two decades of development in qualitative inquiry: A personal experiential perspective. *Sage Journals 1*(3). 261-283.

Sah, R. (2015). Let's tweet to learn English: using Twitter as a language tool in EFL/ESL classrooms. *Langlit 2*(1).17


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