

EXCELLENCE IN EDUCATION JOURNAL

Volume 14
Issue 2

®EEJ

The Excellence in Education Journal
ISSN 2474-4166

Website: www.excellenceineducationjournal.org

Email: eejeditor@gmail.com

Ann Cancilla Gaudino, Ed.D. Editor-in-Chief
William F. Hoge, Assistant

Copyright © 2025 Excellence in Education Journal. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording or any information storage and retrieval system, without permission from EEJ. Readers who wish to duplicate material copyrighted by EEJ may do so by contacting the editor.

Cover art copyright © 2025 by EEJ.

EEJ publications present a variety of viewpoints. The views expressed or implied in this journal are those of the authors and should not be interpreted as official positions of the EEJ.

All Web links in this journal are correct as of the publication date but may have become inactive or otherwise modified since that time. If you notice a deactivated or changed link, please email eejeditor@gmail.com with the words “Link Update” in the subject line. In your message, please specify the issue.

Manuscript submission guidelines can be viewed on the website at:
www.excellenceineducationjournal.org

If you are interested in serving as a reviewer for this journal, please email your request and your curriculum vitae/resume to eejeditor@gmail.com. A sample paper for review will be emailed to you.

From the Editor

The *Excellence in Education Journal* is an open access, refereed, online journal that promotes and disseminates international scholarly writing about excellent practices in all aspects of education. This journal was founded with the goal of sharing these practices to benefit the education of children and adults worldwide. We encourage teachers, professors, and other professionals worldwide to write about practices that promote the improvement of education. Submissions are double-blind, peer reviewed and are accepted year-round with publication occurring twice annually.

In support of our mission, there are no fees to submit or publish manuscripts so that cost will never be a barrier. Typeset and graphics are intentionally simple in order that the journal can be more easily accessed on a variety of devices worldwide to fulfill the mission of the journal.

I hope that the practices discussed in this journal will be helpful to you, our readers.

Sincerely,

Ann Cancilla Gaudino, Ed.D., Founder and Editor-in-Chief
eejeditor@gmail.com

With gratitude to our reviewers who serve the journal:

Dr. Bundit Anuyahong, Thai-Nichi Institute of Technology, Thailand
Dr. Evangelin Arulselvi, Professor, Chennai, India
Dr. Jolene Battitori, William Patterson University, United States
Dr. Dianbing Chin, Zhejiang Normal University, China
Dr. Kim Creasy, University of Northern Colorado, United States
Rev. Dr. Walt Jagela, All Saints Catholic Church, West Virginia, United States
Dr. Alana Kupersmith, Issaquah Middle School, Washington, United States
Dr. Beth Musser, Dean Emeritus, West Liberty University, United States
Dr. Changsong Niu, Zhejiang Normal University, China
Dr. Kakenya Ntaiya, The Kakenya Center for Excellence, Kenya
Dr. Mustafa Ozmusul, Harran University, Turkey
Dr. Li-Wei Peng, Governors State University, United States
Dr. Tonya Perry, University of Alabama at Birmingham, United States
Dr. Jem Cloyd Tanucan, Cebu Normal University, Phillipines
Dr. Janine Wahl, Bemidji State University, United States
Dr. Anthony Williams, Fisk University, United States
Dr. Eleanor Wilson, The University of Virginia, United States
Dr. Xiubin Xu, Zhejiang Normal University, China
Prof. Joan Yakkey, Professor Emeritus, The Music School of Fiesole, Italy

TABLE OF CONTENTS

Page 4

***Investigating the Impact of Consequential Use on edTPA Performance:
A Meta-Analysis Across Content Fields***

Jemimah Young, Kristian Edosomwan, and Jamaal Young

Page 19

Armenian Student and Faculty Perceptions of Education in the United States

Sherrie Klee

Page 38

***General Education Teacher Attitudes Toward Inclusion of Students with Special Education
Needs in United Arab Emirates Mainstream Schools***

Malak Jihad

Page 52

Website Creation to Support Teacher and Museum Partnerships

Alana L. Kupersmith

Investigating the Impact of Consequential Use on edTPA Performance: A Meta-Analysis Across Content

Jemimah Young, Kristian Edosomwan, and Jamaal Young*

**Corresponding author*

Abstract

The purpose of this meta-analysis was to investigate the effects of consequential use on edTPA performance across content areas. The present meta-analysis was guided by the Diffusion of Innovation Theory (DOI). The study examined 127 mean difference effect sizes extracted from the 2014 to 2020 edTPA administrative report. The researchers examined the moderator effects of grade level and content specialization on mean difference effect sizes. The overall mean difference effect size was .22 standard deviations based on a random-effects model. Notable heterogeneity was observed based on a statistically significant Q statistic and I^2 of 99.96. The moderator analysis indicated that the content type and grade level were statistically significant moderators of the effects of consequential use of edTPA. Implications and recommendations for research and praxis in teacher education are provided.

Keywords: edTPA, teacher preparation, teacher assessment, meta-analysis, accountability

Dr. Jemimah Young is an Associate Professor at Texas A&M University. Dr. Young can be reached at jemimah.young@tamu.edu

Dr. Kristian Edosomwan teaches at The University of Houston. Dr. Edosomwan can be reached at kedosomwan@uh.edu.

Dr. Jamaal Young is an Associate Professor at Texas A&M University. Dr. Young can be reached at Jamaal.young@tamu.edu

Teacher performance evaluation has always been a vital part of the education system, aiming to ensure high-quality education for students. Over the years, various assessment methods have been used to measure teacher candidates' effectiveness and classroom readiness (Ronfeldt, 2021). However, the introduction of the Education Teacher Performance Assessment (edTPA) has recently gained significant attention. The edTPA is a performance-based, subject-specific evaluation for teacher candidates that emphasizes applying skills and knowledge to real-world teaching scenarios. The performance-based nature of edTPA gives it special potential to become a key tool in evaluating the effectiveness of teachers in maximizing their students' learning in their specific context. Its comprehensive approach, which incorporates multiple facets of teaching, such as planning, instruction, and assessment, has made it increasingly popular. As a result, understanding the impact of consequential use on edTPA performance has become an essential area of research interest. Consequential use refers to applying assessment results to make crucial decisions, such as certification or employment. Scholars have called for further research and evaluation of the edTPA based on its increasing consequential use (Behizadeh & Neely, 2018; De Voto et al., 2021; Gitomer, 2021). Consequently, it is essential to evaluate how consequential use affects the outcomes of the edTPA.

The significance of the edTPA in measuring teacher performance stems from its ability to offer a standardized evaluation framework that assesses the readiness of future educators. With its focus on authentic teaching practices and its alignment with state and national standards, the edTPA has gained widespread recognition as a tool for ensuring the proficiency and competence of aspiring teachers. Moreover, the consequential implications of edTPA scores have heightened the significance of this assessment in the context of teacher education. As consequential decisions based on the edTPA results can directly impact the career prospects of teaching candidates, comprehending the implications of this consequential use on the performance of the edTPA becomes crucial to ensure the fairness and accuracy of its application. The impact of the consequential use of edTPA becomes especially relevant when noting the edTPA was mandated in 18 states with approval from 21 states as of 2019 (Gitomer et al., 2019). Given the essential role that the edTPA plays in the evaluation and preparation of future educators, it becomes imperative to delve deeper into understanding how various factors can influence its outcomes. The need to explore the impact of consequential use on edTPA performance is underscored by the understanding that different content fields and grade levels may elicit diverse responses from teaching candidates. Understanding the unique differences across content areas and grade levels necessitates a nuanced analysis that accounts for the variability in the performance outcomes based on the specific content specialization and the assessed grade levels.

This meta-analysis aims to comprehensively examine the impacts of consequential use on edTPA performance, with a specific focus on various content fields. Leveraging the Diffusion of Innovation Theory (DOI) as a conceptual framework, this study analyzes 127 mean difference effect sizes extracted from the extensive 2014 to 2020 edTPA administrative report. In doing so, it seeks to contribute to a nuanced understanding of the influence of consequential use on teachers' performance, thereby shedding light on how this phenomenon operates across different content domains. By exploring the nuanced interplay of field grade level and content specialization as potential moderating factors, the study aims to provide valuable insights into the intricacies of these relationships and their impact on edTPA performance. Ultimately, this

research strives to fill the existing gap in understanding the effects of consequential use in the field of teacher education by answering the following research questions:

1. How heterogeneous are mean differences in pre-service edTPA scores for consequential compared to non-consequential states?
2. What is the mean difference between edTPA scores for consequential and non-consequential use?
3. What are the moderator effects of grade level and content type on consequential edTPA use compared to non-consequential use?

The following sections will first introduce the theoretical framework of Diffusion of Innovation, which describes how innovations diffuse into society, like how edTPA diffuses into teacher evaluations. Then, the literature review will address the consequential use of evaluation tools on teacher performance. Next is an explanation of meta-analytical methodology before detailing the analysis results. This paper will end with a discussion of the implications of the findings before concluding with insights for researchers and teacher educators.

Theoretical Framework

The Diffusion of Innovation (DOI) Theory, as described by Everett Rogers (Rogers et al., 2014), elucidates the process by which an innovation is communicated through specific channels over time among members of a social system. The DOI theory posits that innovation diffusion is influenced by various factors, such as the attributes of the innovation itself, the communication channels through which it is disseminated, the time taken for adoption, and the social system's characteristics. Innovations are classified into five categories based on the rate of adoption: innovators, early adopters, early majority, late majority, and laggards. DOI has been widely employed in understanding the adoption and implementation of various innovations in different fields, including education.

The DOI Theory has been widely applied in educational contexts to understand adopting and integrating new practices and technologies. Within teacher education and assessment, DOI offers valuable insights into how innovative assessment practices, like the edTPA, are embraced and implemented within various educational settings. This theoretical framework aids in comprehending the factors influencing the acceptance and utilization of the edTPA among different stakeholders in the education sector. It highlights the significance of factors such as the assessment tool's perceived advantages, compatibility, complexity, trialability, and observability in shaping its adoption and subsequent impact. Applying the DOI framework in educational contexts provides a nuanced understanding of the dynamics involved in implementing and accepting innovative teacher assessment practices, contributing to the development of effective strategies for enhancing teacher education and evaluation.

The relevance of the Diffusion of Innovation (DOI) Theory in understanding the consequential use of edTPA in teacher preparation lies in its ability to explicate the intricate process of how educational innovations are diffused and adopted within the educational system. As a performance assessment tool, edTPA represents an innovation that has introduced significant changes in the assessment practices for aspiring teachers. Understanding the factors

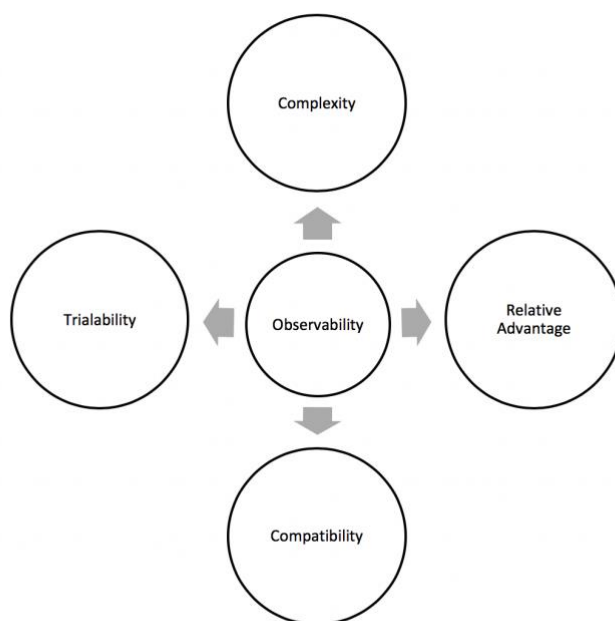
that influence the adoption and implementation of edTPA, such as its perceived advantages, complexity, and compatibility with existing practices, is crucial in comprehending its consequential use in teacher preparation. Furthermore, the DOI framework helps explore the roles played by early adopters, opinion leaders, and the institutional context in disseminating and adopting edTPA, thus providing valuable insights into its incorporation into the teacher preparation curriculum.

In the present study, the Diffusion of Innovation (DOI) Theory was employed as a guiding framework to comprehend the patterns and dynamics of the adoption and use of edTPA in teacher preparation programs. By leveraging the theoretical constructs of DOI, the researchers were able to investigate how the attributes of edTPA as an innovation, the communication channels utilized for its dissemination, and the characteristics of the educational institutions influenced its consequential use. This approach facilitated a comprehensive analysis of the factors that contributed to the variation in edTPA performance across different content fields and grade levels, enabling a nuanced understanding of the moderating effects of these variables. By utilizing DOI as a theoretical lens, the study offered a comprehensive and systematic perspective on the implications of consequential edTPA use, thus providing valuable insights for enhancing teacher education practices and policies.

Figure 1 provides a model of the theoretical relationship between these five components. We posit that observability or the degree to which the effects of edTPA consequential use on preservice teachers' scores and university implementation practices are visible or understandable to teacher educators is key to adopting practices in teacher education programs. According to Figure 1, we contend that observability influences the four other constructs. Therefore, observability is at the center of the model. The remaining constructs are highly contingent upon the perceptions of the preservice teacher. Thus, they all radiate from observability. It is the sole construct that is not directly influenced by the preservice teacher's perceptions or context but rather by the observational evidence the teacher has witnessed or is afforded. In non-hierarchical order, relative advantage describes the preservice teacher's perception of the superiority of edTPA assessment to their knowledge and experiences with non-performance-based assessments (e.g., outcome expectancy). Compatibility is the perceived consistency between the preservice teacher's socio-cultural values, previous ideas, or needs (e.g., cultural discontinuity). Similarly, complexity describes the perceived difficulty or simplicity of use and comprehension (e.g., self-efficacy). Finally, trialability represents the degree of commitment the preservice teacher feels is necessary to do well on edTPA to be a successful teacher in the future (e.g., apprehension). Hence, we contend that the degree to which the effects of edTPA are easily observed and understood (i.e., observability) can influence teacher outcome expectancy, instructional discontinuity, self-efficacy, and apprehension towards edTPA and other performance-based assessments.

Figure 1

Theoretical Relationship between Preservice Teachers' Beliefs and edTPA Performance



Literature Review

The landscape of teacher education has significantly transformed with the introduction of edTPA, a vital evaluation tool that assesses teacher candidates' readiness through a performance-based approach. This literature review explores the diverse impact of edTPA on teacher education, focusing on its implementation across various contexts and its effects on teaching practices. By examining existing research, this review aims to thoroughly understand the consequences, challenges, and opportunities related to edTPA, thereby contributing to the ongoing discussion about the evolution of teacher assessment methodologies.

The edTPA has gained prominence as a consequential evaluation tool in teacher education. The edTPA was introduced as a performance-based assessment and has been widely implemented across various institutions and jurisdictions (Lachuk & Koellner, 2015). Designed to measure a teacher candidate's readiness for the classroom, edTPA evaluates a range of teaching skills, including planning, instruction, and assessment. Its adoption represents a significant shift in assessing the capabilities of aspiring educators, with an emphasis on practical teaching skills rather than mere theoretical knowledge. The consequential nature of edTPA in evaluating teacher performance has prompted significant discussions and investigations into its impact on the teaching profession.

Previous Research on the Impact of Consequential Use on Teacher Performance

The literature on the consequential use of evaluation tools like edTPA has consistently emphasized the potential influence of high-stakes assessments on teacher performance

(Greenblatt, 2016). Research in this area has underscored the complex interplay between external pressures, such as the need to meet specific standards, and its effects on teacher behavior and instructional practices. Scholars have examined how the consequential nature of edTPA might lead to various responses from teacher candidates, including shifts in teaching strategies, heightened preparation efforts, and increased performance-related stress. Gitomer (2021) argued that the consequential use of edTPA is unwarranted based on a lack of evidence regarding its reliability and validity. Behizadeh and Neely (2018) further asserted that edTPA promotes inequitable practices, undermining the argument for its validity in consequential use.

Furthermore, studies have highlighted the need for a nuanced understanding of the relationship between high-stakes evaluations and the development of effective teaching practices (Hutt, Gottlieb, & Cohen, 2018). Several studies have focused on evaluating the effects of edTPA on the landscape of teacher education (Napolitano et al., 2022). These investigations have delved into various aspects, including the impact of edTPA on curriculum design, teacher preparation programs, and the overall quality of teacher education. Scholars have explored the implications of edTPA implementation on the alignment of teacher education programs with the demands of contemporary classrooms (Carter & Lochte, 2017). Furthermore, research has investigated the potential challenges and opportunities that arise from integrating edTPA into teacher education, including its influence on the structure and content of teacher preparation courses (Chung & Zou, 2023). By examining these effects, researchers have aimed to provide valuable insights into the evolving nature of teacher education and how consequential assessments like edTPA shape it.

The review of existing literature on edTPA highlights a dynamic landscape in which consequential assessments are crucial in shaping teacher education practices. While considerable research has delved into the impact of edTPA on teacher performance and education programs, there remain gaps that warrant further exploration. Future studies should address the nuanced intersections of edTPA with cultural, contextual, and institutional factors, providing a more comprehensive understanding of its implications. Additionally, investigations into the long-term effects of edTPA on educators' professional development and retention would contribute significantly to refining assessment practices and ensuring the continued improvement of teacher preparation programs. In the present study, we set the foundation for these future studies by quantifying the effects of the consequential use of edTPA on pre-service teacher examine performance.

Methodology

Data for the present study were extracted from the edTPA administrative reports for 2014-2020. edTPA provides sample sizes, means, and standard deviations for consequential use by field in a tabular format that compares the average scale scores from all states with a consequential policy to states without a consequential policy. In the present study, scores from states with a consequential policy served as the experimental group, while states without a consequential policy served as the comparison or control group. These data were disaggregated into grade level and content area moderators examined in the *ANOVA* analog performed in the meta-analysis. These moderators were not chosen simply for convenience but more strategically to explore the impact of the common differences in teacher preparation across certification grade

levels and content areas on the effects of a consequential use of edTPA. The edTPA's use of content-specific assessment addresses weaknesses of previous teaching evaluation systems and determines in part how teacher candidates prepare for edTPA (Okraski & Kissau, 2018; Youngs & Whittaker, 2014). Current research suggests that grade level significantly affects the frequency and use of specific teaching strategies (Denton et al., 2015; Mihaly & Mccaffrey, 2015).

Data analysis procedures were conducted in two phases: model preparation and model fitting. The model preparation phase will follow the procedures outlined in Borenstein et al. (2021) and be performed in *R* studio using the Metafor application (Veichtbauer & Veichtbauer, 2015). A traditional meta-analysis would require five general steps to define the overall meta-analytic process. However, we conducted the study in three steps due to the direct extraction of all effect sizes from the edTPA administrative report rather than a series of individual studies. First, before model fitting, we modeled independent quantities (i.e., effect size, the within-study variance of the effect, standard error of the effect, and confidence interval for the study effect). In phase 1, these quantities were calculated for each study based on Hedge's *g* as the effect size estimate. Hedge's *g* was selected to address the upward bias of *d'*. Hedges *g* mean difference effect sizes were computed for each study based on the extracted means, standard deviations, and sample sizes. The Hedges *g* was chosen to account for potential bias in small sample sizes. Effect sizes were calculated using the formula:

$$g = \frac{M_1 - M_2}{\sqrt{\frac{(SD_1^2 + SD_2^2)}{2}}}$$

M_1 and M_2 are the mean for the consequential and non-consequential use of the edTPA, respectively, and SD_1 and SD_2 are the corresponding standard deviations.

Hedge's *g* corrects for the bias of *d'* with correction factor *J*, where

$$J = 1 - \frac{3}{4df-1} \text{ and } g = J \times d'.$$

Second, we assessed heterogeneity in effect sizes using the *Q* and *I*² statistics. The *Q* statistic is a test for evidence of heterogeneity in true effect sizes, calculated as

$$Q = \sum_{i=1}^k W_i (Y_i - M)^2,$$

A significant *Q* value rejects the null hypothesis of a common effect size and provides evidence for heterogeneity in the true effect sizes. The *I*² statistic estimates the proportion of variance in observed effect sizes due to true effects instead of sampling error. *I*² reflects the degree of inconsistency in effects across studies such that more inconsistency suggests less overlap in study confidence intervals (i.e., a large *I*² and a greater proportion of variance in observed effect sizes due to true effects) and less inconsistency suggests more overlap in study confidence intervals (i.e., a small *I*² and a lesser proportion of variance in observed effect sizes due to true effects). *I*² is calculated as

$$I^2 = \left(\frac{Q - df}{Q} \right) \times 100\%.$$

When heterogeneity is high, random-effects models are preferred as they have less bias than fixed-effects models (Hunter & Schmidt, 2018). Therefore, based on the heterogeneity analysis results, we implemented a random effects model to calculate the overall mean difference effect size before applying a meta-analytic ANOVA analog to examine the moderator effects of grade level and content type on consequential edTPA use. As noted by Hedges, Tipton, and Johnson (2010), the use of robust variance estimation in cases of dependency can lead to overcorrection, diminishing the precision of the estimates. In the present meta-analysis, robust error variance estimation was not utilized because the effect sizes were independent, rendering such an approach unnecessary. Dependency among effect sizes arises when multiple effect sizes are derived from the same study or when the data structure inherently violates the independence assumption.

Results

Following the procedures above, 127 independent mean difference effect sizes were calculated. Our heterogeneity measures indicated the presence of measurable heterogeneity; see Table 1. After applying the random effects model, the overall mean difference between preservice teacher performance in consequential states versus non-consequential states was statistically significantly different from zero ($g = .22$). Indicating an overall positive moderate effect size for preservice teacher performance on edTPA when the state utilized a consequential implementation model.

Our moderator analysis examined the impact of grade level and content specialization on the effect of consequential edTPA implementation. A statistically significant Q_{between} for grade level ($Q_B = 77.22$, $p < 0.05$) indicated heterogeneity in the random effects model. The Q_{between} was not statistically significant for content in the random effects model. However, the I^2 of 99.96% indicates high heterogeneity.

Table 1

Overall result of random-effect meta-analysis

					Heterogeneity	
	k	ES	CI	VR	Q	I^2
Overall Results	127	0.22*	[0.177, 0.260]		3.00e+05*	99.97

*indicates a statistically significant result

There was notable heterogeneity based on statistical analysis based on the meta-analytic ANOVA analog interpretation (see Table 2). The smallest grade level mean difference, though statistically significant, was observed in the middle grades ($g = 0.013$), while the largest mean difference was observed in the secondary ($g = 0.359$). EC-Elementary was in the middle ($g = 0.229$). All content mean difference effect sizes were positive and statistically significantly different from zero at the $p < 0.05$ level except for the other category. It is important to note that the other category ($g = 0.149$) was used to categorize non-grade specific content such as

specializations and certifications (e.g., special education, ESL, Health and Kinesiology). The core content areas had positive, statistically significant effect sizes: literacy ($g = 0.139$), mathematics ($g = 0.235$), science ($g = 0.211$), and social studies ($g = 0.207$).

Table 2

Moderator analysis for random-effect meta-analysis

Moderator	k	Q_B	ES	95% CI
Grade Level		77.22*		
EC-Elementary	18		0.229	[0.133, 0.324]*
Middle Grades	20		0.013	[-0.054, 0.079]
Secondary	20		0.359	[0.319, 0.400]*
Other	69		0.235	[0.171, 0.298]*
Content Type		4.08		
Elective	50		0.259	[0.189, 0.329]*
Generalist	9		0.211	[0.083, 0.338]*
Literacy	14		0.139	[0.023, 0.254]*
Mathematics	15		0.235	[0.130, 0.340]*
Other	19		0.149	[-0.002, 0.301]
Science	10		0.211	[0.063, 0.359]*
Social Studies	10		0.207	[0.073, 0.341]*

*indicates a statistically significant result at $p < 0.05$

Limitations

While providing valuable insights into the consequences of consequential use on edTPA performance, this meta-analysis is subject to several limitations that necessitate caution in generalizing the findings. The diversity across states in terms of policies and practices introduces a level of heterogeneity that may influence the overall effect size. Educational policies and practices can vary significantly from state to state, and this diversity could contribute to the observed heterogeneity in the outcomes. Additionally, the study's temporal scope, spanning from 2014 to 2020, may not fully capture recent developments or policy changes surrounding consequential use. Education is dynamic, with continuous changes in practices and policies over time. The findings may, therefore, not wholly represent the current landscape of edTPA implementation and its associated consequences.

A notable limitation is the reliance on data extracted solely from edTPA administrative reports. While these reports provide standardized and aggregated information, they might lack the granularity required to examine contextual factors influencing consequential use thoroughly.

The absence of detailed information on state-specific variations, differences in teacher preparation programs, and specific policy nuances limit the depth of the analysis. Another limitation is the study's classification of states based on the presence or absence of consequential use policies. The nature and extent of these policies can vary, impacting the magnitude of consequential effects. A more nuanced examination of these policies' specific elements and stringency could enhance our understanding of their influence on edTPA outcomes.

Teacher demographics, such as race, gender, or experience, were not considered moderators in the analysis, representing a limitation. The consequential effects of edTPA may differ based on individual characteristics, and a more comprehensive analysis incorporating these variables could provide a richer understanding of the nuanced influences at play. The cross-sectional nature of the data is another limitation, as it hinders the exploration of changes in consequential use effects over time. A longitudinal analysis would offer insights into the dynamic nature of edTPA consequences and how these effects evolve as teachers progress through their careers.

Moreover, the meta-analysis may be susceptible to publication bias, as unpublished or negative findings may not be as readily accessible. This potential bias could impact the comprehensiveness of the synthesized evidence and may result in an overestimation of the overall effect size. Lastly, the generalizability of the findings may be limited to the states included in the administrative reports. Caution is necessary when extending the results to regions or countries with different educational contexts, policies, and practices. In addressing these limitations, future research endeavors can contribute to a more nuanced understanding of the consequences of edTPA implementation, facilitating the development of more contextually relevant and effective educational policies and practices.

Discussion

The present meta-analysis investigated the impact of consequential use on edTPA performance, employing the Diffusion of Innovation (DOI) Theory as a guiding framework. The analysis aimed to shed light on the nuanced dynamics of this relationship across various content fields and grade levels. The significance of this study lies in its contribution to understanding how consequential use influences teacher candidates' performance on edTPA, a crucial assessment tool in teacher education.

The purpose of the meta-analysis was to examine the impact of consequential use on edTPA performance across content fields, utilizing 127 mean difference effect sizes from the 2014 to 2020 edTPA administrative reports. The findings of this meta-analysis underscore the significance of considering the diverse impacts of consequential use in the context of edTPA. The substantial overall mean difference effect size of .22 standard deviations, as derived from a random-effects model, points towards the notable influence of consequential use on edTPA performance. The staggering heterogeneity observed, as evidenced by a statistically significant Q statistic and an I² value of 99.96, emphasizes the complex nature of this phenomenon and the need for nuanced analysis. The moderation analysis further highlights the critical role played by content type and grade level in shaping the effects of consequential use. By revealing the statistical significance of these moderators, the study offers a deeper understanding of the

nuanced dynamics underlying the influence of consequential use on edTPA performance, thereby paving the way for more targeted and effective interventions in teacher education.

The moderation analysis focused on field grade level and content specialization, revealing statistically significant differences. The results indicated that consequential use's impact varied across grade levels and content areas. Notably, the middle grades exhibited the smallest mean difference, while secondary grades showed the largest mean difference. Additionally, all content areas demonstrated positive and statistically significant mean differences.

The implications of this study are multifaceted, with direct relevance to both research and practice in the field of teacher education. By shedding light on the nuanced relationship between consequential use and edTPA performance across various content fields, this research offers valuable insights that can inform the development of more effective teacher preparation programs. Moreover, the findings highlight the critical role played by content specialization and grade level in mediating the effects of consequential use, thereby emphasizing the need for tailored and context-specific approaches to teacher assessment. As such, this study holds the potential to inform the development of more targeted and effective educational policies and interventions aimed at enhancing teacher performance and, by extension, student learning outcomes.

As we reflect on these findings, it becomes clear that the impact of consequential use on edTPA performance extends beyond statistical measures. It speaks to the heart of teacher preparation and the complex interplay between assessment policies, teaching practices, and the future of education. The theoretical model presented in this study, anchored in the Diffusion of Innovation Theory, offers a conceptual framework for understanding the intricate relationship between preservice teachers' beliefs and edTPA performance. Observability, at the center of the model, is pivotal in influencing teachers' perceptions of relative advantage, compatibility, complexity, and trialability. This model contributes to understanding the dynamics of edTPA and provides a foundation for future research exploring the psychological and perceptual aspects of consequential assessments. Therefore, we propose a call to action for researchers and teacher educators.

Firstly, there is a pressing need for continued research that goes beyond the mean effect sizes and explores the nuanced experiences of preservice teachers. Qualitative inquiries can unveil teachers' lived experiences, challenges, and successes in navigating the consequential landscape of edTPA. Understanding the human side of assessment can inform the development of more empathetic and supportive teacher preparation programs. Secondly, teacher educators should engage in a reflective reassessment of how they incorporate edTPA into their programs. The significant differences observed based on content specialization and grade level underscore the importance of tailored support and guidance for teacher candidates. It is incumbent upon teacher educators to design interventions that address the unique challenges posed by consequential assessments in different educational contexts. Lastly, policymakers and education stakeholders should consider these findings in shaping assessment policies. A one-size-fits-all approach may not be conducive to fostering adequate teacher preparation. Policies that recognize

and account for the variability in the impact of consequential use based on content and grade level are crucial for ensuring fairness and promoting the development of highly skilled educators.

Conclusion

In the present meta-analysis on the consequential use of the edTPA and its impact on teacher performance, several key findings emerged, offering valuable insights for researchers and teacher educators. The study, guided by the Diffusion of Innovation Theory, delved into the nuanced dynamics across various content fields and grade levels, shedding light on the intricate relationship between consequential use and edTPA outcomes. The substantial overall mean difference effect size of 0.22 standard deviations signals a notable positive influence of consequential use on preservice teacher performance. This finding underscores the importance of recognizing the consequential nature of assessments in shaping teaching practices. The complex heterogeneity observed, with a staggering I² value of 99.96%, emphasizes the need for nuanced analysis and a deeper understanding of the contextual factors contributing to the variation in edTPA outcomes.

The moderator analysis provided important insights, revealing statistically significant grade-level and content specialization differences. The smallest mean difference in the middle grades and the largest in secondary grades highlight the variability in how consequential use affects teacher candidates across different educational contexts. The variability in the impact of consequential use across grade levels and content areas underscores the necessity for tailored approaches in teacher assessment and preparation programs, acknowledging the diverse impacts based on content and grade level.

In conclusion, this meta-analysis represents a significant contribution to understanding the complexities associated with the edTPA and its implications for practice. It calls upon researchers, teacher educators, and policymakers to collaborate in shaping the future of teacher preparation. By embracing the multifaceted nature of edTPA and considering the diverse impacts on teacher candidates, we can collectively contribute to cultivating a skilled and resilient teaching workforce, ultimately enhancing the quality of education for generations to come.

References

- Behizadeh, N., & Neely, A. (2018). Testing injustice: Examining the consequential validity of edTPA. *Equity & Excellence in Education*, 51(3–4), 242–264. <https://doi.org/10.1080/10665684.2019.1568927>
- Carter, J. H., & Lochte, H. A. (2017). Teacher Blame and Corporate Gain: edTPA and the Takeover of Teacher Education. In J. H. Carter & H. A. Lochte (Eds.), *Teacher Performance Assessment and Accountability Reforms: The Impacts of edTPA on Teaching and Schools* (pp. 7–23). Palgrave Macmillan US. https://doi.org/10.1057/978-1-137-56000-1_2
- Chung, B., & Zou, J. (2023, March). *Teacher licensing, teacher supply, and student achievement: Nationwide implementation of edTPA* (EdWorkingPaper No. 21-440). <https://doi.org/10.26300/ppz4-gv19>
- De Voto, C., & Gottlieb, J. J. (2021). The struggle to professionalize teaching: Examining edTPA as a professionalization and deprofessionalization tool. *Teachers College Record*, 123(9), 57-86.
- Denton, C. A., Wolters, C. A., York, M. J., Swanson, E., Kulesz, P. A., & Francis, D. J. (2015). Adolescents' use of reading comprehension strategies: Differences related to reading proficiency, grade level, and gender. *Learning and Individual Differences*, 37, 81–95. <https://doi.org/10.1016/j.lindif.2014.11.016>
- Hedges, L. V., Tipton, E., & Johnson, M. C. (2010). Robust variance estimation in meta-regression with dependent effect size estimates. *Research Synthesis Methods*, 1(1), 39–65. <https://doi.org/10.1002/jrsm.5>
- Hunter, J. E., & Schmidt, F. L. (2000). Fixed effects vs. random effects meta-analysis models: Implications for cumulative research knowledge. *International Journal of selection and assessment*, 8(4), 275-292. <https://doi.org/10.1111/1468-2389.00156>
- Lachuk, A. J., & Koellner, K. (2015). Performance-based assessment for certification: Insights from edTPA implementation. *Language Arts*, 93(2), 84-95.
- Gitomer, D. H., Martínez, J. F., Battey, D., & Hyland, N. E. (2021). Assessing the assessment: Evidence of reliability and validity in the edTPA. *American Educational Research Journal*, 58(1), 3–31. <https://doi.org/10.3102/0002831219890608>
- Goldhaber, D., Cowan, J., & Theobald, R. (2017). Evaluating prospective teachers: Testing the predictive validity of the edTPA. *Journal of Teacher Education*, 68(4), 377-393.

- Greenblatt, D. (2016). The consequences of edTPA. *Educational Leadership*, 73(8), 51-54.
- Hutt, E. L., Gottlieb, J., & Cohen, J. J. (2018). Diffusion in a vacuum: edTPA, legitimacy, and the rhetoric of teacher professionalization. *Teaching and Teacher Education*, 69, 52-61.
- Mihaly, K. and Mccaffrey, D.F. (2015). Grade-Level Variation in Observational Measures of Teacher Effectiveness. In T.J. Kane, K.A. Kerr and R.C. Pianta (Eds). *Designing Teacher Evaluation Systems* (pp. 9-49). John Wiley & Sons, Inc.
<https://doi.org/10.1002/9781119210856.ch2>
- Napolitano, K. V., Marrero, M. E., Gunning, A. M., Brandon, L. T., & Riccio, J. F. (2022). What happens after edTPA?. *Education Policy Analysis Archives*, 30, 80-80.
- Polly, D., Byker, E. J., & Putman, S. M. (2020). Examining elementary education teacher candidates' experiences completing edTPA. *The Teacher Educator*, 55(4), 392-410.
- Okraski, C. V., & Kissau, S. P. (2018). Impact of content-specific seminars on candidate edTPA preparation and performance. *Foreign Language Annals*, 51(3), 685–705.
<https://doi.org/10.1111/flan.12351>
- Ressler, M. B., King, K. B., & Nelson, H. (2017). Ensuring Quality Teacher Candidates: Does the edTPA Answer the Call? In J. H. Carter & H. A. Lochte (Eds.), *Teacher Performance Assessment and Accountability Reforms: The Impacts of edTPA on Teaching and Schools* (pp. 119–140). Palgrave Macmillan US. https://doi.org/10.1057/978-1-137-56000-1_7
- Rogers, E. M., Singhal, A., & Quinlan, M. M. (2014). Diffusion of innovations. In *An integrated approach to communication theory and research* (pp. 432-448). Routledge.
- Robert Powell, S., & Parkes, K. A. (2020). Teacher evaluation and performativity: The edTPA as a fabrication. *Arts Education Policy Review*, 121(4), 131-140.
- Ronfeldt, M. (2021). *Links among teacher preparation, retention, and teaching effectiveness*. National Academy of Education Committee on Evaluating and Improving Teacher Preparation Programs. National Academy of Education.
<https://doi.org/10.31094/2021/3/1>
- Viechtbauer, W., & Viechtbauer, M. W. (2015). Package 'metafor'. *The Comprehensive R Archive Network*. Package 'metafor'. <http://cran.r-project.org/web/packages/metafor/metafor.Pdf>
- Youngs P., Whittaker A. (2015). The role of EdTPA in assessing content specific instructional practices. In Youngs P., Grissom J. (Eds.), *Improving teacher evaluation systems* (pp. 89–101). New York, NY: Teachers College Press.

Acknowledgment of Editing Assistance

The authors acknowledge the use of Grammarly, an AI-powered writing assistant, to support grammar, punctuation, and style refinement during the manuscript preparation process. All edits were reviewed by the authors to ensure scholarly accuracy and integrity. Responsibility for the final content rests solely with the authors.

Armenian Students and Faculty Perceptions of Education in the United States

Sherrie Klee*

**Corresponding author*

Abstract

This study explores the assumptions held by Armenian students and faculty concerning their perceptions of the United States and its education system. A single-stage cluster survey was distributed to students and faculty from two universities located in Yerevan, Armenia. Eighty-four students and nine faculty participated in the study, all studying English as a subject major. The most important results of the study revealed students and faculty overwhelmingly (92.71%) expressed a desire to study/work in the United States. The most noted barriers that influenced the decision to study abroad included financial concerns, family, culture, language, and visa issues. The perceived benefits of studying/working in the United States included increased opportunities, financial gain, education, and language acquisition. The need to assist Armenian citizens in their desire for more opportunities may be found in supporting opportunities to study and work abroad in the United States.

Keywords: Armenian, student perceptions, study abroad

Sherrie Klee, Ph.D., is an Associate Professor at Grand Valley State University. Dr. Klee can be reached at willishe@gvsu.edu

Introduction

University students and faculty decide to study abroad based on a number of factors. The most commonly reported factor involved in deciding to study abroad is to advance career opportunities (Franklin, 2010; Potts, 2015; Yepiskoposyan, 2023). Factors such as financial constraints and previous travel experiences also influence participants (Naffziger et al., 2008). Participants' concept of family and their support can influence the decision to study abroad (Salisbury et al., 2009). Perceived support and resources from their university is additionally noted by students and faculty as deciding factors (Maringe & Carter, 2007). Yet, no matter what particular factors play in making the decision to study abroad, the final decision is based on the perception of benefits versus sacrifices (Naffziger et al., 2008).

In the Republic of Armenia, higher education remains highly entrenched in Soviet pedagogy and traditional teaching methodology. Study/teaching opportunities for students and faculty are generally supported more for the purpose of acquiring language skills than cultural exploration. As teaching methodology begins to embrace a more student-centered approach, study and teaching abroad opportunities are becoming more acceptable. With support offered by a Fulbright Scholarship, research was conducted on the perceptions of Armenian students and faculty concerning studying or teaching abroad in the United States. To explore the benefits versus sacrifices of Armenian students and faculty, this study collected data in Armenia aiming to determine the perceptions of studying/working abroad in the United States.

Armenia, like most post-Soviet nations after separating from the Soviet Union in 1991, is seeking to change and update their higher education system. Armenia remained under Soviet rule for 68 years adopting the Soviet mentality of the purpose of education. This mentality supported "curriculum and instructional practices that were (are) not geared towards developing individuals" (Terzian, 2016, p. 283). Armenia joined the Bologna Process in 2005, collaborating with the European Higher Education Area (EHEA) in hopes of moving higher education toward a more student-focused mind set. This was also the era Armenian Ministry of Education and Science created the Armenian National Curriculum and State Standards for Secondary Education, focusing on international influenced pedagogy.

According to Karakhanyan et al. (2011), "teachers found themselves caught between the world of prevailing Soviet practices and the world dictated by globalization process and Western countries in particular" (p. 509). Greater opportunities for improvement can be seen as a "new system offering more opportunities via greater mobility at the national and international level" (Karakhanyan et al. 2011, p. 516). One opportunity for improvement and growth for the Armenian students and faculty would be in studying/working abroad thereby broadening their cultural awareness and global knowledge. "Most Armenian adolescents have never traveled outside of their country (which is the size of Maryland) and therefore, have had few opportunities for first-hand contacts with people from other cultures (Huntsigner et al., 2019, p. 68).

Studying/working abroad has numerous advantages and challenges. Research exploring the advantages and challenges of studying/working abroad is fairly minimal, with most focus

being on student perceptions and decision-making processes. Students decide to study abroad based on their perceptions of benefits versus sacrifices. One of the most common reasons to study abroad is to further one's careers (Crossman & Clark, 2010; Potts, 2015; Shinn et al., 2009; Yepiskoposyan, 2023). Multi-national companies deem study abroad experiences as an asset to the workplace and give preferential treatment and opportunities to those who have international experience (Kratz & Netz, 2016; Petzold, 2017; Potts, 2015). Shinn et al. (2009) completed a study examining the perceptions of Armenian students on the topic of studying abroad. Within the finding of the study, 61% of students reported advancing their professional career was the main reason to study abroad.

Another reason often noted in the motivation to study abroad is the acquisition of language. Shinn and colleagues (2009) found learning a new language was chosen by 50% of Armenian students when asked what motivated them to want to study abroad. Study abroad is also often associated with academic needs to learn a new language motivated by a students' major area of study (Doppen et al., 2016). Haisley et al. (2021) found language learning to be a distinct motivation to studying abroad. Students considering studying abroad will weigh the value of the experience more favorably if the experience fits with degree progress (Naffziger et al., 2008). Originally, study abroad was considered a requirement for students studying a foreign language and it wasn't until the mid-1970's that study abroad opportunities became more mainstreamed for all students with an eye on cultural enrichment, particularly in the United States (Themudo et al., 2007).

Studying abroad to expand one's world view and global perspectives is an often-noted factor in deciding to study abroad (Curtis & Ledgerwood, 2018; Doppen et al. 2016; Zimmermann & Neyer, 2013). Shin et al. (2009) shared the intentions of Armenian students to study abroad due to personal growth and was noted in 47% of the participants sharing their views of study abroad. Another 45% of Armenian students included the concept of traveling and immersing in another culture as a motivator and learning experience. According to Doppen et al. (2016) acquiring a "broader view of the world" (p. 86) was a major consideration in deciding to study abroad for students.

The majority of studies defining the reasons why students study abroad includes the concern for finances in the decision-making process (Curtis & Ledgerwood, 2018; Naffzier et al., 2008; Shinn et al., 2008). In a study completed by Shinn et al. (2008) of Armenian university students, the top challenge when considering studying abroad was financial concerns. The decision to go abroad for Armenian students is often affected by economic factors (Han & Zhang, 2020). "One of the main economic motives for emigration (in Armenia) is insufficiently high wages and the low standard of living in Armenia" (Yepiskoposyan, 2023, p. 3). Not only was the cost of the schooling considered, but also that of housing, living expenses and other financial constraints. Many students need to work during their college experience to offset rising education costs (Hanson, 2021). Missing the earned income during the study abroad experience, combined with the expense of the study abroad experience itself often leaves a study abroad experience out of a student's reach (Reardon et al. 2022). Even when supported emotionally by family, affordability is a major consideration for students and their families when considering study abroad (Naffziger et al., 2018).

In Armenia the concept of family is viewed as a major component in a student's life and decisions. "Armenia has historically been an interdependent culture with strong closely knit families, which transmit powerful values and traditions to their children" (Kalayjian et al. 2007, p. 16). Armenian students consider the family and their support as a crucial decision-making component. The family unit in Armenia is viewed as a more nuclear entity than in many other areas in the world. Salisbury et al. (2009) found parents' attitudes and willingness to support the idea of study abroad contributed to a students' decision to study abroad. The decision for Armenian student to go abroad is often affected by the student's commitment to family and friends (Han & Zhang, 2020). Sargsyan & Cairns (2020) note the emotional connections to family and friends may outweigh their desire to be employed in their desired area.

Method

The survey methods and instrument (see Appendix A) were duly evaluated and approved by Human Subjects in Review protocol for both the United States university and Armenian university. The intent of the study was to answer the following questions:

1. What are the benefits and deficits as perceived by Armenian students and faculty of studying/working abroad in the U.S.?
2. What factors impact Armenian students and faculty's decision to study/work abroad in the U.S.?

The expectation of findings in this study are that Armenian students and faculty find a number of benefits in studying/working abroad, but variables such as finances and family commitment make this a difficult endeavor. Survey research methods were used to collect data from students and faculty at the Armenian State Teachers Training University (ASPU), also known as the Armenian State Pedagogical University and from students at Yerevan State University. Paper surveys were distributed to faculty and students due to limitations surrounding electronic availability and usage.

Participants

A single-stage cluster sample was used including students from both universities and faculty from ASPU, as well as students from Yerevan State University. The participants were enrolled or teaching graduate study courses in the subject area of English Language. This was a convenience sampling due to the limitations of language. Access to this particular group of faculty and students was aided due to the researcher's proximity as a Fulbright Scholar during the academic year. Contacts and introductions were made via this opportunity. By narrowing the population to this area of study, no need for translation or language decoding prohibited data collection. Eighty-four students and nine faculty members participated. Although gender was not accounted for on the survey, all but two participants of faculty were female. The gender of student participants was not collected or noted.

Instrument

The instrument, found in Appendix A, included Likert-type scale items designed to measure participants' perceptions of the United States and the concept of studying/teaching abroad. The descriptors were numbered 5 to 1 with 5 being strongly agree; 4 agree; 3 neither; 2 disagree; and 1 strongly disagree. Eight questions were included in the survey as noted on the following data analysis, followed by 3 open-ended questions intended to triangulate data collected from the Likert scale questions.

Procedures

Surveys were collected from students and faculty from the Armenian State Pedagogical University and students at Yerevan State University. Due to the limited availability of electronic devices and computers, paper surveys were used and collected by the researcher. Students were approached during a common course time in which instruction was provided in English. Students were asked to complete the survey but were not obligated and could opt out if desired.

Data Analysis

Data analysis was conducted by importing questions and answers into Qualtrics. Answers to open ended questions were grouped into like categories of barriers, benefits, and important factors to consider. The open-ended question section of the survey was further grouped into the following categories under the barriers section: money, family, culture, language, and citizenship. The benefits section was grouped into education, financial, language (native speaker) and opportunity. Most import factors were grouped into education, housing, finance, language (native speaker) opportunity, and safety. The frequency and percentages were calculated using the FREQ Procedure in SAS to support the responses given by each sub-group (students and faculty) in the Likert-scale section of the survey. This served as a triangulation of data to ensure validity of answers.

Results

All distributed surveys were collected with 100% participation rate (n=93). The data results represented below have been divided into two pools depicting the student responses and the faculty responses. Data is further delineated by the multiple-choice questions and Likert-scale response section with the open-ended response section intended to triangulate and further validate respondent's answers.

The first three tables represent the actual number of responses with the overall percentage of responses indicated in parenthesis. The first table indicates the overall combined data from both students and faculty from the multiple-choice questions and questions represented in the Likert-scale section of the survey.

Table 1*Combined Open-ended Question Responses from Faculty and Students*

	Disagree	Neutral	Agree
I have an interest in visiting the United States.	3 (3.13)	4 (4.17)	89 (92.71)
I am familiar with the culture of the United States.	12 (12.90)	24 (25.81)	57 (61.29)
I am familiar with the school systems in the United States.	29 (30.53)	34 (35.79)	32 (33.68)
I would feel safe visiting the United States.	21 (22.34)	34 (36.17)	39 (41.49)
I believe the Armenian education system is superior to the U.S. system.	49 (51.04)	31 (32.29)	16 (16.67)
I believe a degree issued from an Armenian university has the same value as a degree issued from a U.S. university.	52 (54.17)	30 (31.25)	14 (14.58)
I believe there are adequate opportunities presented to me for studying/working abroad in the United States.	8 (8.42)	23 (24.21)	64 (67.37)
I would consider studying/working in the U.S. if given the opportunity.	6 (6.38)	9 (9.57)	79 (84.04)

The data indicates students and faculty show interest in visiting the U.S.A. (92.71 collectively with 91.67% of students and 100% of faculty). This high percentage of interest in the U.S.A. would suggest perceptions of the U.S.A. and studying abroad must be considered favorable in answer to Research Question #1. Further support of this notion is found in answer to questioning if students and faculty would consider studying/working in the U.S with 84.04 collectively and 81.74% of students and 100% of faculty responding they would come to the U.S.A. This is in somewhat of a contrast to the data concerning feeling safe in the U.S.A. by students with 41.49% collectively and 34.5% of students indicated they would feel safe, while 100% of faculty indicated feeling safe.

Results concerning the value of the education system in the U.S. were also calculated. Results indicated 30.12% of students and 66.67% of faculty with 33.68 collectively claiming to be familiar with the U.S. system of education. When comparing the value of education received in Armenia to that of the U.S.A., 48.81% of students and 77.78% of faculty (51.04 collectively) felt the Armenian education system was inferior to that found in the U.S.A. The perception of a superior education in the U.S.A. was also found in the response to the perceived value of a degree question (54.17% collectively) and 58.33% of students indicating a degree from the U.S.A. is superior to a degree earned in Armenia. Faculty indicated the same percentage (33.33%) for agreeing a degree from the U.S.A. being superior. The perceptions of students and faculty support an answer to the question, “What are the benefits and deficits as perceived by

Armenian students and faculty of studying abroad in the U.S.A.?” by acknowledging the value placed on studying abroad and earning a degree from the U.S.A.

Table 2 represents data collected from only students with the percentage of responses in parenthesis and the actual number of responses noted before the percentages.

Table 2

Open-ended Question Responses from Students

	Disagree	Neutral	Agree
I have an interest in visiting the United States.	3 (3.57)	4 (4.76)	77 (91.67)
I am familiar with the culture of the United States.	11 (13.41)	23 (28.05)	48 (58.54)
I am familiar with the school systems in the United States.	27 (32.53)	31 (37.35)	25 (30.12)
I would feel safe visiting the United States.	21 (25.61)	33 (40.24)	28 (34.15)
I believe the Armenian education system is superior to the U.S. system.	41 (48.81)	29 (34.52)	14 (16.67)
I believe a degree issued from an Armenian university has the same value as a degree issued from a U.S. university.	49 (58.33)	26 (30.95)	9 (10.71)
I believe there are adequate opportunities presented to me for studying/working abroad in the United States.	6 (7.23)	21 (25.30)	56 (67.47)
I would consider studying/working in the U.S. if given the opportunity.	6 (7.32)	9 (10.98)	67 (81.71)

Table 3 represents data collected from only faculty with the percentage of responses in parenthesis and the actual number of responses noted before the percentages.

Table 3

Open-ended Question Responses from Faculty

	Disagree	Neutral	Agree
I have an interest in visiting the United States.	. (.)	. (.)	9 (100.00)
I am familiar with the culture of the United States.	. (.)	. (.)	9 (100.00)
I am familiar with the school systems in the United States.	1 (11.11)	2 (22.22)	6 (66.67)
I would feel safe visiting the United States.	. (.)	. (.)	9 (100.00)
I believe the Armenian education system is superior to the U.S. system.	7 (77.78)	2 (22.22)	. (.)
I believe a degree issued from an Armenian university has the same value as a degree issued from a U.S. university.	3 (33.33)	3 (33.33)	3 (33.33)
I believe there are adequate opportunities presented to me for studying/working abroad in the United States.	2 (22.22)	1 (11.11)	6 (66.67)
I would consider studying/working in the U.S. if given the opportunity.	. (.)	. (.)	9 (100.00)

Data intended to answer the second research question, “What factors impact Armenian students and faculty’s decision to study/work abroad in the U.S.?” were also collected. The survey asked the open-ended question; “list the greatest barriers in studying/working abroad in the U.S.” Data were analyzed and compiled into the following themes for students: money, family, culture, language, citizenship/visas. Faculty themes included like categories except for language and money. Once themes were established the frequency in which they appeared in student and faculty responses were indicated by Figures 1 and 2. It should be noted that all faculty participants spoke and/or taught English language courses. Therefore, the concern for language barriers in the U.S.A. was not relevant.

The greatest barrier for students was money with 39 of 84 (46.43%) participants listing money as a barrier to study abroad. This is consistent with findings from a plethora of literature in identifying barriers to study abroad. The concept of family appears as the next highest barrier

with 34.52%, or 29 of students, identifying this concept. Faculty responded with one participant identifying family as a deterrent. The cultural dynamics of the importance of family in the Armenian culture certainly impacts this category. Student responses included references to not wanting to leave or be far away from family members. Numerous responses specifically named approval of parents or reluctance to be away from parents. This ties with the notion of cultural difference and the fact 22.62% of students noted their fear or resistance to learning another culture's expectations. This suggests overall Armenian students are more comfortable in their own culture and families. Additionally, two faculty members cited cultural differences and expectations as a barrier in teaching abroad.

The language barrier was a greater concern for students with 13 (15.48%) students listing it as a concern. No faculty cited language as a concern, but as mentioned above, all faculty were currently fluent in English. The final theme that emerged as a barrier was citizenship issues and/or visa acquisition. Armenian citizens have greater restrictions on travel outside of the region and those coming to the U.S. need to hold a visa for permission to enter the U.S.

Figure 1 indicates the frequency of themed answers reported by students as to the barriers perceived in studying abroad in the U.S.

Figure 1

Frequency of Barriers as Perceived by Students

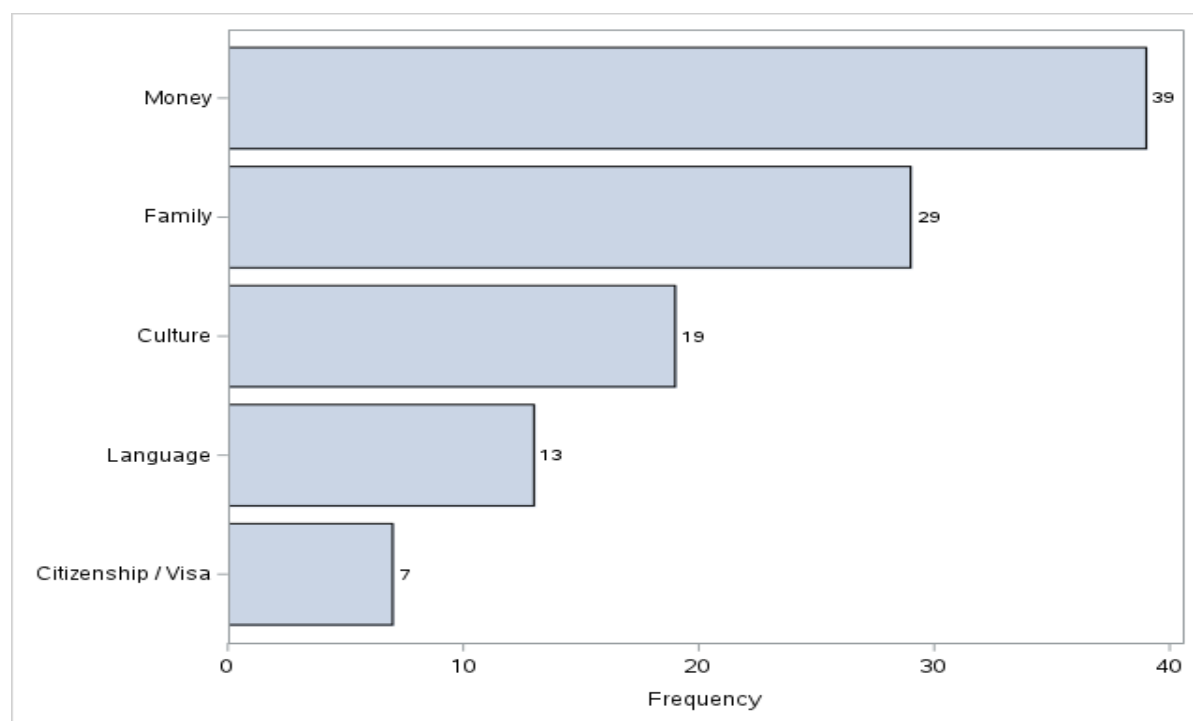
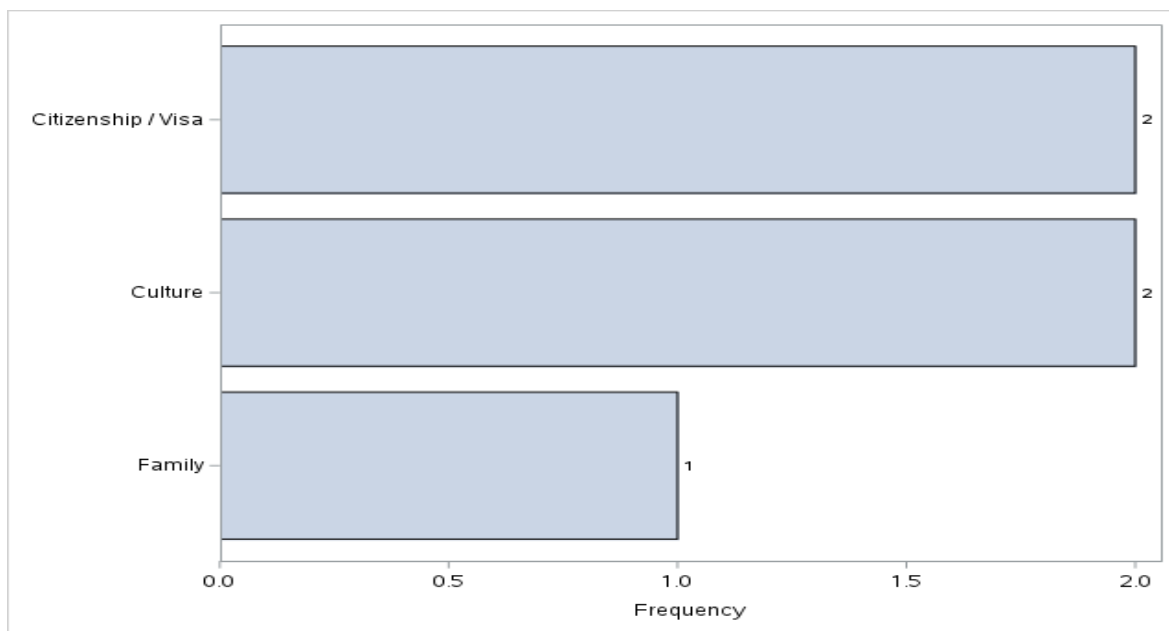


Figure 2 indicates the frequency of themed answers reported by faculty as to the barriers perceived in studying abroad in the U.S.A.

Figure 2

Frequency of Barriers as Perceived by Faculty



Adding to the data that answers the question, “What factors impact Armenian students and faculty’s decision to study abroad in the U.S.?” is an examination of the perceived benefits students and faculty have concerning teaching/studying abroad in the U.S.A. Both faculty and students noted opportunities as the top benefit in teaching/studying abroad with 41.67% of students 22.22% of faculty listing this option. Financial opportunities, or the perception of obtaining a better paying job, was the next identified category. Twenty-two students (26.19%) indicated they believed there would be greater opportunities for good-paying employment in the U.S.A. with one faculty member echoing the same sentiment. The collective data indicates 64% of those surveyed believe there are adequate opportunities of study/work abroad while 24.21% indicated a neutral response. This indicates a belief of benefits in studying/working abroad but may point to a limited number of opportunities.

The next closely identified benefit to teaching/studying abroad was issues surrounding the acquisition of the English language. Seventeen students (20.24%) identified the ability to practice and participate in conversation with native English speakers as a benefit. This may represent a skewed percentage as all student participants were enrolled in English of some degree as their education major. The percentage of faculty, one or 11.11%, may also represent a skewed data report as all faculty were teaching English or a subject in English. And finally, the benefit of education was represented by 19 students (22.62%) and one (11.11%) of faculty. This lends support to the positive perception of the U.S.A. education system as noted above.

Figure 3 below outlines the frequency of answers from students concerning perceived benefits of study abroad in the U.S.A.

Figure 3

Frequency of Benefits as Perceived by Students

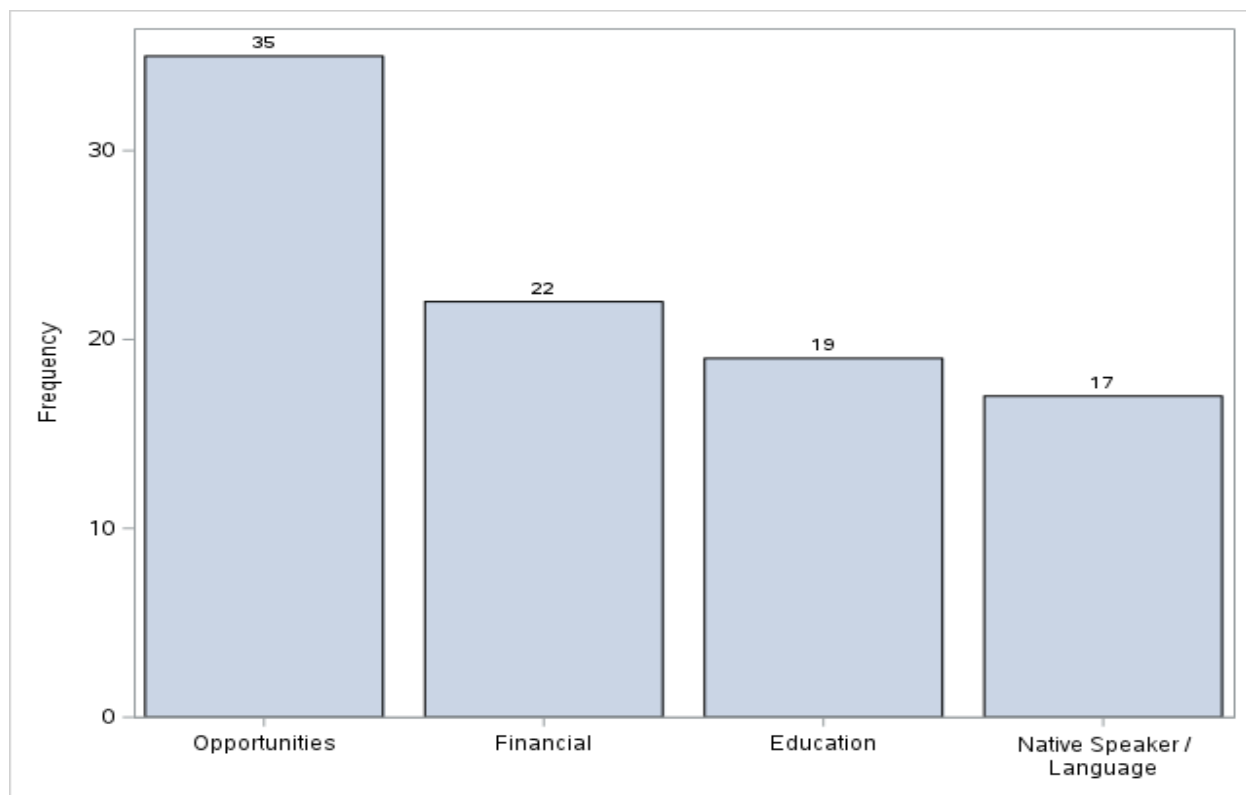
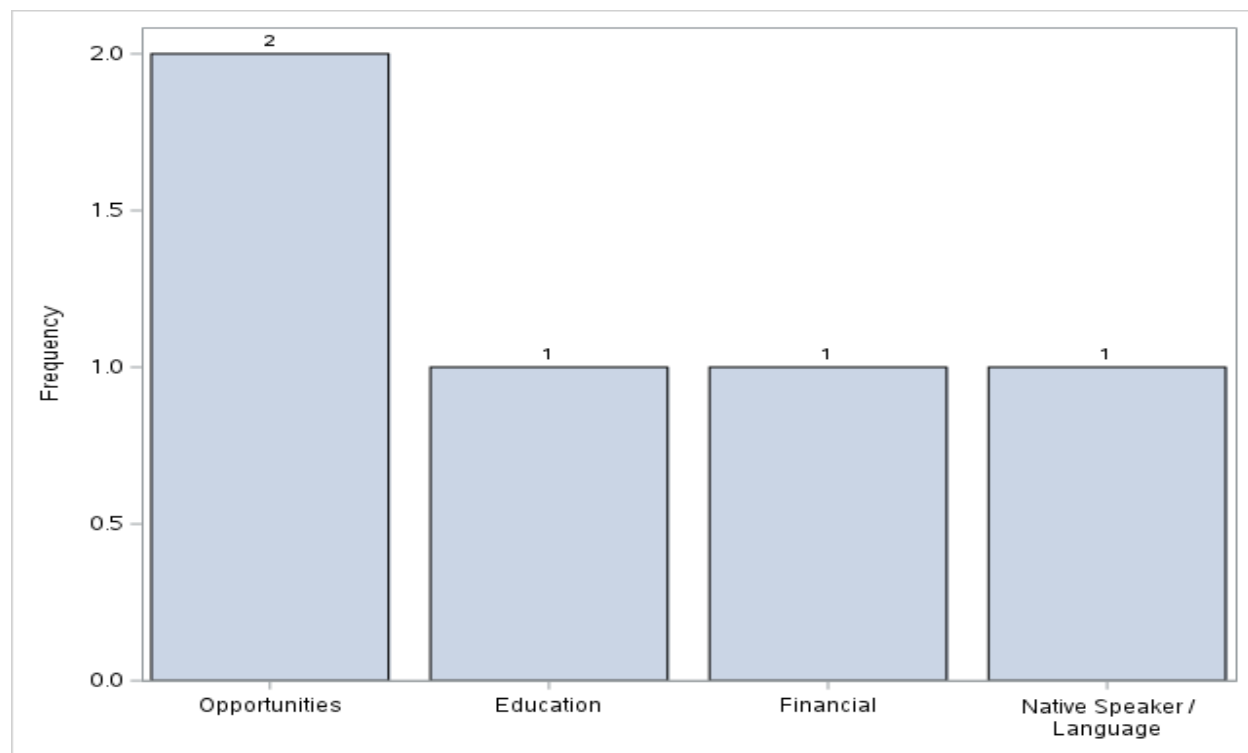


Figure 4 outlines the frequency of answers from faculty concerning perceived benefits of study abroad in the U.S.

Figure 4

Frequency of Benefits as Perceived by Faculty



Discussion

According to Han and Zhang (2020) “the problem of student and graduate mobility is a very new research issue” for the people of Armenia (p. 2). The current literature tends to focus on the mobility issue itself and less on why people move (Han & Zhang, 2020). Furthermore, the mobility of Armenian graduates is concentrated mostly in the United States and the European Union (Han & Zhang, 2020). One explanation of this phenomenon may be the concept of neighboring countries not being accessible due to political reasons (Sargsyan & Cairns, 2020; Yepiskoposyan, 2023). Further research on why those are the destinations of choice may help explain the perceptions of benefits and deficits for each destination.

Studying/working abroad is rich with numerous benefits for students and faculty alike. When surveyed, 89% of Armenian students expressed an interest in studying abroad with the U.S.A. being their first choice (Shinn et. al., 2009). Opportunities and advancement of one’s career is a benefit noted by Armenian faculty and students alike. In conjunction with the notion of advancing one’s career, the idea of being able to earn more money was identified as a major benefit to study/work abroad. This, coupled with the high unemployment rates in Armenia, may add to the desire to study/work abroad (Sargsyan & Cairns, 2020; Yepiskoposyan, 2023). The

acquisition of language and the ability to practice language with native speakers was an additional benefit for Armenian faculty and students seeking to improve their English-speaking skills. All of these identified benefits can be linked to expanding one's view of world and becoming a more aware global citizen.

However, there are obstacles involved in making the decision to study/teach abroad. In Armenia, with its post-soviet educational system, the obstacles may seem more pronounced than in Western culture such as the U.S.A. Financial concerns are noted as a major deterrent to seek a study abroad experience. Dedication to one's family and the concept of being away from home was a strong barrier to the decision to study/teach abroad. Armenia, with its rich culture of strong family ties and closely knit families, seems to be a more pronounced factor in the decision to study/work abroad than in Western culture. Unknown cultural expectations and the difference in cultural norms played a role in decision making for Armenian faculty and students as well. Additionally, the difficulty of securing permission or a visa for entry into the U.S.A. presents another obstacle to overcome when considering working/studying abroad.

Limitations of this study include the lack of data collected based on the language preference. Data were collected from students and faculty fluent in English and studying English in some capacity at a higher education level. Collection from all major areas of study would prove a more rounded collection of data. An even larger scope could be obtained by seeking perceptions from those outside of the world of academia, both professional and manual laborers. This could provide a wholistic measure of Armenia citizens as a whole. Additionally, much of the current literature focus' on studying/working abroad from a world view rather than specific to Armenian citizens. This study can add to the literature by specifically addressing the Armenian people and perspectives.

Conclusions

This study is relevant in addressing the gap in literature investigating the perceptions and intentions of faculty students in higher education in Armenia. Little research focuses directly on this population of students and faculty. Therefore, much of the literature makes assumptions and groups those of Armenian descent with other post-soviet or European countries.

In order to assist Armenian faculty and students in their desire to move forward in the evolution of their education system, support must be offered to those seeking international experiences. Namely, financial support and commitment from the education institutions and government sponsored programs should be considered. With the high percentage of all respondents at 92.71%; students at (91.67%) and faculty at (100%) found to have an interest in working/studying abroad in the U.S. more attention should be given to creating opportunities from both Armenian officials and U.S. officials. This high level of interest is also supported by Shinn, et al. (2009) in their study of Armenian college students, with 89% identifying a desire to study abroad in the U.S as their first choice of locations.

Additional opportunities for cross-cultural learning could also benefit Armenian faculty and students in considering studying/working abroad in the U.S.A. Both students and faculty noted cultural difference and uncertainties and a barrier to the decision to study abroad in the

U.S.A. By supporting more faculty/student exchanges and supporting the creation of relationships between faculty and students a deeper understanding of U.S.A. culture can be shared. This, in turn, would benefit the U.S.A. students who would come to learn cultural differences and similarities of the Armenian faculty and students. A two-way benefit for students and faculty would be eminent. The world is becoming a smaller place with the inclusion of a global mindset for all. By supporting the concept of studying/working abroad the beneficiaries of these activities will help move society forward as a whole.

References

- Crossman, J.E., & Clark, M. (2010). International experience and graduate employability: Stakeholder perceptions on the connection. *Higher Education*, 59(5), 599-613. <https://data.informit.org/doi/10.3316/aeipt.180823>
- Curtis, T., Ledgerwood, J.R. (2018). Students' motivations, perceived benefits, and constraints towards study abroad and other international education opportunities. *Journal of International Education in Business*, 11(1), 63-78. <http://www.emeraldinsight.com/doi/10.1108/JIEB-01-2017-0002>
- Doppen, F.H., An, J.A., Diki, K. (2016). Why do student teachers go global. *The Journal of Social Studies Research*, 40, 85-95. <https://doi.org/10.1016/j.jssr.2015.05.002>
- Franklin, K. (2010). Long-term career impact and professional applicability of the study abroad experience. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 19, 169-190.
- Haisley, P., Grandorff, C., Agbonlahor, O., Mendez, S.L., & Hansen, M. (2021). Why study abroad: Differences in motivation between US and international students. *Journal of Global Education and Research*, 5(2), 185-201. <https://doi.org/10.5038/2577-509X.5.2.1146>
- Hanson, M. (2021). "Average cost of college and tuition", Education Data Initiative, <https://educationaldata.org/average-cost-of-college> (accessed 3/1/2024).
- Han, H. & Zhang, L. (2020). Student and graduate mobility in Armenia. *JEP: EJournal of Education Policy*, 21(2), 1-3. <https://doi.org/10.32674/jis.v10i4.2348>
- Huntsinger, C.S., Shaboyan, T., & Karapetyan, A.M. (2019). The influence of globalization on adolescent's conceptions of self and future self in rural and urban Armenia. In J. McKenzie (ed.), *Globalization as a Context for Youth Development. New Directions For Child and Adolescent Development*, 164, 67-82. <https://doi.org/10.1002/cad.20280>
- Kalayjian, A., Jesmaridian, S., & Swenson E. (2007). In J.J. Arnett (Ed.) *International encyclopedia of adolescence: A-J Index* Vol 1, pp. 16-24. Taylor & Francis.
- Karakhanyan, S., Khachatryan, R. (2023). The dilemma of "good practices" in Armenian higher education, *International Higher Education*, (115), 26-28.
- Karakhanyan, S., vanVeen, K., & Bergen, T.C.M. (2011). Teachers' voices in context of higher education reforms in Armenia. *European Journal of Education* 46(4). 508-523. <https://doi.org/10.1111/j.1465-3435.2011.01497.x>
- Kratz, F., & Netz, N. (2016). Which mechanisms explain monetary returns to international student mobility? *Studies in Higher Education*, 43(2), 375-400. <https://doi.org/10.1080/03075079.2016.1172307>

- Maringe, F., & Carter, S. (2007). International students' motivations for studying in UK HE: Insights into the choice and decision making of African students. *International Journal of Educational Management*, 21, 459-475. <https://doi.org/10.1108/09513540710780000>
- Naffziger, D.W., Bott, J.P., & Mueller, C.B. (2008). Factors influencing study abroad decisions among college of business students. *International Business: Research, Teaching and Practice*, 2(1), 39-52.
- Petzold, K. (2017). Studying abroad as a sorting criterion in the recruitment process: A field experiment among German employers. *Journal of International Education* 21(5), 412-430. <https://doi.org/10.1177/1028315317697543>
- Potts, D. (2015). Understanding the early career benefits of learning abroad programs. *Journal of Studies in International Education*, 19(5), p, 441-459. <https://doi.org/10.1177/1028315315579241>
- Reardon, J., Miller, C., McCorkle, D. (2022). The effect of student perceived benefits and obstacles to determine if and where to study abroad. *Journal of International Education in Business*, 15(2), 351-372. <https://doi.org/10.1108/JIEB-05-2021-0060>
- Salisbury, M.H., Umbach, P.D., Paulsen, M.B. & Pascarella, E. T. (2009). Going global: Understanding the choice process of the intent to study abroad. *Research in Higher Education*, 50(2), 119-143. <http://doi.org/10.1007/s11162-008-9111-x>
- Sargsyan, M., & Cairns, D. (2020). Home or away? Pathways to employment for the highly qualified in Armenia after the Velvet Revolution. *Young*, 28(3), 259–274. <https://doi.org/10.1177/1103308819861793>
- Shinn, G.C., Briers, G., Navarro, M., Peake, J., Parr, B., Ter-Mkrtchyan, A. & Duncan, D. (2009). Through student eyes: Perceptions and aspirations of students from the Armenian State Agrarian University and selected European universities. *The Journal of Agricultural Education and Extension*, 15(3), p. 245-255. <https://doi.org/10.1080/13892240903069553>
- Terzian, S. (2016). International influences on Post-Soviet Armenian education. *European Journal of Education*, Vol. 51(2). <https://doi.org/10.1111/ejed.12143>
- Themudo, D., Page, D., & Benander, R. (2007). Student and faculty perceptions of the impact of study abroad on language acquisition, culture shock, and personal growth. *Aurco Journal*, 13, 65-79.
- Yepiskoposyan, R. S. (2023). Sociological analysis of causes and consequences emigration in Armenia. *German International Journal of Modern Science / Deutsche Internationale Zeitschrift Für Zeitgenössische Wissenschaft*, 66, 71–74. <https://doi.org/10.5281/zenodo.10021854>

Zimmermann, J., & Neyer, F.J. (2013). Do we become a different person when hitting the road? Personality development of sojourners. *Journal of Personality and Social Psychology*, 105(3), 515-530. <https://doi.org/10.1037/a0033019>

Appendix A
Armenia Student/Faculty Questionnaire



International Perspectives of the US from Students and Faculty in Armenia

The purpose of this study is to explore culture assumptions held by Armenian students and faculty concerning the United States and the education system by exploring their experiences, questions and ideas of the United States. Your participation in this research study is completely voluntary. You do not have to participate. You may quit at any time without any penalty to you. Your name will not be given to anyone. All information collected from you or about you is for the sole purpose of this research study and will be kept confidential and anonymous to the fullest extent allowed by law.

Please respond to the following questions.

Are you currently:

_____ student

_____ faculty

_____ neither

Have you ever visited the United States:

_____ yes

_____ no

Question 1 I have an interest in visiting the United States

5	4	3	2	1
Strongly Agree	Agree	Neither Or N/A	Disagree	Strongly Disagree

Question 2 I am familiar with the culture of the United States

5	4	3	2	1
Strongly Agree	Agree	Neither Or N/A	Disagree	Strongly Disagree

Question 3 I am familiar with the school systems in the United States

5 Strongly Agree	4 Agree	3 Neither Or N/A	2 Disagree	1 Strongly Disagree
---------------------	------------	---------------------	---------------	------------------------

Question 4 I would feel safe visiting the United States

5 Strongly Agree	4 Agree	3 Neither Or N/A	2 Disagree	1 Strongly Disagree
---------------------	------------	---------------------	---------------	------------------------

Question 5 I believe the Armenian education system is superior to the U.S. system

5 Strongly Agree	4 Agree	3 Neither Or N/A	2 Disagree	1 Strongly Disagree
---------------------	------------	---------------------	---------------	------------------------

Question 6 I believe a degree issued from an Armenian university has the same value as a degree issued from a U.S. university

5 Strongly Agree	4 Agree	3 Neither Or N/A	2 Disagree	1 Strongly Disagree
---------------------	------------	---------------------	---------------	------------------------

Question 7 I believe there are adequate opportunities presented to me for studying/working abroad in the United States

5 Strongly Agree	4 Agree	3 Neither Or N/A	2 Disagree	1 Strongly Disagree
---------------------	------------	---------------------	---------------	------------------------

Question 8 I would consider studying/working in the U.S. if given the opportunity

5 Strongly Agree	4 Agree	3 Neither Or N/A	2 Disagree	1 Strongly Disagree
---------------------	------------	---------------------	---------------	------------------------

Please list the greatest barriers in studying/working abroad in the United States?

Please list the greatest benefits in studying/working abroad in the United States?

Please list the most important factors to consider for you personally in deciding to study/work abroad in the United States?

General Education Teacher Attitudes Toward the Inclusion of Students with Special Educational Needs in United Arab Emirates Mainstream Schools

Malak Jihad*

**Corresponding author*

Abstract

This quantitative study investigated the attitudes of general education teachers in the United Arab Emirates (UAE) toward the inclusion of students with special educational needs (SEN) in mainstream classrooms. Utilizing a structured questionnaire distributed to 100 teachers across various emirates, the research aimed to identify prevailing perceptions and examine how factors such as training, teaching experience, and institutional support influence these attitudes. Data analysis, conducted using SPSS software, included descriptive statistics, reliability testing, and correlation analyses to ensure robust and valid findings.

The results indicate a generally positive attitude toward inclusion, particularly among teachers who have received formal training in inclusive education or have previous experience teaching students with SEN. Teachers expressed a willingness to accommodate diverse learning needs but also voiced significant concerns regarding the adequacy of resources, availability of classroom support staff, and time constraints. These concerns were more pronounced among teachers working in overcrowded classrooms or with limited access to professional development opportunities.

The findings highlight the critical role of ongoing professional development and the provision of adequate institutional support in fostering more inclusive classroom environments. The study also emphasizes the importance of school leadership and policy frameworks that promote collaboration, differentiation, and access to assistive technologies.

This research contributes to the growing body of knowledge on inclusive education in the UAE context and provides practical insights for policymakers, educational leaders, and teacher training institutions. Recommendations for future research include longitudinal studies, exploration of student outcomes, and comparative analyses across public and private school sectors.

Keywords: *inclusion, special education, UAE, mainstream education, teacher attitudes, quantitative research*

Jihad Malak is Head of Inclusion at the Al Qurm School in the United Arab Emirates. She can be reached at 202170002@uaeu.ac

Introduction

Inclusive education has become a global imperative, aiming to provide equitable learning opportunities for all students, regardless of their abilities or disabilities. This approach is grounded in the belief that all children, including those with special educational needs (SEN), have the right to be educated alongside their peers in mainstream settings, where diversity is embraced and supported. Over the past decade, there has been a significant shift in educational policies and practices worldwide, reflecting a growing commitment to inclusion as a fundamental human right and educational principle.

The United Arab Emirates (UAE) has made considerable strides toward aligning its educational system with global inclusive education standards. Guided by international frameworks such as the United Nations Convention on the Rights of Persons with Disabilities and the Sustainable Development Goals (SDGs), particularly Goal 4 Quality Education, the UAE has developed national policies and strategies aimed at promoting inclusive practices across public and private school systems. These include the “School for All” initiative and the implementation of the Ministry of Education's inclusive education guidelines, which call for differentiated instruction, Individual Education Plans (IEPs), and the involvement of specialized support staff. Despite these efforts, the effectiveness of inclusion depends largely on the attitudes and readiness of general education teachers, who are on the front lines of implementation.

In the UAE, the teaching workforce is highly diverse, with educators coming from various cultural, linguistic, and educational backgrounds. This diversity can influence individual perceptions and acceptance of inclusive education practices. While government mandates promote the integration of SEN students into mainstream classrooms, research indicates that many teachers feel inadequately prepared, undertrained, or unsupported to meet the complex needs of learners with disabilities. A lack of sufficient resources, professional development opportunities, and classroom assistance often hinders the practical application of inclusive strategies, despite teachers' personal willingness to support inclusion.

Furthermore, institutional factors such as leadership commitment, school culture, and access to ongoing support services can significantly shape how inclusion is practiced on the ground. Inconsistent implementation across schools suggests a need for further investigation into the underlying variables that affect teachers' engagement with inclusion.

This study aimed to explore the attitudes of general education teachers in UAE mainstream schools toward the inclusion of SEN students. Specifically, it examined how variables such as professional training, teaching experience, and perceived institutional support correlate with teachers' confidence and willingness to implement inclusive practices. By surveying a sample of 100 teachers from different emirates and educational settings, this research intended to capture a wide range of perspectives and experiences.

Understanding these dynamics is essential for developing evidence-based recommendations that can inform teacher training programs, improve policy implementation, and ultimately create more inclusive school environments. The findings of this study have the potential

to guide educational leaders, policymakers, and stakeholders in enhancing the UAE's inclusive education framework.

This study addresses the following research questions:

1. What are the general attitudes of teachers toward the inclusion of SEN students in mainstream classrooms?
2. How do training, teaching experience, and institutional support impact these attitudes?

Literature Review

Inclusive education involves integrating students with diverse abilities into general education classrooms, promoting equal access to meaningful learning experiences. Rooted in the philosophy of equity and social justice, inclusive education emphasizes the need to accommodate all learners regardless of their physical, cognitive, emotional, or sensory needs. Globally, educational systems have been shifting from segregated models to inclusive frameworks, recognizing that inclusion is not merely a placement issue but a matter of transforming the system to meet diverse student needs.

International frameworks such as UNESCO's Salamanca Statement (1994) and the United Nations Convention on the Rights of Persons with Disabilities (CRPD) (2006) strongly advocate for inclusive practices. These documents assert that inclusive education is a right and an essential element in achieving full participation and equality in society. They call for the removal of barriers that limit participation, emphasizing teacher training, community engagement, and systemic reform as essential components of inclusive implementation. Following this global trend, many countries, including the United Arab Emirates (UAE), have introduced inclusive education initiatives that seek to dismantle systemic and attitudinal barriers to learning.

In response to international obligations, the UAE has implemented national policies aimed at fostering inclusive education, particularly following the launch of its 2017 Policy for Inclusive Education. The policy outlines a commitment to provide quality education for all students, including those with special educational needs (SEN). It emphasizes differentiated instruction, Individual Education Plans (IEPs), and the need for collaborative teaching approaches. The UAE Vision 2021 and Centennial 2071 strategies further embed inclusive principles into the broader national development agenda. Despite these policy advancements, gaps remain in the practical implementation of inclusion, especially at the classroom level.

A significant body of research has identified teacher attitudes as a key determinant of the success of inclusive education. Positive teacher attitudes can lead to more successful integration of students with SEN, while negative perceptions may hinder inclusive practices. Avramidis and Norwich (2002) conducted a meta-analysis revealing that teachers' attitudes are influenced by their training, years of experience, and the level of support available in their schools. Teachers with formal training in special education or inclusive strategies are more likely to demonstrate positive perceptions and greater self-efficacy in handling diverse classrooms. Similarly, Forlin et al. (2009) emphasized the importance of targeted professional development. Their research indicated that

teachers who feel confident in their instructional strategies and classroom management techniques tend to support inclusion more enthusiastically.

In the Middle Eastern context, particularly in the UAE, research presents a complex picture. Studies by Alghazo and Gaad (2004) show that while many UAE teachers are philosophically in favor of inclusion, they often feel inadequately prepared to implement it effectively. One of the main barriers identified is insufficient teacher training specific to inclusive education. Many teachers receive general pedagogical training without adequate exposure to strategies for differentiating instruction, managing diverse learners, or addressing behavioral challenges. This creates a disconnect between policy and practice.

Another recurring challenge is the lack of classroom assistants or co-teachers who can provide additional support for students with SEN. Teachers often report that they feel overwhelmed managing the diverse needs of all students without adequate support. Gaad (2011) pointed out that adapted curricula are often missing or inconsistently applied across schools, leaving teachers to modify lessons independently, which can be time-consuming and stressful. In this regard, access to appropriate resources, such as assistive technology and modified teaching materials, becomes a vital factor in facilitating successful inclusion.

Cultural perceptions of disability in the UAE and broader Arab world also influence how inclusion is perceived and implemented. There remains a degree of social stigma associated with disabilities, which may affect parental expectations, teacher biases, and peer acceptance of students with SEN. Gaad and Khan (2007) argued for the need to adopt culturally responsive inclusion models that respect local values while promoting the rights of individuals with disabilities. These models should emphasize both educational and social integration, ensuring that students with SEN are not merely present in classrooms but actively engaged and supported.

Policy documents such as the UAE School for All guidelines have highlighted the importance of inclusive leadership, ongoing professional development, and collaborative teaching as pillars of effective inclusive education. However, as noted by Alnahdi (2020), the implementation of inclusive education remains inconsistent across different emirates and school types. Some schools benefit from strong leadership and well-established inclusion teams, while others lack the necessary structures and personnel to fully implement inclusive practices. Alnahdi recommends the development of school-wide frameworks and increased investment in human and material resources to support inclusion.

Teaching experience also plays a significant role in shaping attitudes toward inclusion. Sharma and Sokal (2015) found that teachers with more experience working with students with SEN tend to have more positive attitudes and a higher sense of efficacy. These teachers are generally more adaptable and open to using differentiated instruction. Nonetheless, experience alone may not be sufficient without ongoing support. The presence of inclusion specialists, therapists, and administrative backing is critical for ensuring that teachers do not feel isolated in their efforts to implement inclusive strategies.

Another dimension to consider is pre-service teacher education. Research by Loreman et al. (2007) has shown that exposure to inclusive education principles during university training can

significantly impact future teachers' readiness and confidence. In the UAE, universities are increasingly embedding inclusive education modules into teacher preparation programs, yet the depth and consistency of such content can vary widely.

This literature review underscores that while the UAE's policy environment is supportive of inclusion, practical challenges remain. Teachers' attitudes are not formed in isolation but are shaped by their training, the support systems available in their schools, and their personal experiences. Understanding these factors is critical to designing effective interventions aimed at promoting inclusive education. The present study aims to explore these variables within the UAE context by gathering empirical data on teachers' perceptions and the factors influencing them.

By addressing the current gaps in implementation and understanding the nuanced perspectives of general education teachers, this study contributes to the growing body of research focused on inclusive education in the Gulf region. Its findings are intended to inform future policy decisions, support the development of professional training programs, and ultimately promote more inclusive and equitable educational environments for all learners.

Method

Research Design

This study employed a quantitative, cross-sectional survey research design to examine the attitudes of general education teachers toward the inclusion of students with special educational needs (SEN) in mainstream classrooms across the United Arab Emirates (UAE). The quantitative approach was chosen to collect standardized data across a wide sample, enabling statistical analysis of trends and relationships among key variables such as experience, training, and perceived institutional support. The cross-sectional nature of the study allowed data to be collected at a single point in time, providing a snapshot of current attitudes within the UAE educational context.

Participants

A sample of 100 general education teachers working in public and private mainstream schools across the emirates of Abu Dhabi and Dubai was selected using purposive sampling. This sampling method ensured that participants met specific criteria relevant to the study's objectives. Inclusion criteria required teachers to have at least one year of teaching experience in a mainstream classroom setting. The sample was diverse in terms of age, gender, years of experience, educational qualifications, and exposure to inclusive education training. Efforts were made to ensure representation from both elementary and secondary school teachers, as well as those teaching in different curriculum frameworks (e.g., British, American, MOE). The diversity of the sample aimed to enhance the generalizability of the findings within the UAE school context.

Instrument

Data were collected through a structured, self-administered online questionnaire developed by the researcher based on existing literature and similar validated instruments. The questionnaire consisted of three sections:

1. Demographic Information: Included questions about participants' age, gender, years of teaching experience, educational background, and whether they had received training in inclusive education.
2. Attitudes Toward Inclusion: Comprised 15 Likert-scale items rated on a 5-point scale from 1 (Strongly Disagree) to 5 (Strongly Agree), assessing participants' beliefs about the feasibility, benefits, and challenges of inclusion.
3. Support and Resources: Included 5 items evaluating participants' perceptions of institutional support, availability of resources, and collaboration with specialists.

The questionnaire underwent expert validation by three academics in special and inclusive education to ensure content validity. A pilot study was conducted with 10 general education teachers to assess clarity and reliability. Based on feedback, minor adjustments were made. The final instrument achieved a Cronbach's Alpha reliability coefficient of 0.89, indicating high internal consistency.

Procedure

The questionnaire was distributed via email, WhatsApp groups, and educational social media platforms targeting teachers in the UAE. Participation was voluntary, anonymous, and confidential. Data collection occurred over a two-week period in March 2025. Participants provided informed consent electronically before accessing the survey. No incentives were offered to maintain voluntary participation.

Data Analysis

All responses were analyzed using IBM SPSS Statistics. Descriptive statistics, including means, standard deviations, frequencies, and histograms, were generated to summarize participant responses. Cronbach's Alpha was used to assess internal consistency reliability. Pearson correlation analysis was conducted to explore relationships between teacher training, teaching experience, support, and attitudes toward inclusion. These analyses provided insight into the variables that may influence inclusive practice.

Ethical Considerations

Participants were informed of their right to withdraw at any time without penalty. All data were stored securely and used solely for research purposes. No personally identifiable information was collected, ensuring participant anonymity and data confidentiality throughout the research process.

Results

The purpose of this study was to explore the attitudes of general education teachers in the UAE toward the inclusion of students with special educational needs (SEN), and to examine how teacher training, teaching experience, and perceived institutional support influence these attitudes. The data were analyzed using descriptive statistics, reliability analysis, and Pearson correlation to address the research questions.

Descriptive Statistics

Descriptive statistics provided an overview of the general trends in participants' responses. The mean score on the attitude scale was $M = 3.97$, with a standard deviation (SD) of 0.62, suggesting that the teachers surveyed generally held positive attitudes toward inclusion. This mean is close to 4.00 on a 5-point scale, indicating agreement with most of the positively framed statements related to inclusive education.

As shown in Table 1, this score reflects a consistent inclination among participants to view inclusive education as beneficial and feasible under the right conditions. However, the moderate standard deviation points to some variability in responses, suggesting that while many teachers were supportive, others expressed more neutral or cautious views.

In terms of background factors, 62% of participants reported having received formal training in inclusive education, which included pre-service coursework, professional development workshops, or certification in special education. Additionally, 74% of teachers indicated that they required more support including classroom assistants, modified teaching materials, and time for collaboration with specialists to implement inclusion more effectively. This aligns with findings in the literature that emphasize the role of structural support in shaping inclusive practices.

Table 1

Descriptive Statistics for Attitude Scores

Statistic	Value
Mean	3.97
SD	0.62

Reliability Analysis

To ensure that the items on the attitude scale consistently measured the same underlying construct, a reliability analysis was conducted. The Cronbach's Alpha coefficient was $\alpha = 0.89$, as displayed in Table 2, indicating excellent internal consistency. This means that the items used to assess teacher attitudes were highly reliable, and responses across the scale were stable and coherent.

Table 2*Reliability Statistics*

Scale	Cronbach's Alpha
Attitude Scale	0.89

Correlational Analysis

To examine the relationships between the variables, Pearson correlation coefficients were computed. The results are presented in Table 3.

There was a statistically significant positive correlation between training and attitude toward inclusion ($r = 0.51$, $p < .01$), suggesting that teachers with formal training in inclusive education were more likely to express positive beliefs about including SEN students in their classrooms.

A moderate positive correlation was also found between teaching experience and attitude ($r = 0.43$, $p < .05$), indicating that teachers with more years of experience tended to have more favorable views of inclusion. This may reflect increased exposure to diverse learners and greater classroom management confidence.

The strongest relationship observed was between perceived institutional support and attitude ($r = 0.57$, $p < .01$), reinforcing the importance of environmental and organizational factors in shaping teachers' willingness to adopt inclusive practices. Teachers who felt supported by their schools—through resources, leadership, and collaborative opportunities—were more inclined to embrace inclusion.

Table 3*Correlation Matrix*

Variables	Training	Experience	Support	Attitude
Training	1			0.51**
Experience		1		0.43*
Support			1	0.57**
Attitude	0.51**	0.43*	0.57**	1

*Note: * $p < .05$, ** $p < .01$.

These findings collectively underscore the role of professional training, practical classroom experience, and systemic support in fostering teacher readiness and confidence in implementing

inclusive education. Teachers who are adequately trained and feel supported are significantly more likely to embrace inclusive philosophies and apply them in their daily teaching.

Discussion

The findings of this study indicate that general education teachers in UAE mainstream schools generally maintain positive attitudes toward the inclusion of students with special educational needs (SEN). The overall mean attitude score of 3.97 suggests that most participants agreed with statements supporting the value and feasibility of inclusion. This result is consistent with international trends, where teacher attitudes are increasingly favorable when inclusive education is supported by appropriate training and resources (Avramidis & Norwich, 2002; Forlin et al., 2009).

A key finding of this study is the positive correlation between formal training in inclusive education and teacher attitudes. Teachers who had received structured training whether during pre-service education or through in-service professional development were more likely to demonstrate supportive views of inclusion. This relationship reinforces the importance of equipping educators with both theoretical knowledge and practical strategies to manage diverse classrooms. Training increases teacher confidence and competence, which, in turn, enhances their willingness to adapt instruction for SEN students. This is consistent with Forlin et al. (2009), who found that training significantly improves teacher self-efficacy and openness to inclusive practices.

Furthermore, the study identified a strong positive association between perceived institutional support and positive attitudes toward inclusion. Teachers who reported having access to adequate classroom resources, inclusion assistants, collaboration opportunities with special educators, and administrative support were more favorable in their responses. This emphasizes the crucial role of school infrastructure in shaping inclusive teaching. Without systemic support, even well-trained teachers may struggle to meet the needs of diverse learners. This finding echoes Gaad (2011), who argued that policy alone is insufficient if not accompanied by tangible, on-the-ground resources.

Teaching experience also emerged as a relevant factor. The positive correlation between years of experience and supportive attitudes suggests that longer exposure to inclusive settings increases teacher confidence and competence. This supports the notion that inclusion is a skill developed over time, through real-life interaction with diverse students. Teachers with more experience may also have had greater opportunities to reflect on their teaching methods and witness the progress of SEN students, contributing to more optimistic perspectives.

Despite these encouraging findings, the study also highlights significant challenges. Notably, 74% of teachers indicated a need for more support in implementing inclusion effectively. This points to a gap between inclusive education policy and its practical application. While the UAE has made strong policy-level commitments to inclusion such as the 2017 National Policy for Inclusive Education implementation remains uneven across schools. Teachers often find themselves without the necessary time, resources, or staffing to carry out inclusive strategies to the fullest extent.

To address these issues, a multifaceted approach is needed. Educational policymakers should prioritize the expansion of professional development opportunities in inclusive education, ensuring accessibility for all educators. Additionally, schools must invest in inclusion facilitators, classroom aides, and specialized materials. Creating a collaborative school culture where inclusion is seen not as the responsibility of individual teachers but as a shared institutional mission is also essential.

Ultimately, this study reinforces that positive teacher attitudes are a cornerstone of successful inclusive education, and they are significantly influenced by training, experience, and the support systems surrounding educators.

Limitations and Implications

While this study provides valuable insights into teachers' attitudes toward inclusive education in the UAE, several limitations must be acknowledged. First, the research relied on a self-report questionnaire, which may introduce social desirability and response biases. Participants might have responded in ways they perceived as favorable or acceptable, rather than providing a fully accurate reflection of their attitudes or experiences. This limitation is common in survey-based studies but nonetheless affects the generalizability of the findings.

Second, although the sample included teachers from Abu Dhabi and Dubai two major emirates the geographical scope of the study was limited, and findings may not fully represent attitudes in other regions of the UAE, such as the Northern Emirates or rural areas, where resources, school policies, and teacher training opportunities may differ. Additionally, the study focused solely on general education teachers, without including perspectives from special educators, school leaders, or students themselves. Including a broader range of stakeholders could provide a more comprehensive understanding of the factors influencing inclusive education.

Moreover, the cross-sectional nature of the study offers a snapshot in time but does not capture changes in teacher attitudes over time or as a result of specific interventions. Future research could benefit from longitudinal designs to assess how attitudes evolve with continued training, classroom exposure, and institutional support. Incorporating qualitative methods, such as interviews or classroom observations, would also allow researchers to gain richer, more nuanced insights into the lived experiences of teachers and the contextual factors influencing their perceptions and practices.

Despite these limitations, the study presents several important implications for policy and practice. The findings underscore the need for ongoing, targeted professional development in inclusive education, emphasizing practical strategies for differentiation, classroom management, and collaboration with support staff. Training should be embedded in both pre-service teacher education programs and in-service initiatives to ensure that all educators are equipped to work with students with diverse needs.

Additionally, educational leaders and policymakers must prioritize structural supports such as inclusion coordinators, learning support assistants, and accessible resources within mainstream schools. Ensuring that teachers are not only trained but also adequately supported is crucial for

sustaining inclusive practices. Finally, fostering a school culture of collaboration and shared responsibility can enhance teacher efficacy and contribute to more inclusive and equitable learning environments for all students.

Conclusion

This study explored the attitudes of general education teachers in the UAE toward the inclusion of students with special educational needs (SEN) in mainstream classrooms. The findings indicate that, overall, teachers hold moderately to highly positive attitudes toward inclusive education. However, these attitudes are strongly influenced by key variables, including formal training in inclusive practices, years of teaching experience with SEN students, and the level of institutional support available within schools. Teachers who had received targeted training and felt supported by their schools were more confident and favorable toward implementing inclusive strategies in their classrooms.

These findings reinforce the importance of equipping educators with the tools and knowledge necessary to foster inclusive learning environments. Professional development programs should be continuous, practical, and embedded in real-world classroom contexts. Moreover, schools must ensure that adequate support systems such as teaching assistants, access to specialists, and adapted materials are in place to reduce the burden on teachers and enhance their capacity to meet diverse learning needs.

By addressing these key areas, policymakers, school leaders, and educators can work collaboratively to promote more inclusive, equitable, and supportive educational settings that enable all students, regardless of ability, to thrive and succeed.

References

- Alghazo, E. M., & Gaad, E. (2004). *General education teachers in the United Arab Emirates and their acceptance of the inclusion of students with disabilities*. British Journal of Special Education, 31(2), 94–99. <https://doi.org/10.1111/j.0952-3383.2004.00335.x>
- Alnahdi, G. H. (2020). *Teachers' attitudes and self-efficacy toward inclusive education in Saudi Arabia: A path analysis*. International Journal of Inclusive Education, 24(6), 606–622. <https://doi.org/10.1080/13603116.2018.1474186>
- Avramidis, E., & Norwich, B. (2002). *Teachers' attitudes towards integration/inclusion: A review of the literature*. European Journal of Special Needs Education, 17(2), 129–147. <https://doi.org/10.1080/08856250210129056>
- Forlin, C., Douglas, G., & Hattie, J. (2009). *Inclusive education: International policy and practice*. In C. Forlin (Ed.), *Education reform and inclusive education: International practices and directions* (pp. 3–12). Routledge.
- Gaad, E. (2011). *Inclusive education in the Middle East: A myth or reality?*. Routledge.
- Sharma, U., & Sokal, L. (2015). *The impact of a teacher education course on pre-service teachers' beliefs about inclusion: An international comparison*. Journal of Research in Special Educational Needs, 15(4), 276–284. <https://doi.org/10.1111/1471-3802.12043>
- UNESCO. (1994). *The Salamanca Statement and Framework for Action on Special Needs Education*. UNESCO.
- United Nations. (2006). *Convention on the Rights of Persons with Disabilities (CRPD)*. <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html>

Appendix A: Teacher Attitudes Toward Inclusion Questionnaire

Dear Participant,

This questionnaire is part of a research study conducted to explore the awareness and attitudes of teachers toward inclusive education in the UAE. Your participation is voluntary and responses will be kept confidential. The questionnaire should take about 5–7 minutes to complete.

Thank you for your time and support!

Section 1: Demographic Information

1. Age: _____
2. Gender: ☐ Male ☐ Female
3. Number of years teaching: _____
4. Grade level currently teaching: _____
5. Have you received formal training in inclusive education? ☐ Yes ☐ No
6. Highest educational qualification: ☐ Bachelor's ☐ Master's ☐ Other: _____

Section 2: Attitudes Toward Inclusion

Please indicate how strongly you agree or disagree with the following statements using the scale:

1 = Strongly Disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly Agree

No.	Statement	Rating
1	All students, regardless of ability, should be educated together.	1 2 3 4 5
2	Inclusion benefits all students.	1 2 3 4 5
3	I feel confident teaching students with SEN in my classroom.	1 2 3 4 5
4	I believe inclusive education improves social skills for all students.	1 2 3 4 5
5	I have sufficient knowledge to adapt lessons for students with SEN.	1 2 3 4 5
6	Inclusion increases workload for teachers.	1 2 3 4 5
7	I receive adequate support when teaching SEN students.	1 2 3 4 5
8	My school promotes inclusive education effectively.	1 2 3 4 5
9	I feel positive about having students with SEN in my class.	1 2 3 4 5
10	Inclusion should be limited to students with mild disabilities only.	1 2 3 4 5
11	Students with SEN can achieve academic success in regular classrooms.	1 2 3 4 5
12	Collaboration with special educators is essential for inclusion.	1 2 3 4 5
13	I would benefit from more training on inclusive strategies.	1 2 3 4 5
14	Peer support enhances the inclusion of students with SEN.	1 2 3 4 5
15	Inclusive education is feasible in my current teaching environment.	1 2 3 4 5

Section 3: Support and Resources

Please rate your level of agreement with the following items regarding the support you receive.

No.	Statement	Rating
1	My school provides sufficient professional development in inclusive practices.	1 2 3 4 5
2	I have access to support staff (e.g., inclusion assistants, special educators).	1 2 3 4 5
3	I have access to adapted teaching materials for SEN students.	1 2 3 4 5
4	Leadership at my school is supportive of inclusive education.	1 2 3 4 5
5	There is a collaborative culture in my school for supporting inclusion.	1 2 3 4 5

Website Creation to Support Teacher and Museum Partnerships

Alana L. Kupersmith*

**Corresponding author*

Author's Note

This project was possible because of the support of the Hibulb Cultural Center and Natural History Preserve in Washington state, and is one of the vital sites that educate others about the Indigenous Peoples' cultures of the Pacific Northwest. This paper has been reformatted with excerpts, data, and research from an Educational Doctorate dissertation published by Alana L. Kupersmith conferred in May 2024. The website can be found under the [Teaching Resources](#) section titled the alkcurriculumproject.com

Abstract

This paper presents the successes and challenges of creating an online Indigenous Peoples curriculum. The website is embedded in the education section of the Hibulb Cultural Center and Natural History Preserve in Washington state. This project promotes unity between educators and museums. Constructivism, Community of Inquiry, New Museum Theory, and Indigenous New Museum Theory discussed. I had the support of the Hibulb Cultural Center and Natural History Preserve to conduct research, create content, and volunteer virtually.

Keywords: Indigenous Peoples, Indigenous New Museum Theory, New Museum Theory, Constructivism, Community of Inquiry, Museum Education Programming, Teaching Presence (TP), Cognitive Presence (CP), Social Presence (SP)

Alana Kupersmith, Ed.D. is a Special Education Teacher in the Issaquah School, Washington. Dr. Kupersmith can be reached at alana.kupersmith@gmail.com

Background

Teaching online through Learning Management Systems (LMS) and Canvas has been in practice for decades. When online instruction became a requirement, students had challenges accessing required programs for remote learning. These ranged from limited internet access to minimal assistance for logins that pertained to LMS, such as Google Classroom or Canvas. Studies have shown that online curriculum resources also “bears much resemblance with learning in the face-to face setting; but also has unique opportunities and challenges” (Huang, 2019, p.1882). One of the challenges was that students did not have printers and/or scanners at home. These technologies are needed for printing worksheets, submitting homework, and determining proof of participation in the remote education model. Other concerns revolve around student engagement and the consideration that “students are unlikely to engage in instruction if they do not find the instruction available to them meaningful or stimulating” (Domina & Renzulli, et al., 2021, p.3; Fredericks, et al., 2004). Therefore, teachers also needed to have direct methods of instruction for academic tasks. This could not be possible without teachers learning the skill first (Schrum & Levin, 2015).

Traditionally students attended field trips to engage in standards-based content for all subjects including the exploration of history and cultures. However, in 2020, 90% of museums closed to the public and relied on remote instruction models to support patronage. By 2021, 43% of museums remained closed to the public. Institutions increased or developed their online learning opportunities within the categories of family, school, and professional programming (Ennes, et al., 2021). By partnering with an institution, students and teachers benefit from a resource with open accessibility without logins supported by district web browsers. A partnership between the Hibulb Cultural Center and Natural History Preserve in Washington state and teachers is a free, engaging, comprehensive resource. The Hibulb Cultural Center and Natural History Preserve is an example of an institution that is “a theoretical thoroughfare for understanding broad, social processes of representation, of identity formation, and the establishment, reproduction, and disruption of social inequalities” (Erickson, 1999; Trofanenko & Segall, 2014, p.57). In exhibitions there are items of invaluable importance honoring the Hibulb Cultural Center and Natural History Preserve.

The site is found in the [Teaching Resources](#) section with lesson plans, games, and links to relevant resources divided by grade level and topic. The grade levels represented with state standards and content encourages interactivity and discovery. However, the main audience for this research are the educators to help with planning and lesson presentation. This is a continuation of museum education programming (Hein, 2012) supporting the idea that “museum websites, in particular, provide new ways to interact with the museum” (Marstine, 2005, p.30). This partnership explored how a teacher can create academic content and lessons for an institution outside of the classroom with the intent to be “ready-to-use multimedia lessons” (Chong & Smith, 2017, p.175), including visual and audio methods to engage the learner. The technology in this project was not meant to replace the teacher (Sharples, et al, 2016). Digital learning opportunities establish and “engage the learner by allowing a certain degree of choice and control over the flow of information by mouse-clicking or screen-tapping” (Chong & Smith, 2017, p.169). The linked readings and videos allow for more passive learning (Saiki, 2010).

Whereas the language components were more interactive (Saiki, 2010) to support standards. Research also states that:

Some digital instructional materials might have been created to support noncontent goals, such as social/emotional development. Other materials might operate from a position that content standards represent a baseline of knowledge only, and students should be given the opportunity to go beyond the standards... (Noddings, 2013; Rice & Ortiz, 2021, p.986).

The curriculum's goals allow for multiple entry points and serve to engage and inform learners. The content is open to interpretation as it correlates to a specific exhibition on view at the time of website creation and development. Each lesson is independent of the others, representing stand-alone learning units used in museum education methodology (Chong & Smith, 2017). Within an online curriculum, this level of flexibility promotes the museums' digital presence (Chong & Smith, 2017). The information on the site provided data collection opportunities and extended activities available to students through visual/audio and text (Sharples, et al., 2016).

Research Questions

The questions below are intended to guide research and data collection, these questions emphasized curriculum development and participant reflection:

Guiding Research Questions

To what extent can online curriculums be used to teach accurate and critical topics in social studies?

- ☐ Which aspects of Washington State Indigenous Peoples' education curriculums are found in select cultural centers? (Hibulb Cultural Center and Natural History Preserve, respectively).
- ☐ How does the creation of an online curriculum promote interest and participation in the content?
- ☐ Which activities were the most successful and how can that success be replicated?
- ☐ How can an online curriculum teach about cultural customs, traditions, and history?
- ☐ Which methods are most successful for educational programming? (Surveys were available on the site through Forms. The determination of a successful study was measured with data from the forms and reflection about the site from participants and a member of the museum education team at the Hibulb Cultural Center and Natural History Preserve)

The first question addressed planning and research efforts that are integral to the partnership with the Hibulb Cultural Center and Natural History Preserve and the requirements from Washington state curriculum about Indigenous Peoples. The second question discusses the idea of an interactive site. Questions three to five analyze the educational site in response to data collection, interviews, and findings. There is a focus on technology but at times there is a lack of supporting resources to teach to all student levels in the classroom.

In Washington state there is a requirement to teach about the history of Indigenous Peoples at the K-12 level in legislation passed in 2015 under Senate Bill 5433. This bill was modified from the original 2005 legislation and renamed in 2024. Legislature was passed as [House Bill 1879](#) changing the title of the curriculum in honor of John McCoy (*lulilaš*) (OSPI, Since Time Immemorial: Tribal Sovereignty in Washington State, 2024). The purpose of this curriculum site was to gain the interest of educators who may struggle with teaching this unit of social studies without enough suitable online resources.

In 2016, Washington State law mandated that all K-12 schools adopt an Indigenous Peoples' curriculum. Instruction aimed to "examine the historical impact of physical geography, such as the need to be near salmon, a centerpiece of early tribal life. Currently, students learn about the hardships of reservation life and problems created when people moved from their established homeland" (Bandici, 2016). These lessons support the Hibulb Cultural Center and Natural History Preserve mission to further public knowledge of Indigenous Peoples' history, present and future, through content supported by state-wide initiatives.

Project Rationale and Description

This research is from the perspective that the educational landscape and methods change over time. The goal was to create a resource for educators used in conjunction with the video created by the Hibulb Cultural Center and Natural History Preserve and various educational websites. When beginning to create the components of the site, the plan was to create an extension of their education materials into online activities with games containing worksheets, links, and videos along with input from the Hibulb Cultural Center and Natural History Preserve. The videos, lessons, worksheets, rely on what was already present through exhibitions and academic standards. The Hibulb Cultural Center and Natural History Preserve staff agreed to view any work and make edits or corrections if I erred in language, concept, image, or source. This aligns with the idea that, as someone who is non-Indigenous, I sought the approval of both Indigenous Peoples, and the Hibulb Cultural Center and Natural History Preserve (Younging, 2018).

This was especially important as there are laws that protect the rights and items of importance of Indigenous Peoples through the Native American Graves Protection and Repatriation Act (NAGPRA), passed by Congress in 1990 (Marstine, 2006). NAGPRA protects Native American burial sites and requires museums to inventory Native American remains and ceremonial artifacts, as well as provide a list of archived objects to federally recognized tribes. "NAGPRA states that tribes have a legal right to request the return of these objects" (Marstine, 2006, p.20). This contains aspects of property law and civil rights legislation that necessitates increased contact between the Indigenous nations, archaeologists, and museums (Nash & Colwell, 2020; Wheeler et al, 2022, p. 9). Through enforcing the legislation, maintenance of such collections has provided empowerment for these communities. The initiation of NAGPRA has led to the founding and/or expansion of museums and cultural centers on ancestral lands (Marstine, 2006, p. 20). Despite these efforts, items that belong to Indigenous Peoples from various Nations and tribes are still in museum collections (Nash & Colwell, 2020; Wheeler, et al., 2022;).

Discussion and Theory

The theories that support this view are rooted in Constructivism defined as the thought “that human learning is constructed, that learners build new knowledge upon the foundation of previous learning” (Bada & Olusegun, 2015, p.62). Learners possess knowledge gained from previous experience recalling prior knowledge attributing to new experiences (Bada & Olusegun, 2015; Phillips, 1995). This is contingent upon the teacher or student and how they are using the curriculum resource. By contrast, Community of Inquiry (COI) is a collaborative-constructivist process model rooted in Dewey’s educational philosophy and social constructivism (Castellanos-Reyes, 2020; Garrison, 2017).

It has multiple definitions, depending on the educational philosopher, and defined as “students are in control of their own learning” (Howlett, 2008, p.2; Milbrandt, 2004) and as students serving as active participants to construct knowledge (Howlett, 2008). This supports educational philosophies that reference prior knowledge as espoused by Dewey. The philosophy states:

An experience has pattern and structure, because it is not just doing and undergoing in alternation, but consists of them in relationship ... The action and its consequence must be joined in perception. This relationship is what gives meaning; to grasp it is the objective of all intelligence. The scope and content of the relations measure the significant content of an experience. A child’s experience may be intense, but, because of lack of background from past experience, relations between undergoing and doing are slightly grasped, and the experience does not have great depth or breadth. (Dewey 1934; Hein, 2012, p.32)

Schools and institutions can achieve learning through experience by collaboration via in person and remote instruction opportunities. Research conducted in 2021 on the impact of online programming for museums after the events of the pandemic cited recommendations that support the potential for change. Moreover, “museums need to invest in partnerships and professional development for their educators in order to create sustainable museum-based online programming” (Ennes et al., 2021, p.468). Thus, within a cultural institution, the creators of the site, lessons, and exhibitions are responsible for planning and research that aligns with preexisting onsite programming, or state and national standards (Ennes, et al, 2021). The students and teachers may not be able to internalize all the knowledge, either at the museum or on the website, but they will be able to construct new knowledge from their experience.

COI falls between two different schools of thought that are part of Constructivist theory. In one, teachers provide access to predetermined answers within the content, whereas the other path is to have students follow new knowledge and come to their own conclusions regarding the materials presented (Golding, 2009). However, integrated within these two ends of the Constructivist spectrum is COI, defined as “a discussion about ‘topics of interest’ in the service of constructing knowledge and common understanding, and internalizing the discourse of the inquiring community” (Golding, 2009, p.474-475; Pardales & Girod, 2006). This implies that the materials and information presented will facilitate discussion based on interest level. Teachers

have a role, but it is the student who participates in autonomous learning through discovery of new or prior knowledge about the content. In Constructivism, there is also the idea that “subject matter is about concepts rather than facts” (Black, 2005, p.140), meaning that there are layers in students’ comprehension of the content.

Museums today are cognizant that technology is a key factor in maintaining and attracting interest in exhibitions and providing educational opportunities that were not available before such advances (Chong, Smith, 2017). The most common technological forms museums embrace is through digital collections. Digitization allows for more of the collection to be on view in an alternate space and opens new avenues of knowledge for patrons farther away (Løvlie & Waern, 2022). Constructivism and COI support a variety of learners and allow for content to be repurposed. Researchers also hold the view that:

designed to only complement visits to the physical institution. This idea supports research that suggests museums should use online media to support activities rather than replace them.
(Liew, 2006; Saiki & Robins, 2008; Saiki, 2010, p.53).

It is beneficial to have resources available to the public that correlate to a specific online learning experience (Chong, Smith, 2017). Thus, museum educators and teachers can include technology that applies formal and informal elements of learning with digital and interactive aspects (Chong, Smith, 2017). Criticisms of these theories come in the form of three presences: Cognitive Presence (CP), Social Presence (SP), and Teaching Presence (TP). CP refers to the level of discourse and reflection. Students who are working online may need more guidance in this goal. SP is defined as “the ability of learners to feel effectively connected with peers and perceive their full personality through computer mediated communication” (Castellanos-Reyes, 2020, p.557; Garrison, et al. 2000; Swan & Ice, 2010). SP contrasts the criticisms of CP through students’ ability to connect through technology. TP is “the design, facilitation, and direction of cognitive and social processes” (Anderson, et al. 2001, p.5) and includes peer-to-peer learning, which facilitates (Castellano-Reyes, 2020; Swan & Ice, 2010,) a path for learning to occur. Each presence in isolation, however, does not have an impact on learning, especially within the online environment. According to COI theory the three presences of (TP), (CP), and (SP) in the educational environment overlap and are interdependent (Huang, et al, 2019). COI scholars have determined that TP is fundamental for both SP and CP (Huang, et al., 2019).

Other risks are the potential to take focus away from physical exhibits when students have already had visual access through an online platform (His, 2003; Løvlie & Waern, 2022, p. 35). There are fewer opportunities for making meaning when interacting with the material because of a limited SP (Løvlie & Waern, 2022; Mortimer & Scott, 2003). The ability to participate in open discussions facilitated a continuum as research suggests that a “COI framework provides guidance for both research in online teaching and the design of online learning experiences” (Castellanos-Reyes, 2020, p.558). These discussions support the idea that, to be successful at presenting potentially abstract information, there needs to be a consideration of visitor needs addressed in conjunction with learning theory (Black, 2005). Determining that there must be direct instruction to provide prior knowledge if the students are not aware of the content. Solutions for hands-on learning were a concern in studies conducted in 2021. A viable option

was the use of “hands-on components through activity prompts and materials kits” (Ennes, et al., 2021, p.475).

Before COVID-19, materials loaned out to classes from the Hibulb Cultural Center Preserve served as kits. There is a syllabus discussing cedar and salmon and the impact that those resources have on the past, present, and future of the Tulalip Indigenous Peoples. Inside the education box, there are examples of roots, representations of salmon, miniature canoes, baskets, and woven items, such as mats. However, the box was not available again until after the events of the pandemic for safety reasons. During this period, the Hibulb Cultural Center and Natural History Preserve were fully operational, and the contents created by museum educators were available online. The inspiration for the interactive online curriculum concept connects to the educational philosophy of Dewey. Experiential learning reflected a return to museums and the creation of pre- and post-materials to support standards or lesson-based student learning and is a cornerstone of education. In lieu of consistent involvement, museum experiences can guide students and teachers in experiential learning practices either in person or online. Museums allow for critical thinking skills to develop and grow in a public or virtual environment.

As museums embrace constructivism, they create experiences that are relevant to their exhibitions. This philosophy transferred to remote instructional opportunities through sites that require museum educators to be more open to different modes of learning, separate from traditional classroom models (Crow & Din, 2010). The more abstract concept derived from constructivism is New Museum Theory (NMT) defined as:

...things are more than just things; museum narratives construct national identity and legitimize groups. When we look at a museum object, we might think that we see something pure and “authentic” -- untouched since its creation. We have a tendency to see museum objects as unmediated anchors to the past.
(Marstine, 2006, p.6).

Within NMT there are elements of constructivism and Indigenous New Museum Theory (INMT) specific to the topic of the Hibulb Cultural Center and Natural History Preserve exhibitions. INMT defined as

...an Indigenous specific set of guiding techniques or rules a museum or exhibit uses to engage new voices, interpretations, and dialogues, attempting to combat colonial narratives or harmful representations of indigenous peoples and cultures within the museum.
(Baudino, 2013, p.62)

Museum workers make changes in the narrative to challenge or reverse the status of the content or practice as it pertains to Indigenous Peoples (Baudino, 2013; Marstine, 2006). Other aspects of the project are technology-focused to support the overall goals of the curriculum site. These views differ from the previous definition of museums and make cultural “institutions responsible for conserving and classifying historical objects” (Greenhill, 1992, p.41; Løvlie & Waern, 2022). The Tulalip Indigenous Peoples possess intellectual and physical control of the items that are on display (Pohawpatchoko, et.al., 2017) and the theories of NMT and INMT

extend to historical and current knowledge of tradition, language, social issues, and education (Baudino, 2013).

According to Colin Beard, a Dewey scholar, “for an experience to be ‘educative,’ it also had to lead the learner on to new experiences and adhere to what is called the principle of continuity” (Beard, 2018, p.28; Dewey, 1938;). Learning occurs when there is an intriguing and motivating aspect that will engage and enlighten us based on experience. This claim discusses constructivism as a central philosophy and describes how learning occurs:

...through meaningful and interesting experiences that involve individual, social, and environmental interactions. Dewey’s notion of interaction is acknowledged as central to contemporary thinking about curriculum perspectives relating to transmission, and transformative orientations. (Beard, 2018, p.28; Miller & Seller, 1985).

Experiential learning in any capacity can allow students and teachers to express their interest in the topic within a formal school-structured setting or an informal experience. The individual has a “direct encounter with the phenomenon being studied rather than merely thinking about the encounter or only considering the possibility of doing something with it” (Keeton & Tate, 1978, p.2; Kolb, 2014). Based on this approach, learning occurs by doing. Teachers model how to perform a task or show interactive/audiovisual examples first. Then they guide students in independent practice of the task. In remote instruction, this occurs in separate ways depending on technology or application. The most common methods found are screen sharing and direct access to age- and content-appropriate links, which are easily transferable to modeling for a game or online worksheet.

Methods

After creating the basic structure of the site through Google, I compiled information, videos, and links. I created lessons and set them to open as new pages on the site. I also found tools to create games. Through the interactive curriculum, teachers access a resource from a reputable institution with ease and minimal to non-existent planning. The materials presented on the curriculum site are one fraction of the information and resources available for use in remote instruction. Data collection from focus groups were synchronous because “participants are essentially confined (but perhaps not as much with face-to-face groups) to the full length of the focus group” (Abrams, 2017, p.431). This allowed data about the site to share in real time and transcribed using tools available through ZOOM. Alternatively, participants typed their responses on the Google form provided as a part of the focus group.

The 4A Framework devised by scholars Rice and Ortiz in the text, *Evaluating Digital Instructional Materials for K-12 Online and Blended Learning*, (Rice & Ortiz, 2021, p. 978), defines the methodology of instructional planning prior to the data collection phase. Planning the website required accessibility, active engagement, advocacy for inclusion, and accountability. In terms of accessibility, lessons were user-friendly with games to reflect active engagement. Through game-based learning opportunities, evidence suggests that “games can contribute to a number of benefits to education, in particular, modeling principles of effective teaching and

learning” (Burn, 2016, p.4). Partnering with the Hibulb Cultural Center and Natural History Preserve correlates to the advocacy for inclusion as Indigenous Peoples were central to the intentions of the project.

In reference to accountability, the lessons and content created to support the Hibulb Cultural Center and Natural History Preserve and data collection remained anonymous. These are two methods explicitly connected to the original idea for a curriculum site. They are representations of the interconnected nature of educational methodology. The project is an existing open resource to learn about the culture of Indigenous Peoples with guidance as needed for comprehension from their teacher.

Data Analysis

The data from surveys, interviews, and focus groups analyzed mixed methods approaches. Quantitatively, the surveys utilized Google Forms, which charted responses and tracked choices made by participants in the survey. This applied to the survey on the site. Focus group responses were more detailed and had a separate Google Form. Interviews with Museum Assistant Courtnie Reyes and ZOOM focus group participants had their responses organized by question or transcribed for clarity depending on the discussion method. This contributed to the overall academic and cultural effectiveness of the site by providing clear responses from interview participants about methodology.

Participants and Data Collection

The Hibulb Cultural Center and Natural History Preserve is the hosting site for the curriculum to maintain a collaborative relationship between the program and the institution. As a part of data collection educators evaluated the site and completed an anonymous Google Forms survey or participated in pre-planned ZOOM focus groups. Teachers and school districts within Washington State benefit most, as the location of the Hibulb Cultural Center and Natural History Preserve is in the same state. Teachers and students outside of Washington State can use the concept of the curriculum site and apply it to their own units on Indigenous Peoples, nations, and tribes.

Through their participation, educators examined how the website could benefit their instructional needs. Data collection began with a Google Forms survey at the bottom of the curriculum site that teachers completed. Google was the most familiar and comprehensive for website design and editing, as well as cost; regardless of other scholars’ comments about limitations (Ransick, 2015). Focus groups had participants view the site and provide input in further data collection opportunities.

The second method of data collection was interviews with teachers and in focus groups through forms, questions, and a select Hibulb Cultural Center and Natural History Preserve staff member. Questionnaires followed the focus group participation.

Interview Questions

The reference *Anthropologists and Museums* inspired the questions. Throughout the educator interview, teachers spoke about the ambitions and challenges of teaching. A focus group evaluated the website within the following parameters:

They may be given specific tasks (or no particular task) and could then provide feedback during the hands-on part as well as overall feedback during conversations with their peers.
(Henning & Roberts, 2016, p.179).

Synchronous focus groups allowed participants to express their opinion and ask questions as needed after the event. This was key, as the exploration of the site was the main task, and this also made it possible for participants to remain anonymous as requested.

Findings

Participants

Courtne Reyes, museum assistant at the Hibulb Cultural Center and Natural History Preserve, described the role of the institution in a ZOOM interview. Reyes confirmed that instruction aligned with the standards to support the curriculums for Indigenous communities throughout Washington state for grades K-12. There are materials with worksheets created by Lena Jones, education curator. The lessons she created reflect community members' understanding of events as found in PDF- and video-linked lessons on the [Teaching Resources](#) page. In the lessons, there is extensive inclusion of the Lushootseed language. This signifies that there is careful attention to the specific language versus a general reference to an Indigenous Peoples' community (Burke Museum, 2022). Educators and students can forge connections with the content from the exhibitions and lesson materials. This is especially pertinent if they are forming a connection to their own culture. An exhibition that was particularly impactful was the replica of a longhouse. Reyes described this as an immersive space that allows the visitors to gain exposure to traditions in an engaging way. The Hibulb Cultural Center and Natural History Preserve also had elders consulted on the design of the building to provide a true meaning of what is to be Tulalip. The inclusion of the surrounding Indigenous Peoples' [Tulalip] community in the construction of the Hibulb Cultural Center and Natural History Preserve supports the idea that identity has an integral role in the environment. Research also states that:

...land is engrained in us as Indigenous peoples, as it runs through our veins and fills our spirit. Our bodies are indeed children of the land. Moreover, it is my belief that we are connected to Mother Earth and all that she has to offer us. It is by that connection that we find our identity as Indigenous peoples. Mother Earth serves to influence many aspects of our life: teachings, ceremony, medicine, languages, construction, craft, and art.
(Merasty, 2022, p.145)

Acknowledging this, the Tulalip as a community is supporting their past, present, and future by ensuring that there is a central location where anyone can gather and learn about or be a part of the culture. Therefore, there is the development of a “respectful relationship” (Merasty, 2022, p.147). Further contributions discussed in the interview were how school districts support through the availability of an educational box containing representation items (salmon, woven objects, miniature canoes) available after schools reopened.

Education boxes as a tool for educators began in the social progressive movement. Historically, advocates have developed the mission to forge a school-museum partnership lending materials, much like a library (Peniston, 1999, p.163; Shaffer, 2018). Lending these items, or using them during a field trip visit, provides an opportunity for exploration. Worksheets created by Lena Jones, education curator, work in combination with materials from the education boxes and provide the opportunity for the strategy of in-depth exploration and their use:

... seeks to engage the learner actively in a process of gathering information through the senses of sight, sound, taste, touch, and smell. This approach is particularly salient for the young child as a sensory learner. Information gleaned from interaction with an object can be documented in many ways, aligning strategies through written narrative or poetry, discreetly describing observations and assumptions, while the pre-literate child can share ideas through drawing, photo documentation, and role play or dictate personal thoughts and interpretative ideas to a companion.
(Shaffer, 2018, p.46)

Further information about the school trip options is found on the Hibulb Cultural Center and Natural History Preserve [field trip](#) page. There is also no limit to where school groups may come from; however, although there are generally more from local Washington State districts. Washington State history was a main area of research and interest, and Reyes expressed that:

...we are very lucky that we get to provide a place like that for children to continue to learn about their surrounding tribes. Even Tulalip tribes, we're very lucky to have a space like that.
(C. Reyes, Personal Communication. 2022)

The Hibulb Cultural Center and Natural History Preserve forges a connection between the past and present through artifacts and artworks that represent the Tulalip Indigenous Peoples who have occupied the land. The items on display are donations from the family of Chief William Shelton, a notable artist, author, and leader. The artifacts and symbolic art pieces are central to the educational concepts taught to school groups. The displays at the Hibulb Cultural Center and Natural History Preserve aligns with NAGPRA and the initiative for the repatriation of Native American objects (Marstine, 2006).

Survey Data, Quantitative

The information presented in these charts is from anonymous survey data through the website link. Teachers and school-based educational professionals viewed the site at their leisure and responded to the questions.

Anonymous Survey Data

Figure 1

Grade Level (Check all that apply)

27 responses

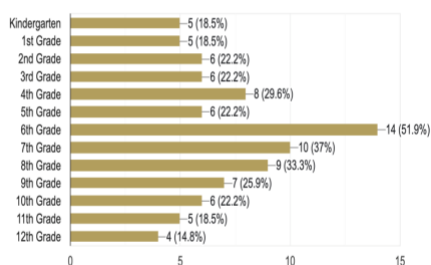


Figure 2

Do you feel prepared to use this content in a lesson?

27 responses

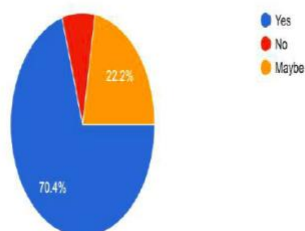


Figure 3

Which aspects of the curriculum were most useful?(There can be multiple responses)

27 responses

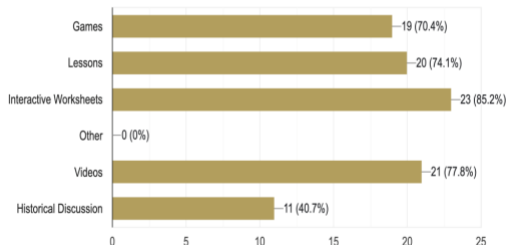


Figure 4

Would you recommend this site?

27 responses

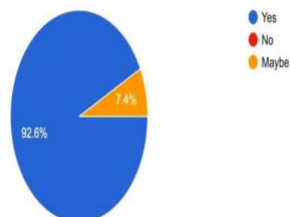
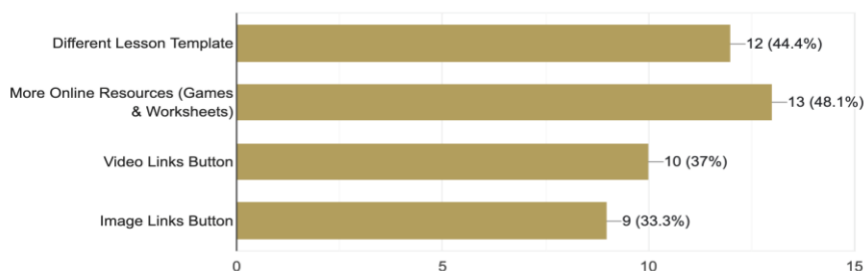


Figure 5

How can the curriculum be presented more effectively?

27 responses



(Kupersmith, 2024)

Survey Data, Qualitative

Over the span of four months, there were two ZOOM focus groups conducted. The agenda of the focus group was to introduce the guidelines derived from research planned as:

- o Intentions of the focus group.
- o A set amount of time to view the site.
- o Group discussion or questions.
- o Focus group survey completion for more detailed responses.

For anonymity, participants had pseudonyms. Prior to the focus group, participants gave consent and the only identifying information shown below to facilitate discussion of their specific responses to the Google Forms survey. This was a small focus group that allowed for detailed responses and revealed definite areas of improvement on future iterations of the website. The details of their responses found in the Appendix and participant details listed below

ZOOM Focus Group Participants

Catherine: Location: Issaquah School District, State: Washington State Grade Level: Middle School, Content Area(s): ESL/MLL
Josephine: Location: Issaquah School District, State: Washington State, Grade Level: Elementary, Content Area(s): Special Education
Sara: Location: New York City Public Schools, State: New York State, Grade Level: High School Content Area: Art
Michelle: Location: New York City Public Schools State: New York State, Grade Level: High School, Content Area(s): Music and Japanese
Miriam Location: Issaquah School District, State: Washington State Grade Level: High School, Content Area: Special Education

(Kupersmith, 2024)

Summary and Website Survey Analysis

Out of 27 responses, 51.9% of the K-12 anonymous respondents taught sixth grade. The second survey question revealed that the interactive worksheets were the most useful feature followed by lessons, games, and historical discussion opportunities. Overall, 70.4% rated it as a positive experience and would use it in their classes. Surveys also showed that 48.1% of respondents believed that the site could have more worksheets and games. In total, 92.6% of respondents said that they would recommend the website to other educators.

ZOOM Focus Group Summary and Analysis

Question 1: What is the importance of teaching about local Indigenous Peoples of Washington State in your classroom/district?

Focus group participant responses varied in this question. Catherine, Josephine, and Miriam all taught in Washington, where they had familiarity with but did not have to teach about this content specifically. Whereas, Sara and Michelle taught in New York City where there is no such requirement.

Question 2: Where are you finding the most applicable resources for teaching this content?

Catherine, Josephine, and Sara taught courses or groups of students that could directly benefit from the content on the website. Miriam was not teaching this content in her classroom but was aware of the curriculum required by Washington State and cited the phrasing from known policies. Michelle, a music and Japanese language teacher, requested guidance on how to answer the first and second questions from the forms survey. My response as facilitator was to use the standard “Not Applicable” (N/A) based on my understanding of their roles in the classroom. As assumed, the Washington State educators were aware of, and cited components of, the “Since Time Immemorial: Tribal Sovereignty in Washington State” (OSPI, Since Time Immemorial: Tribal Sovereignty in Washington State, 2022) curriculum and the benefits of the content on the site published by OSPI. By contrast, the New York State educators appreciated the inclusion of local books and videos that could be useful for concepts they teach.

Question 3: What role has technology played in teaching this topic? How can there be a larger role?

In reference to technology and the larger role it can play, the responses were more personal in one set of reflections and less so in the others. Sara suggested that the lessons incorporate adaptations for more arts and music into the site. Michelle stated that they use videos and interactive games to support instruction, whereas Catherine and Josephine described the benefits as a general concept. Miriam had a view that her students are highly engaged by using their cell phones and computer programs versus textbooks. This response implies that teaching social studies through an interactive website can lead to more engagement, especially for high school students (Miriam, Personal Communication, 2023). These comments speak to the idea that it is essential to have different opportunities to explore content through technology.

Question 4: How have you used museum education resources in your teaching for teaching your content area(s)? If they have not been considered, why or why not?

The fourth question was especially enlightening as all participants had varied responses. Catherine cited the Since Time Immemorial: Tribal Sovereignty in Washington State curriculum. Josephine stated that they had used resources from local Washington State Tribal Centers in the past. Sara used museum resources with art curriculums. Miriam stated that she was inspired to give museum resources a try (Miriam, Personal Communication, 2023). Finally, Michelle had used resources “sporadically from museums and other institutions” (Michelle, Personal Communication, 2023). She often needs to design materials specific to her students' needs and subject areas.

Question 5: After viewing the website, what do you think can aid students in understanding the content? If there were more questions than answers, why?

The fifth question was especially revealing in its responses. Catherine saw the intended connection between the Hibulb Cultural Center and Natural History Preserve. Josephine expressed the view that firsthand examples are more helpful. However, the topic has more questions than answers. Sara suggested a general statement in correlation to the link stating that “answers/responses are found within the information on the Lesson/Links” (Sara, Personal Communication, 2023). Overall, Sara thought the lesson plans were informative and the role of the teacher and their presentation using the site can pique student interest. Michelle encouraged more “human interaction” (Michelle, Personal Communication, 2023) and fast-paced materials. Finally, Miriam expressed the view that the directions section edited for more clarity (Miriam, Personal Communication, 2023).

Data showed that the intentions of the curriculum and its resources were clear and allowed for adaptation and choice from the facilitator standpoint. Furthermore, this view I supported by the fact that 70.4% of respondents said that the games were useful for instruction, contributing to the argument that constructivism applied to online learning (Ennes, et al., 2021). After conducting data collection through these means, there are also inconsistencies with that which were evident. Michelle recognized that there were limited opportunities to have the learner fully engage with more dynamic games and resources (Michelle, Personal Communication, 2023). This is a limitation within the site in its current iteration. The concept of three presences CP, SP, and TP apply as the site is inconsistent with peer-to-peer learning (Castellanos-Reyes, 2020; Swan, Ice, 2010).

Survey data implied that there were limited opportunities for multiple modes of historical discussion. This conclusion demonstrated from the question *Which aspects of the curriculum were most useful?* Survey respondents overwhelmingly chose the interactive worksheets {85.2%}, lessons {74.1%}, games {70.4%}, and videos {77.8%} over historical discussion {40.7%}. This returns the discussion to the need to establish prior knowledge and use the materials to lead discussion to implement CP, SP, and TP with more complex topics. These findings from the anonymous surveys and ZOOM focus group data indicate that while being effective, there is room for improvement. Survey and focus group data indicated that the games, videos, and interactive worksheets were the most accessible for educators. Through the online

curriculum, the culture and traditions of this specific Indigenous Peoples' group represents and supports outside of the Hibulb Cultural Center and Natural History Preserve. This project allowed data to show that educators would be receptive to content created for engagement.

Implications and Limitations

The creation of the interactive curriculum in collaboration with the Hibulb Cultural Center and Natural History Preserve is a tool to lead educators to content in more convenient ways in the classroom or through remote instruction models. The website's contents support topics in social studies that can be difficult to find for varying cognitive levels. Depending on the teacher and learner, within a Constructivist mindset and Dewey (1938), the method of delivery for this content is new. The learner, teacher, or student has exposure to the content at various levels through the Hibulb Cultural Center and Natural History Preserve materials from the OSPI and the accompanying online source.

This creates a form of "continuity" for that individual or group (Beard, 2018; Dewey, 1938;). As described in the discussion of CP, SP, and TP, students benefit more from firsthand exposure to content (Castellanos-Reyes, 2020; Garrison, et al., 2000; Swan & Ice 2010). Within the process of COI, CP, SP, and TP are also varied in terms of student comprehension and ability. There were modifications for efficacy as a part of a complete learning experience (Huang et al., 2019) in curating an online learning experience (Huang, et al, 2019).

Findings did not differ from the expectation that the more interactive the source, the more engaged the viewer/user would be. Before beginning this project, I assumed that the more familiar methods would be the most popular. These included videos, worksheets, and games. The intention of moving forward with the site for data, qualitatively in small groups and quantitatively in an anonymous survey response, was to compose a sample of information to determine the success of the future iterations of similar projects.

This concept is not the first of its kind with websites from the Ontario Institute for Studies in Education (OISE) complete with links, videos, programs to log into, language learning materials, and other pertinent information for Canada-based educators found at [Infusing Indigenous Perspectives in K-12 Teaching](#) (Wong, 2023). Further resources can be found in [The Alberta Teachers' Association: Foundational Knowledge for Indigenous Education](#). Within this site, there is information that allows educators to access details about different Indigenous Peoples of Canada. Under the games tab, there are more interactive choices. Examples are [Growing Up Ojibwe: The Game](#) and [When Rivers were Trails](#). There are also Minecraft games created by outside parties:

- [Indigenous Rights in Canada](#)
 - [Traditional Indigenous Home](#)
- (Microsoft, 2024)

In game creation, there is the risk that there will be more focus on rewards versus content. As a result, online and game-based tasks need to have a thoughtful design. This maintains focus on what designers want players to do and experience, rather than on the reward system (Deterding, 2011; Løvlie & Waern, 2022). Design and intention in academic content can support

gamification and has connections to COI and meaning making for learning online (Castellanos-Reyes, 2020; Garrison, et al., 2000).

The games located in the links are examples of what professional collaboration between designers and educators can accomplish. This was not possible in the creation of the curriculum site. Today students have more opportunities to explore complex topics through gamification than they did twenty years ago. In creating this curriculum site and planning for data collection, there were limitations within the sphere of three outlooks. I developed this curriculum because I had school servers block access to educational websites. The second was that I had an interest in contributing to standards-based content through a museum. This was a pertinent role to consider as I did not want to diminish the role of museums and the impact they have when viewed in person. Finally, I wanted to have the ability to use the site in my own classroom.

The primary limitation I had experienced was through the development of tasks centered around technology. I used familiar resources from my own teaching experience. I researched data or tasks that would be easily transferable to a website under construction and comprehensible for a wide population of students and educators. I was also aware that I had no control over creating new video sources without the concern of cultural appropriation or impropriety. I had limited knowledge of building an extensive list of curriculum materials from scratch or how to maintain them once created and this project presented a learning curve from the beginning of its inception.

The secondary limitation was access to participants for data collection. In comparison to website creation and research, and data collection was a formidable challenge. Once I established a partnership and created the curriculum website, I was not able to obtain surveys or focus group participants with the numbers that I had previously planned in initial Instructional Review Board documents. Consequently, the number of participants and data collection completion dates changed multiple times over a year. The Hibulb Cultural Center and Natural History Preserve, two separate Washington State school districts, Kansas State University, and social media invitations through Facebook were sources of data collection. I fell short of my data collection goal but received informative data. The anonymous surveys were positive and allowed me to understand what educators needed from the source materials. The focus group participants showed how the curriculum can impact teaching.

Conclusion

The climate in which students learn revolves around competing attention for traditional forms of learning. Schools can lean on institutions that embrace technology for the enhancement of abstract concepts that are taught through videos and games. These forms of teaching would not be possible without New Museum Theory, Community of Inquiry, and Constructivism and imply that students benefit from exploration of content with guidance from a facilitator or teacher with multiple visuals and hands-on tasks. This project is an example of what can be done from available resources.

The Hibulb Cultural Center and Natural History Preserve was the inspiration for the content that drove the website, and they contributed by allowing use of audio/visual materials,

topics from exhibitions, and guidance on respectful terms and presentation. By partnering with the Hibulb Cultural Center and Natural History Preserve, I was able to narrow down content to support field trip with options for content through lessons. Through these experiences, both through the interactive curriculum site and potential visits to the Hibulb Cultural Center and Natural History Preserve, students can gain a more well-rounded understanding of the content.

Appendices

Focus Group Responses by Subject

ZOOM Focus Group Questions: Catherine
1. What is the importance of teaching about local Indigenous Peoples of Washington State in your classroom/district? We occupy their land and acknowledging the people through exploring museums, cultural centers, and events lend us that insight and discovery. The Tulalip history and culture is rich to explore and learn in the form of “The tree, fish, seasonal lifeways,” etc., as depicted in the lesson plans on the website.
2. Where are you finding the most applicable resources for teaching this content? The website caters to all types of learners – be it visual, auditory, kinesthetic, or writing/reading learning styles. I find the “Educational Interactive games” inspired by the “Lushootseed Language resource” can engage students with the content in many ways and teach important skills like creativity, teamwork, and focus. I loved the “Totem Pole Maker.” In addition, the “live worksheets” can be easily integrated into an ELA/ SS classroom with the variety of skills, comprehension, article summary, etc.
3. What role has technology played in teaching this topic? How can there be a larger role? Technology has brought the past cultures ALIVE for the students to be engaged in it and at the same time learning from it.
4. How have you used museum education resources in your teaching for teaching your content area(s)? If they have not been considered, why or why not? WA OSPI website has a resource section called “Since time immemorial: Tribal Sovereignty in Washington State.” It has a section devoted to all the tribal museums.
5. After viewing the website, what do you think can aid students in understanding the content? If there were more questions than answers, why? I believe the website is a window to implement a plethora of activities in one’s curriculum while getting acquainted with the Hibelb Cultural Center and forming a connection with the Tulalip People and outside party.
ZOOM Focus Group Questions: Josephine
1. What is the importance of teaching about local Indigenous Peoples of Washington State in your classroom/district? So we can recognize that we are all tribal land and we need to honor this culture. To be culturally relevant educators we need to embrace this important heritage.
2. Where are you finding the most applicable resources for teaching this content? I have found local books and videos. The Duwamish log house is a wonderful resource as well.

3. What role has technology played in teaching this topic? How can there be a larger role? Technology has let us have access to more research and provided opportunities for many indigenous people to speak their truth which has often been told in history.

4. How have you used museum education resources in your teaching for teaching your content area(s)? If they have not been considered, why or why not? I have used resources from local tribes as well from the Seattle School District center for indigenous studies. I would like to use more museum resources.

5. After viewing the website, what do you think can aid students in understanding the content? If there were more questions than answers, why? I think the hands-on examples will really help students understand the content. I feel that this topic does have more questions than answers due to many misconceptions. This website has really helped provide clarity.

ZOOM Focus Group Questions: Sara

1. What is the importance of teaching about local Indigenous Peoples of Washington State in your classroom/district? The artistic aspects of the culture can be a leading topic to understand other people and the traditions within a community. Teaching about the local Indigenous Peoples of Washington State in New York City would not have a direct connection but a more global one as it could lead to students to find information about the local Indigenous Peoples within their area.

2. Where are you finding the most applicable resources for teaching this content? The most applicable resources for teaching this content is under the lesson plans which contain information that is easily accessible through the links provided

3. What role has technology played in teaching this topic? How can there be a larger role? Technology has played a large part as it was the gateway to finding information on the Indigenous Peoples of Washington State. A larger role could be having access to a picture file resources for adapting lessons for other academic areas such as visual arts and/or music.

4. How have you used museum education resources in your teaching for teaching your content area(s)? If they have not been considered, why or why not?
Yes, the use of museum education resources was used in conjunction with the social studies teacher to expand the learning of history through visual arts by creating an illuminated manuscript. Also, the museum education resources from art museums have been useful to develop lesson plans as well as visual references when teaching the content area.

5. After viewing the website, what do you think can aid students in understanding the content? If there were more questions than answers, why?

The Educational Game link would need to have a general statement that the answers/responses are found within the information presented in the Lesson links. This would need to be a preference unless using the game link could intrigue the students when the teacher is introducing the topic. The Lesson Plans are quite informative and are structured to provide sequential learning as well as a stand-alone lesson. The teacher's presentation of the content can aid the students' understanding through the provided worksheets and videos which are a good length to pique interest and have the students ask questions.

ZOOM Focus Group Questions: Michelle

1. What is the importance of teaching about local Indigenous Peoples of Washington State in your classroom/district? N/A

2. Where are you finding the most applicable resources for teaching this content? N/A

3. What role has technology played in teaching this topic? How can there be a larger role? Videos, interactive games, etc.

4. How have you used museum education resources in your teaching for teaching your content area(s)? If they have not been considered, why or why not? I have never used museum education resources in my content area other than borrowing some materials sporadically from museums and other institutions. This is because I always need to design my own teaching materials to meet the particular needs of my classes and exam preparations.

5. After viewing the website, what do you think can aid students in understanding the content? If there were more questions than answers, why?

The website was good and informative overall. However, I felt that learners needed more "human" interaction, such as a narrator who presents storytelling in a more engaging way. I assume this website will be used while a teacher is teaching/talking to the learners. However, I felt something that pulls the audience towards the material might be missing. The audience today is used to seeing stimulating, easy-to-understand, and fast pacing videos. If you could design the website to meet the contemporary trend a little, it will be more attractive, I think.

ZOOM Focus Group Questions: Miriam

1. What is the importance of teaching about local Indigenous Peoples of Washington State in your classroom/district?

First Peoples lived in what is now Washington State for thousands of years and in harmony with the land. We have much to learn from them. And they should be respected as our predecessors in this land.

2. Where are you finding the most applicable resources for teaching this content?

I'm not actively engaged in teaching this content at this time.

3. What role has technology played in teaching this topic? How can there be a larger role?

I teach high school. My students are on their cell phones most of the time. They do use their computers but rarely their textbooks. I have started trying to distribute educational resources that my students can access right there on their cell phones. They find this approach more engaging than even using computers. I think it is a methodology we learned in teacher training – go to where the student is and bring him/her into your instructional content from that place.

4. How have you used museum education resources in your teaching for teaching your content area(s)? If they have not been considered, why or why not?

I haven't used museum education resources before. It never occurred to me to do so. But I'm glad to see that someone thought to do this – I'm inspired to give it a try!

5. After viewing the website, what do you think can aid students in understanding the content? If there were more questions than answers, why?

As we discussed, I'd just ensure that the instructions for making use of each page/section is made clear. Once a learner understands what is expected on any one of the sections, from there the content is both interesting and engaging. I think this approach to teaching Indigenous Peoples studies is fresh and will be very successful.

References

- Abrams, K. (2017). *Online Focus Groups*. In *The SAGE Handbook of Online Research Methods*. (pp.435-450). SAGE Publications, Ltd.
- Bada, S. O., and Olusegun, S. (2015). Constructivism Learning Theory: A Paradigm for Teaching and Learning. *Journal of Research & Method in Education*, 5(6), 66-70.
- Baudino. (2013). A Place of Memory and Possibility: Creating Sites of Power and Meaning with Indigenous Collections. *Museums & Social Issues*, 8(1-2), 59–73.
- Beard, Colin. (2018). Dewey in the World of Experiential Education. *New Directions for Adult and Continuing Education*, 2018(158), 27-37.
- Black, G. (2005). *The Engaging Museum: Developing Museums for Visitor Involvement*. Routledge: Taylor & Francis Group.
- Burke Museum. (2022). *Tips for Teaching about Native Peoples*.
- Castellanos-Reyes, D. (2020). 20 Years of the Community of Inquiry Framework. *TechTrends*, 64(4), 557–560.
- Chong, C., and Smith, D. (2017). Interactive Learning Units on Museum Websites. *Journal of Museum Education*, 42(2), 169–178.
- Crow, and Din, H. (2010). The Educational and Economic Value of Online Learning for Museums. *Journal of Museum Education*, 35(2), 161–172.
- Dewey, J. (1938). *Experience and Education*. Touchstone.
- Domina, Renzulli, L., Murray, B., Garza, A. N., and Perez, L. (2021). Remote or Removed: Predicting Successful Engagement with Online Learning during COVID-19. *Socius: Sociological Research for a Dynamic World*, 7.
- Ennes, Wagner-Pelkey, A., and McVey, M. (2021). Museum-Based Online Learning One Year After Covid-19 Museum Closures. *Journal of Museum Education*, 46(4), 467–480.
- Golding, Clinton. (2011). *The Many Faces of Constructivist Discussion*. *Educational Philosophy and Theory*, 43(5), 467-483.
- Hein, George E. (2012). *Progressive Museum Practice: John Dewey and Democracy*. Routledge: Taylor & Francis Group.
- Henning, G., Roberts, D., and Ludvik, M. B. (2016). *Student Affairs Assessment: Theory to Practice*. Stylus Publishing, LLC.

- Howlett. (2008). Remote Access Museum Education: Next Steps in Moving toward Constructivist and Inquiry-Based Learning Online. *The International Journal of the Inclusive Museum*, 1(4), 1–14.
- Huang, Law, V., and Lee, S. J. (2019). The Role of Learners' Epistemic Beliefs in an Online Community of Inquiry. *British Journal of Educational Technology*, 50(4), 1882–1895.
- Kolb, D. (2014). *Experiential Learning: Experience as the Source of Learning and Development*, Second Edition. Pearson Education, Inc.
- Kupersmith, A. (2024). *Online Curriculum Development, Review and Resource Contribution in Partnership with the Hibulb Cultural Center and Natural History Preserve*. [Publication No. TX 9-410-581] [Doctoral Dissertation, Curriculum and Instruction, Kansas State University. Proquest Dissertations and Theses Global.
- Løvlie, A. S., Waern, A., Eklund, L., Spence, J., Rajkowska, P., & Benford, S. (2022). Hybrid Museum Experiences. In A. S. Løvlie and A. Waern (Eds.), *Hybrid Museum Experiences: Theory and Design* (pp. 31–56). Amsterdam University Press.
- Marstine, J. (2005). *New Museum Theory and Practice: An Introduction*. John Wiley and Sons, Inc.
- Marstine, J. (2006). *New Museum Theory and Practice: An Introduction*. Blackwell.
- Merasty, R. (2022). *Resurgence: Engaging with Indigenous Narratives and Cultural Expressions in and Beyond the Classroom. Indigenizing Spaces: Identity in the Built Environment*. (pp.145- 158) Portage and Main Press.
- Microsoft Corporation. (2023). *Minecraft Education*.
- Reyes, C. (2022, November 17). *Courtne Reyes on Hibulb Cultural Center and Natural History Preserve Educational Programming*. Personal Communication.
- Pohawpatchoko, Colwell, C., Powell, J., and Lassos, J. (2017). Developing a Native Digital Voice: Technology and Inclusivity in Museums. *Museum Anthropology*, 40(1), 52–64.
- Ransick, Kelsey J. S. (2015). *Free and Easy Website Design for Museums and Historic Sites*, (pp. 135-155). Rowman & Littlefield Publishers, Inc.
- Rice, M. F. and Ortiz, K. R. (2021). Evaluating Digital Instructional Materials for K-12 Online and Blended Learning. *TechTrends*, 65(6), 977–992.
- Saiki. (2010). Interacting Online: A content Analysis of Museum Education Websites. *Journal of Learning Design*, 4(1), 52–62.

- Schrum, L., and Levin, B. (2015). *Leading 21st Century Schools* (pp. 137-166). Corwin.
- Shaffer, S. (2018). *Object Lessons and Early Learning*. Routledge: Taylor & Francis Group
- Sharples, M., Taylor, J., and Vavoula, G. (2016). *A Theory of Learning for the Mobile Age*. In C. Haythornthwaite and R. Andrews (Eds.) *The Sage Handbook of E-learning Research*. SAGE Publications, Ltd.
- Trofanenko, B. and Segall, A. (2014). *Beyond Pedagogy Reconsidering the Public Purpose of Museums*. Sense Publications.
- Washington Office of Public Instruction (OSPI) (2024). *Since Time Immemorial: Tribal Sovereignty in Washington State*.
- Weiss, J., Wali, A., and Dominguez, V. R. (2018). Anthropologists and Museums: An Interview with Joseph Weiss. *American Anthropologist*, 120 (4), 808–812.
- Wheeler, Arsenault, J., and Taylor, M. (2022). Beyond NAGPRA/Not NAGPRA. *Collections* (Walnut Creek, Calif.), 18(1), 8–17.
- Wong, Desmond. (2023). *Infusing Indigenous Perspectives in K-12 Teaching*. University of Toronto, OISE, Ontario Institute for Studies in Education.
- Younging, G. (2018). *Elements of Indigenous Style: A Guide for Writing by and About Indigenous Peoples*. Birchbark Books.

