



الزمالة المهنية
Professional Fellowship
في التعليم والتعلم الجامعي
in University Teaching & Learning



جامعة الإمام عبد الرحمن بن فيصل
IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY
عمادة تطوير التعليم الجامعي
Deanship of Academic Development

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KINGDOM OF SAUDI ARABIA

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معرض التعليم والتعلم الجامعي 2025
UNIVERSITY TEACHING & LEARNING EXHIBITION

بحوث إجرائية في التعليم والتعلم الجامعي

قدمها أعضاء هيئة التدريس المشاركون في برنامج الزمالة المهنية في التعليم والتعلم الجامعي

Action Research in University Teaching & Learning

Presented by Faculty Members Participating in the Professional Fellowship
in University Teaching and Learning



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جامعة الإمام عبد الرحمن بن فيصل
IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY

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رسالة من عمادة تطوير التعليم الجامعي

يسعدني أن أرحب بكم مجددًا -للعام السادس على التوالي- في معرض التعليم والتعلم الجامعي (TLEX25)، حيث يحتفي المجتمع الأكاديمي بأفضل الممارسات التعليمية، ويناقش التحديات والتحولات الجديدة، ويعترف بالمتميزين في التعليم الجامعي من الأفراد والجهات على حد سواء. رسالة المعرض -هذا العام- تحمل رؤية طموحة: "صناعة المستقبل من خلال التميز المستدام في التعليم". في ظل التغيرات المتسارعة التي يشهدها العالم، يبرز دور التعليم العالي كركيزة أساسية لبناء مجتمعات قائمة على المعرفة والابتكار. وبالرغم من أن جهوداً كبيرة تبذل في إعداد الخريجين كمتعلمين مستقلين ومنتقلين من مهارات المستقبل، إلا أن استدامة هذه الجهود وتطويرها يمثل مهمة جوهرية يمكن أن يسهم في تحقيقها أعضاء هيئة التدريس الشغوفين بالتعليم والتعلم الجامعي.

ومن هذا المنطلق، فإن التميز المستدام في التعليم ليس خيارًا، بل ضرورة حتمية للاستجابة المستمرة لاحتياجات أصحاب المصلحة وتحقيق تطلعاتهم، بالإضافة إلى المساهمة المؤثرة في تحقيق مستهدفات رؤية المملكة العربية السعودية 2030، التي تضع تطوير التعليم والاقتصاد المعرفي في صلب أولوياتها.

تلتزم جامعة الإمام عبدالرحمن بن فيصل بدورها الريادي في هذا السياق، من خلال مبادرات مبتكرة مثل برنامج الزمالة المهنية في التعليم والتعلم الجامعي (PFUTL)، حيث توجّ البرنامج -العام الماضي- بجائزة QS لإعادة تصور التعليم على مستوى الشرق الأوسط، وقدمَ أنموذجًا رائعًا لمجتمع الممارسة الفاعل والمؤثر بمشاركة أعضاء هيئة التدريس من 25 جامعة سعودية منذ 6 سنوات وحتى الآن. بالإضافة إلى تركيز البرنامج على تمكين أعضاء هيئة التدريس من تبني أفضل الممارسات التعليمية القائمة على الأدلة، وتعزيز ثقافة الابتكار والتعلم المستمر.

وبينما نحتفل هذا العام بإنجازات 80 عضو هيئة تدريس من 15 جامعة سعودية، الذين كرسوا أنفسهم بتفان كمشاركين ومرشدين نحو تطوير التعليم الجامعي، فإنه يطيب لي أن أدعوكم لاستكشاف فرص التعلم والنمو والتعاون التي يوفرها معرض TLEX25. معاً، ومن خلال التزامكم الثابت وجهودكم المخلصة، نصنع مستقبلاً يتسم بالتميز والاستدامة، حيث يركز على تمكين المتعلمين ونشر المعرفة وتطبيق الابتكار لخدمة المجتمع والإنسانية.

أرحب بكم في مجتمعنا الأكاديمي الحيوي في رحاب جامعة الإمام عبدالرحمن بن فيصل، وأشركم لمشاركتكم في هذه الرحلة الملهمة نحو تعليم متميز ومستدام يصنع المستقبل.

د. محمد بن صالح الكثيري
أستاذ مشارك في التعليم والتعلم
عميد عمادة تطوير التعليم الجامعي
جامعة الإمام عبدالرحمن بن فيصل (IAU)

Message from the Deanship of Academic Development

It is my pleasure to welcome you once again—for the sixth consecutive year—to the University Teaching and Learning Exhibition (TLEX25). This annual gathering celebrates excellence in academic practices, addresses emerging challenges and transformations, and recognizes outstanding contributors to higher education, both individuals and institutions alike.

This year's exhibition carries an ambitious vision: "Shaping the Future Through Sustainable Excellence in Education." In an era of rapid global change, higher education stands as a cornerstone for building knowledge-driven, innovative societies. While significant efforts are being made to prepare graduates as independent learners equipped with future-ready skills, sustaining and advancing these efforts remains a critical mission—one that passionate faculty members in university teaching and learning can help achieve.

Sustainable excellence in education is not merely an option but an imperative. It ensures continuous responsiveness to stakeholder needs, fulfills their aspirations, and contributes meaningfully to the goals of Saudi Arabia's Vision 2030, which prioritizes education development and the knowledge economy.

Imam Abdulrahman Bin Faisal University (IAU) reaffirms its leadership in this endeavor through innovative initiatives such as the Professional Fellowship in University Teaching and Learning (PFUTL). Last year, this program was honored with the QS Reimagine Education Award for the Middle East, showcasing a dynamic and impactful community of practice involving faculty members from 25 Saudi universities over the past six years. The program emphasizes evidence-based teaching practices while fostering a culture of innovation and lifelong learning.

As we celebrate the achievements of 80 faculty members from 15 Saudi universities this year—who have dedicated themselves as participants and mentors in advancing higher education—I invite you to explore the learning, growth, and collaborative opportunities offered by TLEX25. Together, through your unwavering commitment, we can build a future marked by sustainable excellence—one that empowers learners, disseminates knowledge, and leverages innovation for the benefit of society and humanity.

Welcome to our vibrant academic community at IAU, and thank you for joining us on this inspiring journey toward sustainable excellence in education.

Dr. Mohammed Saleh Alkathiri
Associate Professor of Teaching and Learning
Dean, Deanship of Academic Development
Imam Abdulrahman Bin Faisal University (IAU)

قائمة المشاركين

المشارك	الكلية	الجامعة
1. عبدالعزيز سلطان العنقري	الصحة العامة والمعلوماتية الصحية	جامعة الملك سعود بن عبدالعزيز للعلوم الصحية
2. عبد الله سعد سعيد القرني	العلوم الطبية التطبيقية	جامعة الإمام عبدالرحمن بن فيصل
3. عبد الله صالح الرويلي	العلوم الطبية التطبيقية	جامعة الملك سعود بن عبدالعزيز للعلوم الصحية
4. عبدالرب أحمد مهدي ال خنجف	العلوم الطبية التطبيقية	جامعة نجران
5. آدم فهد الضويان	كلية الطب	جامعة الإمام عبدالرحمن بن فيصل
6. أفنان سعد الشنبري	كلية الصيدلة	كلية محمد المانع للعلوم الطبية بالدمام
7. احمد محمد الملا	عمادة السنة التحضيرية	الإمام عبدالرحمن بن فيصل
8. أريج عبد الغني بليل المولد	الأعمال	جامعة الباحة
9. عاصم بن يحيى شبير نجمي	الصيدلة	جامعة جازان
10. أسماء أحمد الشهري	كلية العلوم والدراسات الإنسانية بالجبيل	الإمام عبدالرحمن بن فيصل
11. باسم محمد صالح عبدالوهاب ناظرين	معهد اللغة الإنجليزية	جامعة أم القرى
12. فيصل محمد سليمان العتيبي	الكلية التطبيقية	جامعة الأمير سطام بن عبدالعزيز
13. د. فرحات نديم إقبال سوداچار	كلية الطب	جامعة الإمام عبدالرحمن بن فيصل
14. هيفاء محمد أحمد العمري	كلية التربية	جامعة بيشة
15. هناء علي عبدالباقي أبوالسعود	كلية العلوم والدراسات الإنسانية بالجبيل	جامعة الإمام عبدالرحمن بن فيصل
16. جاتم مصطفى رضوان أبوحتيش	طب الأسنان	جامعة الإمام عبدالرحمن بن فيصل
17. جميلة عبد الله ابوعلامه مجرشي	التربية	جامعة نجران
18. خلود صالح بوبشيت	تمريض	جامعة الإمام عبدالرحمن بن فيصل
19. لطيفة عبدالله العامر	كلية الطب	جامعة الإمام عبدالرحمن بن فيصل
20. ماجدة مصلح السعيدى	الصيدلة	كلية محمد المانع للعلوم الطبية
21. مرام رسام سعد العمري	كلية العلوم والدراسات الإنسانية	الإمام عبدالرحمن بن فيصل
22. مروة ابراهيم ماضي	طب الأسنان	الإمام عبد الرحمن بن فيصل
23. د. مسره يوسف حسن الجاروف	كليات محمد المانع للعلوم الطبية	كلية محمد المانع للعلوم الطبية
24. محمد سعيد الحمراي	كلية الأعمال	جامعة بيشة
25. محمد جعفر عبدالله أحمد	قسم الجراحة	مستشفى الملك فهد الجامعي
26. د. محمد حامد الطويرقي	كلية الطب	جامعة الطائف
27. معاذ محمد عبدالجليل أحمد	كلية الطب	جامعة الإمام عبدالرحمن بن فيصل
28. دكتور نوفل عمر محفوظ	كلية التطبيقية	جامعة الإمام عبد الرحمن بن فيصل
29. ناز شرفيق	كلية الطب	جامعة الإمام عبدالرحمن بن فيصل
30. نوران يوسف عجب نور	التطبيقية	جامعة جازان
31. عمر بن سعد بن صالح الطويل	كلية العلوم الاجتماعية	جامعة الإمام محمد بن سعود الإسلامية
32. رائد محمد علي السلیمان	كلية الطب	جامعة الإمام عبدالرحمن بن فيصل
33. رياض عبدالله الصيعري	كلية العلوم والآداب	جامعة نجران
34. رذاذ حسين فلمبان	كلية إدارة الأعمال	جامعة الطائف
35. رقية اسماعيل علي بديوي	كلية العلوم الطبية التطبيقية	جامعة تبوك
36. ساره ماجد الشهبان	كلية الطب	جامعة الإمام عبدالرحمن بن فيصل
37. شروق اسماعيل خليل الشريف	كلية الآداب	جامعة الإمام عبدالرحمن بن فيصل
38. سهيلة عبدالكريم علي فضل	الطب	جامعة جازان
39. سمية عيسى الرويعي	كلية الصحة العامة	جامعة الإمام عبدالرحمن بن فيصل
40. يحيى علي الزهراني	كلية العلوم الطبية التطبيقية	جامعة الإمام عبدالرحمن بن فيصل

List of Participants

Participants	College	University
1. Abdulaziz Sultan Alangari	Public health and health informatics	King Saud bin Abdulaziz university for health sciences
2. Abdullah Saad ALQarni	CAMS - Applied Medical sciences	IAU
3. Abdullah Saleh Alruwaili	College of applied medical sciences	King Saud bin Abdulaziz university for health sciences
4. Abdulrab Ahmed M. Alkhanjaf	Applied Medical sciences	Najran University
5. Adam Fahad Aldhawyan	Medicine	Imam Abdulrahman Bin Faisal University
6. Afnan saad alshnbari	College of Pharmacy	Mohammed Al-Mana College for Medical Sciences
7. Ahmad Almulla	Deanship of Preparatory year	Imam Abdulrahman Bin Faisal University
8. Areeg Abdulghani Almowalad	College of Business Administration	Al Baha University
9. Asim Yahaya Shubair Najmi	College of Pharmacy	Jazan university
10. Asma Ahmed Alshehri	College of Sciences and Humanities	Imam Abdulrahman Bin Faisal University
11. Basim Mohammad Salih Nadhreen	English Language Institute	Umm Al-Qura University
12. Faisal Mohammed alotaibi	Applied College	Prince sattam bin Abdulziz university
13. Farhat Nadeem Iqbal Saudagar	Medicine	Imam Abdulrahman Bin Faisal University
14. Haifa Mohammed Ahmed Al-Amri	College of Education	University of Bisha
15. Hanaa Ali Abdulbaqi Abualsoud	College of Sciences and Humanities in Jubail	Imam Abdulrahman Bin Faisal University
16. Hatem Mustafa Radwan Abuohashish	Dentistry	Imam Abdulrahman bin Faisal University
17. Jamilah Abdullah A Majrashi	College of Education	Najran University
18. Khlood Saleh Yousef Bubshait	Nursing	Imam Abdulrahman Bin Faisal University
19. Latifah Alamer	Medicine	Imam Abdulrahman Bin Faisal University
20. Majidah Muslih Alsaeeedi	College of Pharmacy	Mohammed Al-Mana College for Medical Sciences
21. Maram rassam Saad alamri	College of Sciences and Humanities	Imam Abdulrahman Bin Faisal University
22. Marwa Ibrahim Madi	Dentistry	Imam Abdulrahman Bin Faisal University
23. Masarrah Yousef Aljarroof	Mohammed Al-Mana College for Medical Sciences	Mohammed Al-Mana College for Medical Sciences
24. Mohamd Saeed Alhomrani	College of Business Administration	University of Bisha
25. Mohamed Gafar Abdallah Ahmed	department of oral and maxillofacial surgery	king Fahad hospital of the university
26. Mohammed Hamed Al Towairqi	Medicine	Taif University
27. Muaz Mohammed Abdelgalil Ahmed	Medicine	Imam Abdulrahman Bin Faisal University
28. Naoufel Omar Mahfoudh	Applied College	Imam Abdulrahman Bin Faisal University
29. Nazish Rafique	Medicine	Imam Abdulrahman Bin Faisal University
30. Nouran Yousef Ajabnoor	Applied College	Jazan university
31. Omar Saad Saleh Al-taweel	Faculty of Social Sciences	Imam Muhammad bin Saud Islamic University
32. Raed Mohammed Alsulaiman	Medicine	Imam Abdulrahman Bin Faisal University
33. Raiedhah alsaiari	College of Science and Arts	Najran University
34. Razaz Houssien Felimban	College of Business Administration	Taif University
35. Ruqaiah Ismael Ali Bedaiwi	Applied Medical sciences	University of Tabuk
36. Sarah Majid Alshahwan	Medicine	Imam Abdulrahman Bin Faisal University
37. Shuruq Ismail Alsharif	Arts	Imam Abdulrahman bin Faisal University
38. Suhaila abdalkarim ali fadol	Medicine	Jazan university
39. Sumaiah Essa Alrawiai	College of Public Health	Imam Abdulrahman Bin Faisal University
40. Yahya Ali Alzahrani	CAMS - Applied Medical sciences	Imam Abdulrahman Bin Faisal University



تجربة التعلم باستخدام الذكاء الاصطناعي

د. أريج عبد الغني المولد

أستاذة مساعد ، كلية الأعمال ، جامعة الباحة
المرشد المهني : د. نايف بن صنيطان الشمري



الملخص

يفتح الذكاء الاصطناعي التوليدي ابوابا جديدة في التعليم والتعلم لاسيما في تخصصات مثل التسويق التي تتطلب التفكير الإبداعي والقدرة على تقديم عروض تقديمية واحترافية.

في هذا العمل، جرب الباحث استخدام تطبيقات الذكاء الاصطناعي مثل ChatGPT والتي توفر خدمات مختلفة على سبيل المثال تقديم العروض التقديمية وانشاء المحتوى وتحليل النصوص.

من خلال استطلاع آراء الطلاب، جاءت النتائج بأهمية استخدام تطبيقات الذكاء الاصطناعي التوليدي في تسهيل دراسة القرارات بشكل عام والعروض التقديمية والمشاريع وصناعة المحتوى بشكل خاص.

أهداف البحث/مشكلة البحث

تركز مشكلة البحث على التحديات التي تواجه طلاب قسم التسويق في صعوبة انتاج محتوى تسويقي مبتكر في تنفيذ الواجبات والمشاريع التسويقية باستخدام تقنيات الذكاء الاصطناعي للوصول الى نتائج مرضية لخريجات تعلم الطلاب.

يهدف هذا البحث الاجرائي الى استكشاف دور أدوات الذكاء الاصطناعي في مساعدة الطلاب في انتاج محتوى تسويقي والواجبات باستخدام تطبيق ChatGPT

سؤال البحث

• ما أثر استخدام تطبيقات الذكاء الاصطناعي ChatGPT على جودة المحتوى التسويقي الذي ينتجه طلاب قسم التسويق، وعلى كفاءتهم في إنجاز المهام والمشاريع؟



شكل ١. تطبيقات الذكاء الاصطناعي التوليدي (Chat GPT).

منهجية البحث

استخدم الباحث المنهج الوصفي التحليلي لاتجاهات الطلاب نحو استخدام تطبيقات الذكاء الاصطناعي في تحسين جودة المحتوى التسويقي وإنجاز المهام والمشاريع.

أداة البحث عبارة عن استبانة تم تصميمها للوقوف على دور تطبيقات الذكاء الاصطناعي مثل ChatGPT في عملية تحسين أداء الطلاب في إنجاز المهام والمشاريع التسويقية.

بعد تطبيق الأداة، تم تحليل النتائج وحساب التكرارات والنسب المئوية للاستجابات وعرضها في جدول النتائج.

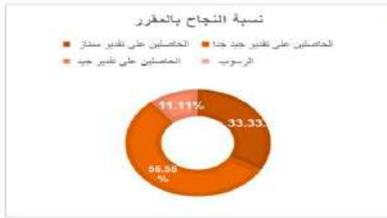
الأثر

1 عمل هناك تحسن كبير في أداء الطالبات ومستوى انجازهم في المقرر مما انعكس على مشاركتهن في فعالية السياحة على مستوى القسم والكلية.

2 حسن أداء الطلاب في استخدام أدوات الذكاء الاصطناعي في تقديم المحتوى والمشاريع



شكل ٤ . انطباع وتعلق الطالبات على الفعالية .



شكل ٥ . نسبة النجاح بالقرور .

التحسينات المستقبلية

التابعة المستمرة لتقييم تأثير استخدام الذكاء الاصطناعي على نتائج التعلم

استخدام وتبني تطبيقات الذكاء الاصطناعي لتدريب الطلاب على استخدامه بشكل فعال في عملية التعلم

مقابلة ما يستجد من تطبيقات حديثة في الذكاء الاصطناعي والذكاء التوليدي.

استبدال طرق تقييم المشاريع والواجبات بأنشطة لاصفية تركز من فعالية الطلاب للتعلم

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النتائج

1 خلال النتائج التي تم التوصل اليها من الاستبانة، ظهر أن هناك تأثير كبير بتبني تطبيقات الذكاء الاصطناعي في تحسين أداء الطلاب في انتاج محتوى تسويقي وتنفيذ الواجبات والمشاريع التسويقية. في التالي ملخص لأهم النتائج التي وصلت اليها هذه الدراسة:

2 اولا: الطلاب وصعوبة اعداد المحتوى التسويقي وأداء الواجبات والمشاريع:

• انتاج محتوى تسويقي جذاب يحتاج لوقت طويل (80%)

• هناك صعوبة في تطبيق وسائل التواصل الاجتماعي في قطاع الضيافة (60%)
• الواجبات والمشاريع التي أقدمها تحتاج الى جهد كبير (61.11%)

ثانيا: فاعلية استخدام تطبيقات الذكاء الاصطناعي في التعلم

• استخدام الذكاء الاصطناعي يساعد في انتاج محتوى تسويقي جذاب (66.67%)
• استخدام الذكاء الاصطناعي يسهل من تطبيق وسائل التواصل الاجتماعي في قطاع الضيافة (66.67%)
• استخدام الذكاء الاصطناعي يساعد في تحسين جودة الواجبات والمشاريع التي أقدمها (93.33%).

صعوبة اعداد المحتوى التسويقي واداء الواجبات



صعوبة في تطبيق وسائل التواصل الاجتماعي في قطاع الضيافة فضلا عن جهد كبير

استخدام الذكاء الاصطناعي يساعد في انتاج محتوى تسويقي جذاب



البيانات	المرتبطة	درجة الصعوبة
أوافق بشدة	أوافق	لا أوافق بشدة
أولا اني اتمتع بصعوبة في اعداد المحتوى التسويقي واداء الواجبات والمشاريع في قطاع الضيافة		
انتاج محتوى تسويقي جذاب يحتاج لوقت طويل		1
هناك صعوبة في تطبيق وسائل التواصل الاجتماعي في قطاع الضيافة		2
الواجبات والمشاريع التي أقدمها تحتاج الى جهد كبير		3
فأثريا اتمتع بذكاء الاصطناعي		
استخدام الذكاء الاصطناعي يساعد في انتاج محتوى تسويقي جذاب		4
استخدام الذكاء الاصطناعي يسهل من تطبيق وسائل التواصل الاجتماعي في قطاع الضيافة		5
استخدام الذكاء الاصطناعي يساعد في تحسين جودة الواجبات والمشاريع التي أقدمها.		6

شكل ٣. أداة الاستبانة المستخدمة في الدراسة.



الملخص

هدف البحث إلى التعرف على أثر استخدام المحاضرة التفاعلية باستخدام تطبيق Nearpod على مشاركة وتفاعل الطالبات في القاعة الدراسية لطالبات مقرر ١٤٠ مهرو ١٥١ مبر البالغ إجمالي عددهن ٥٥ طالبة. وقد استخدمت الباحثة المنهج شبه التجريبي. واستخدم القياس القبلي والبعدي باستخدام بطاقة الملاحظة، بالإضافة إلى استبانة، وخلصت النتائج. زيادة نسبة مشاركة الطالبات في القاعة الدراسية. بالإضافة إلى تقدير عالي بلغ ٢.٧ من ٣ من الطالبات. لمستوى تفاعل بعد استخدام Nearpod.

أهداف البحث/مشكلة البحث

خلال تدريس مقرر ١٤٠ مهرو ١٥١ مهرو للفصل الدراسي الثاني ١٤٤٦هـ لاحظت الباحثة انخفاض مشاركة الطالبات والانخراط في التفاعل الصفي. وتنفيذ أنشطة الصفية وتحققت من ذلك من خلال استطلاع رأي قبلي حيث كانت النتائج تشير إلى خوف وتردد عدد من الطالبات عند المشاركة ومن خلال مراجعة الأدبيات ومنها (Hakami,2020) و (Astrini, Wijayanto, & Laila,2024) و (المعافا,٢٠٢١) وجدت الباحثة أن أحد الحلول الممكنة لزيادة مشاركة الطالبات استخدام تطبيق Nearpod ودراسة أثر هذا التدخل يمثل مشكور الدراسة عبر الإجابة على أسئلة البحث الآتية:

- ما أثر استخدام المحاضرة التفاعلية باستخدام تطبيق Nearpod على تفاعل الطالبات في القاعة الدراسية؟
- ما مستوى تفاعل الطالبات باستخدام تطبيق Nearpod من وجهة نظرهن؟

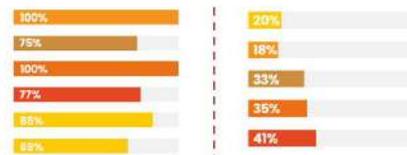
منهجية البحث

- المنهج شبه التجريبي بالقياس القبلي والبعدي من خلال الإجراءات الآتية:
- استطلاع رأي مسبق للتعرف على مشكلات الطالبات في التفاعل والمشاركة في أنشطة المقرر.
 - البحث عن أفضل الوسائل لزيادة التفاعل والمشاركة وتحديد تطبيق للميزات التي يتضمنها.
 - إعداد أداة الملاحظة الصفية وتسجيل ٥ ملاحظات قبلية.
 - تحميل تطبيق Nearpod وإعداد الجلسات بنمط التدريس المتزامن.
 - تطبيق أداة بطاقة الملاحظة الصفية وتدوين الملاحظات ثم تحليل البيانات.
 - تطبيق استبانة بعدية لقياس وجهة نظر الطالبات عن تفاعلهن بعد استخدام Nearpod. ثم تحليل الاستبانة.

النتائج

1 أظهرت النتائج زيادة ملحوظة في الانخراط والمشاركة والتفاعل في القاعة الدراسية باستخدام بطاقة الملاحظة في جلسات التدخل عنها في جلسات المحاضرة العادية دون استخدام Nearpod حيث بلغت نسبة المشاركة بدون Nearpod ٢٩% في كلا الشعبتين بينما ارتفعت النسبة بعد استخدام Nearpod إلى ٨٧% في كلا الشعبتين معا. ولم تعتمد الباحثة لتخصيص أداة محدد من الأنشطة في Nearpod بالبحث ولكن وكانت أبرز الأنشطة التي تجد تفاعلا أكبر هي Collaborate Board و poll و draw it.

2 أظهرت النتائج متوسط مرتفع بلغ ٢.٧ تقريبا من ٣ على تفاعل مستوى تفاعل الطالبات من وجهة نظرهن وحصلت العبارتين "أصبحت المحاضرات أفضل" و "أصبحت أتابع بتركيز أثناء الشرح ولا أشعر بالملل بسهولة" على أعلى متوسط ٢.٦٩ كمؤشر على فعالية Nearpod في تحسين تفاعل الطالبات داخل المحاضرة.



نسب المشاركة خلال جلسات الملاحظة وجلسات التدخل



استجابة الطالبات على استبانة قياس مستوى التفاعل من وجهة نظرهن

العبارة	المتوسط
أنهت لي فرص للمشاركة	2.75
مستوى التفاعل في الصف ارتاد	2.44
أحببت مشاركة إجابتي مع القاعة	2.63
أسلوب التحكم بالأنشطة والمواد التعليمية ساعدني على الانخراط أكثر في عملية التعلم	2.81
أصبحت المحاضرات أفضل	2.69
أصبحت أتابع بتركيز أثناء الشرح ولا أشعر بالملل بسهولة	2.69
المتوسط العام	2.67

الأثر



التحسينات المستقبلية

تطوير مهارات في استخدام Nearpod وتفعيل الاشتراك السنوي الحالي بتعميم استخدام التطبيق في مقررات أخرى، وإعداد جولة أخرى للبحث.

استخدام Nearpod بشكل مكثف في المحاضرات بالنمطين المتزامن وغير المتزامن وإجراء مقارنة بينهما.

إشراك الزملاء في تصميم أنشطة التعلم على Nearpod وإجراء دراسات مقارنة

المراجع

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Astrini, A., Wijayanto, A., & Laila, M. (2024). Exploring Students' Experience of Using Nearpod in Grammar Lesson about Students' Increased Engagement: A Descriptive Qualitative Approach. Jurnal Indonesia Sosial Teknologi, 5(7)



فاعلية استخدام المعامل الافتراضية كبديل عن المعامل الواقعية في تنمية الفهم العملي للمفاهيم الكيميائية لطالبات قسم الكيمياء

ريضة الصيعري ، أستاذ الكيمياء الفيزيائية المشارك ، جامعة نجران
المرشد المهني : د. تهاني بخش

INSERT
IMAGE
HERE

شعار
الجامعات
الخارجية

المخلص

يهدف هذا البحث الإجرائي إلى دراسة فاعلية المعامل الافتراضية كبديل تعليمي في تدريس الكيمياء لطالبات قسم الكيمياء، خصوصاً في الحالات التي لا تتوفر فيها المواد الكيميائية أو التجهيزات المعملية الكاملة. تم تطبيق البحث على عينة مكونة من ٣٠ طالبة، تم تقسيمهن إلى مجموعتين: تجريبية استخدمت معمل افتراضياً من خلال منصة Crocodile labs لتتفيذ عدة تجارب، وضابطة تلقت نفس المحتوى بشكل نظري فقط دون أي تجارب. اعتمد البحث على اختبار قبلي وبعدي لقياس مدى التحسن في الفهم، بالإضافة إلى استبيان لقياس رضا الطالبات عن استخدام المعمل الافتراضي. أظهرت النتائج أن المجموعة التجريبية حققت تحسناً ملحوظاً في نتائج الاختبار البعدي، حيث ارتفع متوسط الدرجات من ٥ إلى ٩.٥ من ١٠، مقارنة بالمجموعة الضابطة التي ارتفع متوسطها من ٥.٥ إلى ٧ فقط. كما أظهر الاستبيان أن أكثر من ٧٠% من الطالبات وجدن أن المعمل الافتراضي ساهم في توضيح المفاهيم وسهل عليهن الفهم والتفاعل.

الأثر

في ظل التحديات التي تواجه بعض المؤسسات التعليمية في توفير المعامل الكيميائية وتجهيزاتها، يبرز استخدام المعامل الافتراضية كخيار واقعي وفعال لتدريس المفاهيم العلمية. وقد أظهر هذا البحث أن استخدام المعمل الافتراضي ساعد بشكل ملحوظ في تحسين مستوى الفهم العملي لدى طالبات قسم الكيمياء، مقارنة بالاعتماد على الشرح النظري فقط.

بعد نهاية التجربة، تم تطبيق استبيان لقياس:

- 1-درجة التفاعل.
 - 2-مدى وضوح المفاهيم بعد الاستخدام.
 - 3-رضا الطالبة عن التجربة التعليمية.
- (طبق الاستبيان على الطالبات في المجموعة التجريبية فقط).

وكانت النتائج كالتالي:

- أكثر من ٧٠% من الطالبات وافقن على أن المعمل الافتراضي ساعد في تبسيط وفهم المفاهيم الكيميائية. وعبرن أن التجربة الافتراضية كانت تفاعلية أكثر من الحصص النظرية المعتادة. كذلك أشرن إلى أن تنفيذ التجربة خطوة بخطوة عبر الشاشة ساعد في ترسيخ المفهوم أكثر من مجرد شرحه.

تابع منهجية البحث

طريقة تطبيق التجربة:

المجموعة التجريبية: استخدمت المعمل الافتراضي من خلال منصة Crocodile labs، حيث قمن بتنفيذ تجربتين افتراضية. تم شرح خطوات كل تجربة داخل المعمل الافتراضي مع متابعة فورية، ثم نُوقشت النتائج بشكل جماعي.

زمن التطبيق: ٩٠ دقيقة لكل تجربة.

المجموعة الضابطة:

تلقت شرح نظري فقط للمفاهيم نفسها دون استخدام أي أدوات محاكاة أو تطبيق عملي.

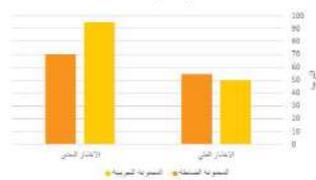
النتائج

تم البدء بالاختبار القبلي لكلا المجموعتين وتم رصد هذه النتائج والتي نزل تقريباً على تساوي الخلفية العلمية لكلا المجموعتين والجدول التالي يوضح نتيجة الاختبار القبلي.

المجموعة	النسبة
المجموعة التجريبية	50%
المجموعة الضابطة	50%

2-نتائج الاختبار البعدي: بعد أن تم تطبيق التجارب والأنشطة لكلا المجموعتين بالطرق المخصصة لهن، تم إجراء الاختبار مرة أخرى لقياس مدى التأثير. تظهر النتيجة بوضوح في الشكل التالي أن المجموعة التجريبية التي استخدمت المعمل الافتراضي حققت تطوراً أعلى بكثير في الفهم، بينما كان التحسن لدى المجموعة الضابطة أقل مما يدل على أن الشرح النظري للتجارب لم يكن كافياً.

مقارنة نتيجة الاختبار القبلي والنسبي للسرعة العنصرية والاسئلة



التحسينات المستقبلية

النظر بجديّة إلى دمج هذه التقنية بشكل دائم ضمن الخطة التعليمية، مع توفير التدريب اللازم للطالبات وأعضاء هيئة التدريس لضمان تحقيق أكبر استفادة ممكنة من هذه الأدوات الرقمية.

ربط التجارب الافتراضية بأنشطة تقييم فوري (مثل: اختبارات قصيرة، أسئلة فهم بعد كل تجربة)، لتعزيز الاستيعاب الفوري والتفاعل.

المراجع

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أهداف البحث/مشكلة البحث

تعد التجارب العملية جزءاً أساسياً في تدريس مادة الكيمياء، حيث تُسهم في توضيح المفاهيم النظرية وتعزيز الفهم لدى الطالبات. إلا أن كثيراً من المؤسسات التعليمية مثل الجامعات الناشئة، تواجه صعوبات في توفير معمل كيميائية مجهزة بسبب نقص الموارد أو عدم توفر المواد اللازمة لإجراء التجارب (العتيبي، ٢٠٢٠). ومع التطور التقني، بدأت تظهر بدائل تعليمية جديدة مثل المعامل الافتراضية، وهي بيئات رقمية تتيح للمتعلمين إجراء تجارب محاكاة تشبه الواقع بدرجة كبيرة.

مشكلة البحث:

بسبب نقص المواد الكيميائية أو تعذر استخدام المعامل الواقعية في بعض الأحيان، تواجه الطالبات صعوبة في تطبيق المفاهيم الكيميائية التي يتم تدريسها نظرياً. مما يدفع للساؤل: هل يمكن للمعامل الافتراضية أن تكون بديلاً فعالاً لتنمية الفهم العملي؟

أهمية البحث:

مواجهة التحديات الواقعية في التعليم الجامعي. استثمار التقنيات الحديثة في التعليم. تحسين مستوى الفهم والتفاعل لدى الطالبات.

هدف البحث:

قياس أثر استخدام المعامل الافتراضية في تحسين فهم المفاهيم الكيميائية الأساسية مقارنة بالشرح النظري فقط.

منهجية البحث

المنهج شبه التجريبي (مجموعة تجريبية ومجموعة ضابطة).

عينة البحث:

تم اختيار ٣٠ طالبة من طالبات قسم الكيمياء، وتم تقسيمهن إلى: مجموعة تجريبية (١٥ طالبة): استخدمن المعمل الافتراضي مجموعة ضابطة (١٥ طالبة): تلقت نفس الدروس بشكل نظري فقط دون أي تجربة افتراضية.

أداة البحث كانت الاختبار القبلي والبعدي:

تم إعداد اختبار مكون من ١٥ سؤال موضوعي (اختبار من متعدد وصح وخطأ) يعطي مفاهيم كيميائية أساسية. طبق الاختبار على المجموعتين قبل التنفيذ، ثم أعيد تطبيقه بعد التنفيذ من قبل المجموعة التجريبية والمجموعة الضابطة.





"أثر استخدام الألعاب التعليمية على دافعية واستيعاب وفهم الطالبات"

رذاذ حسين فلمبان، أستاذ مساعد، كلية إدارة الأعمال، قسم الإقتصاد والتمويل
المرشد المهني (د.مى أبو العطا حليم)



المخلص

سعى هذا البحث الإجرائي إلى معالجة تدني دافعية الطالبات واستيعابهن في مقر "مبادئ الإدارة المالية"، وذلك من خلال تطبيق استراتيجية تعليمية قائمة على الألعاب. تم إجراء دراسة شبه تجريبية على عينة مكونة من (١٠٦) طالبة من كلية إدارة الأعمال بجامعة الطائف، باستخدام تصميم قبلي-بعدي لثلاث مجموعات. أظهرت نتائج الاستبيان القبلي أن (7٦%) من الطالبات أرجعن تدني التفاعل في الطرق التقليدية في التدريس، مما أبرز الحاجة إلى إيجاد بيئة صفية أكثر تفاعلاً وحيوية. تم تنفيذ أنشطة تعليمية تفاعلية قائمة على الألعاب. شملت تدريبات تشاركية وممارسات صفية مبتكرة. حيث أظهرت النتائج بعد التطبيق تحسناً ملحوظاً في دافعية الطالبات، وزيادة في التفاعل والمشاركة، بالإضافة إلى تحسن في استيعاب المفاهيم والنظريات المالية. تؤكد هذه التجربة أهمية إعادة تصميم الممارسات الصفية، وتبني أساليب تعلم نشطة تراعي الفروق الفردية، وتحفز الطالبة فكرياً وعاطفياً، وترتبط بشكل أعمق بالمحتوى الأكاديمي.

أهداف البحث/مشكلة البحث

مشكلة البحث:

تشير نتائج استطلاعات الطالبات في مقر "مبادئ الإدارة المالية" إلى تدني مستويات الانتباه والدافعية والتحفيز أثناء التعلم، حيث أرجعت 6٤% من الطالبات السبب إلى اعتماد أساليب تدريس تقليدية تنفرد إلى العناصر التفاعلية والتطبيقية فإن الافتقار على الشرح النظري دون دمج وسائل تعلم نشطة كالألعاب التعليمية أو الحالات العملية أدى إلى جعل تجربة التعلم جافة وأقل جذباً، كما أن غياب التفاعل داخل القاعة وقلّة الأنشطة التشاركية وعدم مراعاة أنماط التعلم المختلفة ساهمت في انخفاض المتعة والتحفيز لدى الطالبات، مما أبرز الحاجة إلى إعادة النظر في الممارسات الصفية لتفعيل مشاركة الطالبة ورفع كفاءتها في استيعاب المفاهيم المالية. هذا الوضع يؤثر سلباً على تفاعل الطالبات وفتحن بقدراتهن، مما يحذ من تحقيق الأهداف التعليمية للمقرر.

لذا، تتبع مشكلة البحث من التساؤل الآتي:

• إلى أي مدى يُسهم استخدام الألعاب التعليمية في تحسين دافعية واستيعاب وفهم الطالبات لمقر "مبادئ الإدارة المالية"؟

حيث ينبثق من هذا السؤال الرئيسي للبحث الإجرائي السؤالان التاليان:

1. ما أثر استخدام الألعاب التعليمية على دافعية الطالبات نحو تعلم مقر "مبادئ الإدارة المالية"؟
2. ما أثر توظيف الألعاب التعليمية على استيعاب وفهم الطالبات لمحتوى المقرر؟

أهداف البحث:

1. قياس مستوى دافعية واستيعاب وفهم الطالبات نحو دراسة مقر "مبادئ الإدارة المالية" قبل تطبيق الألعاب التعليمية.
2. اختيار فاعلية دمج الألعاب التعليمية كأداة تفاعلية مبتكرة لتعزيز الدافعية والارتباط بالمقرر.
3. تحليل مدى تأثير الألعاب التعليمية على تحسين استيعاب وفهم الطالبات لمحتوى المقرر.
4. تقديم توصيات تعليمية لتطوير طرق تدريس المقررات المالية من خلال استراتيجيات أكثر تفاعلاً وبتعة.

منهجية البحث

نوع البحث: اعتمدت الدراسة المنهج شبه التجريبي ذي التصميم القبلي والبعدي، لمجموعة واحدة (المجموعة التجريبية)، حيث تم قياس أداء الطالبات قبل إدخال المتغير المستقل (استراتيجية الألعاب التعليمية باستخدام برنامج Kahoot)، ثم إعادة القياس بعد تطبيقه، وقد تم تفسير الفرق بين نتائج الاختبار القبلي والبعدي باعتباره مؤشراً على فاعلية المتغير المستقل ومدى تأثيره على دافعية واستيعاب الطالبات.

العينة: تكونت من (١٠٦) طالبات موزعة على ٣ شعب يدرسن مقر مبادئ الإدارة المالية وهو مطلب كلية بالمستوى الرابع بكلية إدارة الأعمال.

أداة البحث: استبيان قبلي وبعدي يتناول:

- دافعية الطالبات نحو التعلم.
- مستوى الاستيعاب والفهم للمقرر.

الإجراءات:

1. تطبيق استبيان قبلي.
2. تنفيذ ألعاب تعليمية مرتبطة بمحتوى الدرس.
3. تطبيق استبيان بعدي.
4. تحليل النتائج وإحصائها.

أدوات التحليل: تحليل وصفي.

الحدود الزمنية والمكانية:

الحدود المكانية: كلية إدارة الأعمال - شطر الطالبات، الجوية. جامعة الطائف.

الحدود الزمنية: الفصل الدراسي الثاني للعام الجامعي ١٤٤٦هـ.

تصميم اللعبة: تم تصميم لعبة تعليمية تفاعلية باستخدام منصة Kahoot. بهدف مراجعة المفاهيم الرئيسية في الفصل الثاني عشر (التمويل قصير الأجل)، وتحفيز الطالبات على التفاعل والمشاركة النشطة داخل القاعة الدراسية. تضمنت اللعبة أنواعاً متنوعة من الأسئلة لقياس مدى الفهم والاستيعاب:

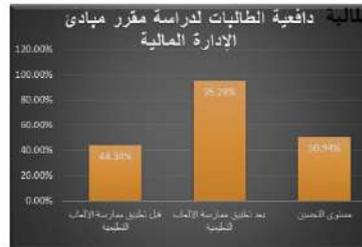
(Quiz - True or False - Type answer - Slider - Pin answer - Puzzle)

النتائج

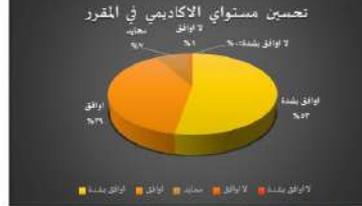
من خلال مقارنة نتائج الطالبات في الاستبيانات القبلي والبعدي لوحظ الآتي:

- رفع مستوى دافعية الطالبات نحو التعلم.
- زيادة حماسة الطالبات لدراسة مقر مبادئ الإدارة المالية بعد استخدام الألعاب التعليمية.
- زيادة المتعة والتشويق عن السابق عند دراسة المقرر.
- زيادة الرغبة في تحسين المستوى الأكاديمي للطالبات في المقرر بعد خوض هذه التجربة.
- رفع مستوى فهم المفاهيم المالية الأساسية بعد استخدام الألعاب التعليمية.
- رفع مستوى استيعاب النظريات المالية بسهولة بعد التفاعل مع المحتوى من خلال الألعاب.
- تحسن فهم الطالبات لمحتوى المقرر مقارنة بالطريقة التقليدية.
- إبراز دور الأمثلة العملية والتطبيقية في الألعاب في تعزيز قدرة الطالبات على الفهم أكثر من الشرح النظري.

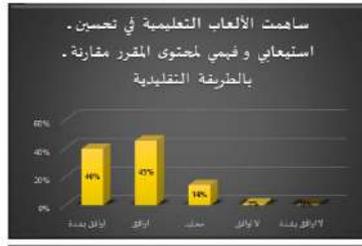
أولاً: الدافعية نحو تعلم مقر مبادئ الإدارة المالية



تحسين مستوى الاستيعاب في المقر



ثانياً: الاستيعاب والفهم للمقرر



سبلت النظريات المالية

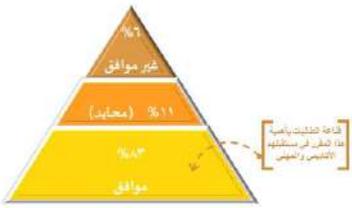


عززت الأمثلة العملية والتطبيقية في الألعاب



الأثر

أظهرت نتائج البحث الأثر الإيجابي الواضح لاستخدام الألعاب التعليمية في تعزيز دافعية الطالبات نحو التعلم، وتحسين قدرتهن على الفهم والاستيعاب، وقد بين الاستبيان البعدي، بالإضافة إلى ملاحظات أستاذة المقرر وتأملات الطالبات، أن دمج الألعاب داخل المحاضرات أسهم في رفع مستوى التفاعل والانخراط داخل القاعة الدراسية، كما شجّع على زيادة المشاركة، والجوار، والعمل الجماعي. أفادت الطالبات أن الألعاب التعليمية قد أضفت طابعاً من المتعة والحيوية على التعلم، وساعدتهن في استرجاع المعلومات وتثبيتها، ووصفت كثورات منهن هذه التجربة بأنها أكثر فاعلية من الطرق التقليدية في تسهيل الفهم والمذاكرة. أفضت ذلك لتولدت لديهن فناعة بأهمية هذا المقرر في مستقبلهن الأكاديمي والمهني، ويتضح من هذه التجربة بأن البيئة التفاعلية والتعلم النشط قادران على تحويل المحتوى الجاف إلى تجربة تعليمية ثرية ومُلهمة.



التحسينات المستقبلية

- المدى القصير:** دمج ألعاب تعليمية بسيطة في المحاضرات المستقبلية - تحفيز الطالبات على التفاعل من خلال نقاط أو مكافآت رمزية - تدريب عضوات هيئة التدريس على استخدام الألعاب في الشرح باستخدام برامج متنوعة.
- المدى المتوسط:** تطوير بنك ألعاب إلكترونية متكاملة تغطي فصول المقرر - إخراج الألعاب ضمن خطة المقرر كمكون أساسي وليس إضافياً - تقييم أثر الألعاب بشكل دوري على التحصيل والدافعية.
- المدى الطويل:** تعويل المقرر إلى صيغة تفاعلية تعتمد على الألعاب والمحاكاة - التعاون مع منصات تعليمية لتطوير ألعاب احترافية مخصصة للمقرر - إجراء أبحاث موسعة لقياس الأثر على مستويات أعلى من التفكير (التحليل، التطبيق).

المراجع

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المخلص

هدف البحث إلى تحسين الممارسات البحثية لدى طالبات البكالوريوس في برنامج علم الاجتماع. من خلال إدخال تقنيات الذكاء الاصطناعي في تدريب عملي ميداني أثناء مقرر "تصميم وتنفيذ البحوث الاجتماعية" ومقرر "مشروع التخرج".

سعى البحث إلى استكشاف فاعلية هذه التقنيات في دعم الطالبات في جمع الدراسات السابقة، وتحليلها وتصنيفها، ثم صياغتها بشكل أكاديمي منهي. بالإضافة إلى تعزيز قدرتهن على توظيف النظريات السوسولوجية في بحوثهن. وقد تم تطبيق هذا البحث الإجمالي على مجموعة واحدة مكونة من (٧٤) طالبة، حيث تم تنفيذ خطة تدريبية متدرجة واختبار مدى التحسن في الأداء عبر الملاحظة والتأمل والتحليل المرحلي.

وأُسفرت النتائج عن تحسن ملحوظ في مهارات الطالبات المتعلقة بالتصنيف والربط النظري والكتابة العلمية. بما يعكس أثر إدماج الذكاء الاصطناعي كأداة داعمة في تطوير الأداء البحثي.

أهداف البحث/مشكلة البحث

أهداف البحث

يهدف هذا البحث الإجمالي إلى تطوير المهارات البحثية لدى طالبات برنامج علم الاجتماع. من خلال تصميم وتطبيق خطة تدريبية تدمج تقنيات الذكاء الاصطناعي في مراحل جمع وتصنيف وصياغة الدراسات السابقة، وتوظيف النظريات السوسولوجية. كما يسعى إلى رفع وعي الطالبات بالاستخدام الأخلاقي والمنهجي لهذه التقنيات. وتحديد الضوابط التي تضمن توظيفها بوصفها أداة داعمة لا بدلاً عن الجهد الأكاديمي. ويتضمن البحث التأمل في أداء الطالبات قبل وأثناء وبعد تنفيذ الإجراء. بهدف رصد أثر التغيير والتحسين في ممارساتهن البحثية.

تساؤلات البحث

1. إلى أي مدى تُسهم تقنيات الذكاء الاصطناعي في تحسين مهارات الطالبات في تصنيف وصياغة الدراسات السابقة ضمن مشاريع التخرج؟
 2. كيف يمكن للذكاء الاصطناعي أن يدعم الطالبات في تنظيم وتوظيف النظريات السوسولوجية داخل البحث الاجتماعي؟
 3. ما التحديات أو الاستخدامات السلبية التي ظهرت أثناء تطبيق تقنيات الذكاء الاصطناعي في سياق تدريبي ميداني؟
 4. ما الضوابط التي تم التوصل إليها لضمان الاستخدام المنهجي والأخلاقي للذكاء الاصطناعي في البيئة التعليمية البحثية؟
- كما يسعى البحث إلى تضيء أثر التدخل التدريبي باستخدام تقنيات الذكاء الاصطناعي على مستوى أداء الطالبات. وملاحظة التحسن النوعي في إنتاج مشاريع التخرج. من حيث التنظيم، وتكامل المضمون، وجودة التوثيق النظري. مقارنة بالممارسات السابقة.

منهجية البحث

المنهج والعيبة:

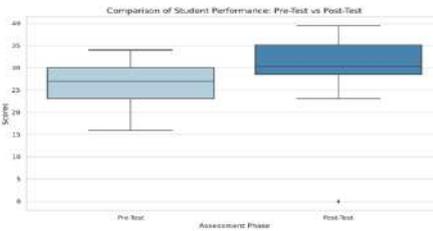
اعتمد هذا البحث على منهج البحث الإجمالي الذي يقوم على تحسين الممارسات التعليمية في سياقها الواقعي. من خلال تخطيط وتنفيذ وتقييم إجراء تطبيقي يهدف إلى تنمية المهارات البحثية لدى الطالبات. باستخدام تقنيات الذكاء الاصطناعي. وقد مرَّ البحث بمراحل: تشخيص المشكلة - التخطيط للتدخل - تنفيذ الإجراء - التأمل والتقييم. حيث قامت الباحثة بتصميم برنامج تدريبي ميداني قائم على استخدام الذكاء الاصطناعي في جمع وتصنيف وصياغة الدراسات السابقة، وتنظيم النظريات في بحوث التخرج.

عينة الدراسة تكونت من (٧٤) طالبة من طالبات برنامج علم الاجتماع في المستوى السابع والثامن بكلية الآداب - جامعة الإمام عبد الرحمن بن فيصل. تم اختيارهن بطريقة قصدية. نظراً لتفاعل الباحثة المباشر. معهن كمحاضر. نُفذ الإجراء داخل مقرر "تصميم وتنفيذ البحوث الاجتماعية" في الفصل الدراسي الأول، واستُكمل بشكل مندرج خلال مقرر "مشروع التخرج" في الفصل الثاني. مع رصد وتوثيق تطور الأداء بشكل مرحلي.

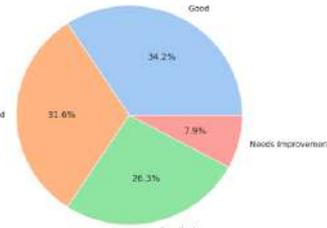
النتائج

1. أسفرت نتائج هذا البحث الإجمالي عن تحسن ملحوظ في الأداء البحثي للطالبات بعد تطبيق الإجراء التدريبي المعتمد على تقنيات الذكاء الاصطناعي.
2. أظهرت البيانات الكمية ما يلي: ارتفع متوسط درجات الطالبات من (٢٦.٣١ ± ٤.٩٤) في الاختبار القبلي إلى (٣٠.٧٥ ± ٦.٨٠) في التقييم البعدي. تمثل هذه الزيادة نسبة تحسن قدرها ١٦.٩%. مما يعكس أثر التدخل التدريبي. على تطوير المهارات البحثية. كما أظهرت المخرجات النهائية للمشاريع تحسناً في تصنيف الدراسات السابقة منهجياً و صياغة الفقرات بلغة أكاديمية واضحة وتوظيف النظريات السوسولوجية بصورة متماسكة ومرتبطة بواقع البحث.

الرسم البياني (١) مقارنة بين أداء الطالبات قبل وبعد التدريب باستخدام تقنيات الذكاء الاصطناعي



Distribution of Performance Levels (Post-Training)



	Criteria 1	Criteria 2	Criteria 3	Criteria 4
Student A	8.01	7.99	5.77	6.44
Student B	4.50	3.11	9.55	1.12
Student C	6.15	8.90	6.18	5.66
Student D	8.21	2.15*	3.11*	7.17
Student E	3.00	9.70	10.50	4.45

This table illustrates the performance of students across four key research criteria after the application of AI-based training. Scores are out of 10. An asterisk (*) indicates a noteworthy change or statistically relevant variation in the student's score.

الأثر

1. أسهم هذا البحث الإجمالي في إحداث تغير نوعي ملموس في ممارسات الطالبات البحثية خلال مقرر "تصميم وتنفيذ البحوث الاجتماعية" و"مشروع التخرج".
- ومن خلال التطبيق المندرج للإجراء التدريبي، لاحظت الباحثة - بوصفها جزءاً من البيئة التعليمية- جملة من الآثار الإيجابية على مستوى الأداء والاتجاهات. يمكن تلخيصها في المحاور الآتية:
 - أولاً: الأثر المعرفي والمنهجي: أصبحت الطالبات أكثر قدرة على البحث المنهجي عن الدراسات السابقة باستخدام أدوات الذكاء الاصطناعي، مثل: Google Scholar وSemantic Scholar وChatGPT. تحسنت قدرتهن في التصنيف والتحليل. إذ بدأت بتميز أنواع الدراسات (نظرية، ميدانية، نقدية) وتصنيفها وفق متغيرات البحث. وأظهرن قدرة أكبر على صياغة فقرات أكاديمية واضحة. وربطها بالمفاهيم النظرية ذات الصلة.
 - ثانياً: الأثر العملي والمهاري: أظهرت منتجات الطالبات (المشاريع النهائية) تحسناً في البنية والتنظيم والتسلسل المنطقي. حيث تمكنت الطالبات من استخدام أدوات مساعدة (مثل Zotero أو Grammarly أو أدوات إعادة الصياغة الأكاديمية) بصورة تعزز من جودة الكتابة.
 - ثالثاً: الأثر القيمي والسلوكي: أبدت الطالبات حرصاً متزايداً على الالتزام بأخلاقيات البحث العلمي، والتفرقة بين المساعدة التقنية والسرقعة العلمية.



التحسينات المستقبلية

1. استناداً إلى نتائج هذا البحث الإجمالي. يمكن اقتراح عدد من التحسينات المستقبلية التي تسهم في تعميق الأثر وتوسيع نطاق الاستفادة من تقنيات الذكاء الاصطناعي في التعليم الجامعي. منها:
 - تصميم دليل إرشادي منهجي لاستخدام أدوات الذكاء الاصطناعي في البحث الاجتماعي. يوضح التطبيقات الممكنة والضوابط الأخلاقية.
 - إدراج وحدات تدريبية رسمية ضمن مقررات المناهج البحثية. تتناول استخدام أدوات مثل ChatGPT وZotero وGoogle Scholar بصورة منظمة.
 - توسيع نطاق التطبيق ليشمل طلاب البرامج الأخرى في الكلية (مثل: الخدمة الاجتماعية، الإعلام، الجغرافيا). لقياس الفروقات وتبادل التجارب.
 - إشراك الطالبات في تقييم الأدوات التقنية المستخدمة. من خلال نماذج استقصاء وتأمّل ذاتي. بهدف تعزيز التعلم التشاركي وتمكين التفكير النقدي.
 - تعزيز التكامل بين الذكاء الاصطناعي والأساليب التقليدية في البحث. بحيث لا يُنظر للأداة التقنية كبديل بل كمكمل يعزز جودة الإنتاج العلمي.
 - إجراء بحوث إقليمية لاحقة تركز على عناصر محددة. مثل: مهارات التوثيق. أو أخلاقيات استخدام الذكاء الاصطناعي. أو تصميم أدوات بحث رقمية.

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أثر التعليم في المتحف على تحصيل طلاب البكالوريوس في قسم التاريخ

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د. عمر بن سعد الطويل، أستاذ مساعد، كلية
العلوم الاجتماعية – قسم التاريخ والحضارة



المُلخص

هدفت الدراسة إلى قياس أثر التعليم في المتحف على مخرجات التعلم لطلاب البكالوريوس في قسم التاريخ والحضارة بجامعة الإمام محمد بن سعود الإسلامية، وذلك مقارنة بالتعليم في القاعة الدراسية.

ولتحقيق أهداف الدراسة فقد استخدم الباحث المنهج شبه التجريبي، حيث تم اختيار عينة من الطلاب وتقسيمهم إلى ثلاثة مجموعات:

المجموعة الأولى: هي مجموعة ضابطة لا تتعرض لأي مدخل تعليمي، والغرض منها أن تكون للمقارنة مع المجموعتين التاليتين.

وأما المجموعة الثانية: فتتلقى تعليماً في قاعة دراسية باستخدام العرض التقديمي (PowerPoint).

وأما المجموعة الثالثة: فتأخذ الموضوع الدراسي نفسه ولكن في المتحف.

وقد تم إجراء اختبار لقياس الأثر واستطلاع رأي الطلاب، وتوصلت الدراسة إلى أهمية المتاحف في تجويد مخرجات التعلم، وإثراء تجربة الطلاب.

أهداف البحث/مشكلة البحث

مشكلة البحث:

يعتمد التدريس في أقسام التاريخ بشكل كبير على أسلوب الإلقاء والمحاضرة في القاعة الدراسية، مما يؤثر على تفاعل الطلاب وفهمهم العميق للمادة العلمية.

ومع توفر بيئات تعليمية مساعدة –ومن أبرزها المتاحف- فقد حرصت الدراسة على التحقق من مدى فاعلية التعليم في المتحف على مخرجات التعلم لطلاب قسم التاريخ.

أهداف البحث:

1. قياس أثر التعليم في المتحف على مخرجات تعلم طلاب قسم التاريخ.
2. مقارنة فاعلية التعلم في المتحف بأسلوب المحاضرة التقليدية في تنمية الفهم التاريخي لدى الطلاب.
3. استطلاع رأي الطلاب في التعليم المتحفي باعتباره وسيلة تعليمية مساعدة.

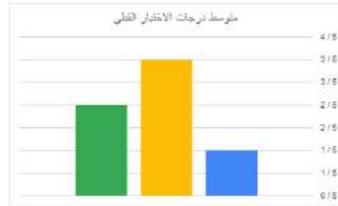
منهجية البحث

اعتمد البحث على المنهج شبه التجريبي لقياس أثر التعليم في المتحف على مخرجات التعلم لدى طلاب قسم التاريخ، من خلال تطبيق تجربة ميدانية على ثلاث مجموعات من الطلاب:

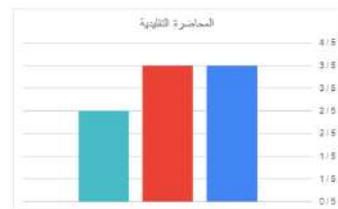
1. المجموعة الأولى: مجموعة ضابطة لم تتعرض لأي تدخل تعليمي.
 2. المجموعة الثانية: تلقت تعليماً يعتمد على أسلوب الإلقاء والمحاضرة مع استخدام العرض المرئي.
 3. المجموعة الثالثة: تلقت تعليماً في المتحف.
- استخدام اختبار قبلي-بعدي لقياس التحصيل المعرفي.
 - إجراء استطلاع لرأي الطلاب في المجموعة الثانية والثالثة تجاه التجربة التعليمية.

النتائج

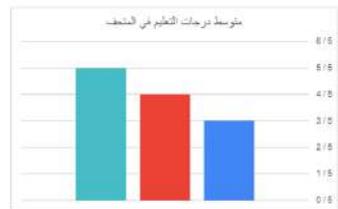
1 متوسط درجات الاختبار القبلي من (٥):



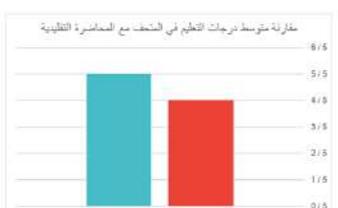
2 متوسط درجات الاختبار البعدي للمجموعة الثانية (المحاضرة التقليدية) من (٥):



3 متوسط درجات الاختبار البعدي للمجموعة الثالثة (التعليم في المتحف) من (٥):



4 مقارنة بين متوسط درجات التعليم التقليدي والتعليم في المتحف:



❖ أظهرت النتائج ارتفاع درجات الطلاب الذين تلقوا تعليماً في المتحف، مقارنة بالطلاب الذين تلقوا محاضرة تقليدية.

الأثر

1 أهمية تعزيز تدريس التاريخ بالبيئات التعليمية المساعدة للمحاضرة الدراسية، ومن ذلك التعليم من خلال المتحف.

2 أظهر الاستطلاع تفضيل الطلاب للتعليم في المتحف على المحاضرة التقليدية.

3 يلاحظ من خلال الاستطلاع أن التعليم في المتحف زاد من دافعية الطلاب نحو التعلم.

من تعليقات الطلاب على التجربة التعليمية

رؤية الأثرات أمام ناظرينك يبسط المعلومات

كان شرح واضح لكل شيء من ناحية الفائدة العلمية وتوضيح طرق الاستخدام وإبراز العلماء و معرفة فوائد الأسطوانات من ناحية معرفة الوقت والابراج و العواصم بشكل خاص

استفدت كثيراً عن علم الفلك .

التحسينات المستقبلية

- زيادة عدد افراد العينة للخروج بنتائج أكثر دقة
- إطالة مدة التعلم في كل بيئة تعليمية حتى يظهر التأثير بشكل أوضح.

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تطوير مهارة أخذ التاريخ المرضي لطلاب الطب والأطباء المتدربين

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جامعة الإمام عبد الرحمن بن فيصل
المرشد المهني: د. جلييلة الطيب بابكر - جامعة حائل

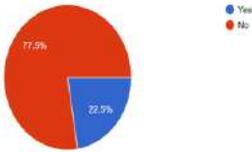
INSERT
IMAGE
HERE

شعار
الجامعات
الخارجية

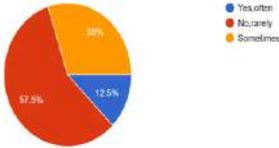
الأثر

أظهر الإستبيان تأثير عوامل أخرى على جودة التدريب مثل قلة وعدم إنتظام النوم بنسبة ٧٠% من المشاركين. أكثر العوامل تأثيراً على التدريب في أمراض الكلى حسب إجابات المشاركين قلة الممارسة العملية تليها عدم المعرفة بالمفاهيم الأساسية في طب أمراض الكلى وأخيراً عدم كفاية الإرشاد والتوجيه المهني. أفاد حوالي ٤٢% من المتدربين بوجود صعوبات لغوية عند التواصل مع المرضى. الأمر الذي يستلزم مزيد من الدراسة والبحث.

11: Do you have enough sleep during your training/duties time?
40 responses



8: Do you encounter any language barriers when communicating with dialysis patients or their relatives?
40 responses



التحسينات المستقبلية

يعكس الإستبيان الحاجة لزيادة وقت التعرض والتدريب لحالات القصور الكلوي ومراجعة منهج التدريب السريري لأمراض الكلى والتفكير في تبني طرق تدريسية وتقييمية مختلفة تزيد من تفاعل الطلاب والمتدربين وتعزز احتكاكهم بمرضى القصور الكلوي.

يقترح الباحث أيضاً تطوير صيغة نموذجية للقصة المرضية باللغة العربية لتسهيل التواصل مع المرضى وذلك استقاء من نتائج هذه الدراسة وبناء على مراجعة الأدبيات والدراسة السابقة والمشابهة.

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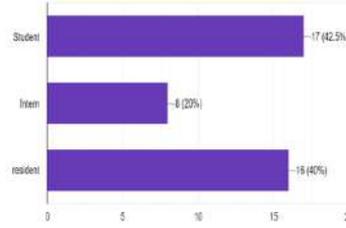
النتائج

تم توزيع الإستبيان إلكترونياً على مجموع ٥٥ مشاركا وقد أجاب ٤٠ منهم بنسبة إستجابة إجمالية بلغت ٧٢.٧%.

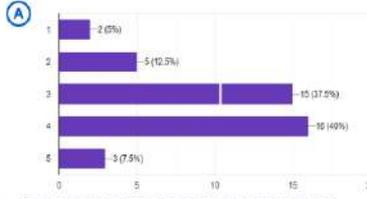
1 كان ثلثا المشاركين من الإناث. ٢٠% منهم من أطباء الامتياز و٤٠% من كل طلاب الطب ومتدربي الطب الباطني.

2 أفاد أكثر من ثلثي المشاركين بعدم تلقيهم لتدريب عملي ممنهج في مهارات أخذ التاريخ المرضي لمرضى القصور الكلوي. بينما أشارت النتائج لعدم تلقي ٥٠% من المتدربين للتغذية الراجعة المطلوبة عند تقديمهم وعرضهم للتاريخ المرضي.

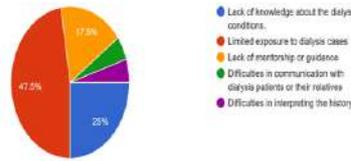
1 Kindly state your current position:
40 responses



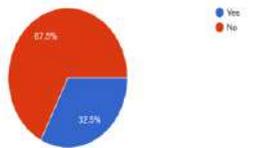
4-On a scale of 1-5: how confident are you in taking a focus history from a dialysis patient? (1: not confident, 5: very confident)
40 responses



12-From the following options, kindly choose the top three obstacles impacting history-taking in dialysis patients:
40 responses



14: Have you received specific training on the skills of history-taking for ESRD patients on dialysis?
40 responses



المخلص

التاريخ المرضي هي المعلومات والسوابق الطبية التي يجمعها الطبيب من المريض أو أسرته لتشخيص الحالة الصحية وتحديد الفحوصات اللازمة ووضع خطة العلاج.

ويعد التاريخ المرضي وطريقة أخذه من المهارات الأساسية في الممارسة الطبية وهو مطلب أساسي للتشخيص الطبي.

يعتبر طب أمراض الكلى من التخصصات الباطنية الدقيقة التي شهدت زيادة في عدد المرضى في الفترات الأخيرة مما استلزم زيادة متوازنة في عدد المتخصصين وتطوير مناهج التدريب.

بالبحث في الأدبيات لوحظ وجود صعوبات لغوية في التواصل بين المتدربين والمرضى في الدول التي يدرس فيها الطب بلغة أجنبية كاللغة الإنجليزية.

تناول هذا البحث العوامل المؤثرة على أداء الطلاب والأطباء المتدربين عند أخذهم للتاريخ المرضي لمرضى الكلى. وجاءت النتائج من خلال إجابات المشاركين بالحاجة لزيادة الجرعات التدريبية في طب أمراض الكلى مع الحاجة أيضاً للإرشاد والتوجيه والتقييم المستمر.

أهداف البحث/مشكلة البحث

أثناء تدريسي للمقرر السريري لأمراض الكلى لاحظت ضعف في مهارات أخذ وتقديم التاريخ والسوابق المرضية ومهارات التواصل مع مرضي القصور الكلوي.

يهدف هذا البحث لتقصي ودراسة العوامل المختلفة التي تؤثر على أداء المتدربين في قسم أمراض الكلى أثناء الممارسة العملية السريرية في أخذ التاريخ المرضي والتواصل مع المرضى وأسراهم.

سؤال البحث

استطلاع أسباب ضعف مستويات الطلاب والأطباء المتدربين في أخذ التاريخ المرضي لمرضى القصور الكلوي من وجهة نظرهم وطرق معالجتها.

سؤال البحث

تقييم مدى الثقة بالنفس عند أخذ التاريخ المرضي والفحص السريري لمرضى الكلى.

منهجية البحث

تم الاطلاع على الأدبيات والدراسات المتعلقة بموضوع البحث ومن ثم تم تحديد مجتمع الدراسة وتوزيع استبيان إلكتروني باستخدام نماذج قوالب يحتوي على ١٥ سؤال متعدد الخيارات على عينة الدراسة من طلاب وطالبات الطب بجامعة الإمام عبد الرحمن بن فيصل وأطباء الامتياز المتدربين والأطباء المقيمين بتخصص الطب الباطني وذلك خلال العام الجامعي ٢٠٢٤/٢٠٢٥.

يستغرق الاستبانة حوالي ٥ الى ٧ دقائق لإكماله. وقد تم توزيعه عن طريق مشاركة رابط الاستبيان أو مسح الباركود



مدى فاعلية استخدام التعليم بالمحاكاة القضائية في مجال التعليم القانوني

د. محمد بن سعيد الحمراي، أستاذ مساعد، قسم القانون – كلية الأعمال
المرشد المهني / د. جلوس بنت فرج القحطاني



الملخص

يهدف البحث إلى دراسة مدى فاعلية استخدام أسلوب المحاكاة القضائية كوسيلة تعليمية في مجال التعليم القانوني، وذلك من خلال تحليل تأثير هذا الأسلوب على تطوير مهارات الطلبة القانونية والعملية.

وقد شملت الدراسة استطلاعاً لأراء أعضاء هيئة التدريس في كليات وأقسام القانون على مستوى المملكة العربية السعودية، والذين قاموا باستعمال هذا الأسلوب أثناء تدريسهم بالمقارنة لطلابهم الذين لم يستعملوا هذا الأسلوب في التدريس، وقد أظهرت النتائج رضاً عالياً للأعضاء في قدرتهم على توصيل المفاهيم القانونية، ورضاً من قبل الطلبة على استعمال هذا الأسلوب التدريسي بشكل لمسوا منهم فهماً أعمق للموضوعات القانونية.

أهداف البحث/مشكلة البحث

مشكلة البحث
ما مدى فاعلية استخدام المحاكاة القضائية في تحسين العملية التعليمية القانونية وتعزيز قدرتهم على تطبيق القانون عملياً؟

أهمية البحث
يهدف هذا البحث إلى دراسة أثر استخدام المحاكاة القضائية كأداة تعليمية في أقسام وكليات القانون، ومدى فاعليتها في تطوير مهارات الطلاب، وتعزيز فهمهم للنظم القانونية والإجراءات القضائية، وذلك عبر ما يلي:

- تعزيز الجانب العملي في التعليم القانوني.
- سد الفجوة الحاصلة بين النظرية والتطبيق في دراسة القانون.
- تمكين الطلاب من تجربة أدوار مختلفة في النظام القضائي.

أهداف البحث
١. تقييم مدى مساهمة المحاكاة القضائية في تحسين استيعاب الطلاب للمفاهيم القانونية.
٢. تحليل أثر المحاكاة على تنمية المهارات القانونية.

- أسئلة البحث**
- ما مدى استعمال الجهات التعليمية القانونية في الجامعات السعودية لاستراتيجية المحاكاة القضائية في التدريس القانوني؟
 - ما هي الآثار المعرفية والمهارية والقيمية التي انعكست على الطلبة بعد استخدام أعضاء هيئة التدريس لاستراتيجية المحاكاة القضائية؟
 - ماهي التحديات التي تواجه أعضاء هيئة التدريس الراغبين في استخدام استراتيجية المحاكاة القضائية أثناء تدريسهم؟

منهجية البحث

- المنهج المستخدم:** تم استخدام المنهج التجريبي والمنهج المقارن في صناعة هذا البحث.
- عينة الدراسة:** مجموعة من أعضاء هيئة تدريس القانون في الجامعات السعودية.
- أدوات البحث:** استبيانات، مقابلات.

الخطوات التنفيذية

- تحديد المستهدف:** تم عبر الاستبيانات التواصل مع مجموعة من أعضاء هيئة التدريس في الجامعات السعودية للكشف عن مدى استعمالهم لاستراتيجية المحاكاة القضائية من عدمه.
- بدء استخدام الاستراتيجية:** تم حث الأعضاء على استخدام استراتيجية المحاكاة القضائية.
- قياس الأثر:** تم قياس الأثر المعرفي والمهاري والقيمي الناتج عن استخدام استراتيجية المحاكاة القضائية، وبيان مدى الفرق التعليمي قبل استخدامها وبعده.

النتائج

١ فيما يتعلق بفهم الطلبة لموضوعات المقرر القانونية نتيجته لاستخدام المحاكاة القضائية، نجد أن ثمة رضاً عالياً لدى الأعضاء في قدرتهم على توصيل المفاهيم القانونية لدى الطلبة، وتطوراً ملحوظاً في مهارات التفكير القانوني والنقدي لديهم.



٢ فيما يتعلق برضا الطلبة عن استعمال المحاكاة القضائية، نجد ارتفاعاً ملحوظاً في رضا الطلبة عن هذه الاستراتيجية، وعن كونها تؤدي إلى زيادة ثقافتهم الشخصية في التعامل مع القضايا القانونية.



الآثر

فيما يلي مجموعة من ردود الزملاء أعضاء هيئة التدريس الذين شاركوا في الدراسة، والتي تبين الأثر الناتج عن استخدامهم لاستراتيجية المحاكاة القضائية في التدريس.

تربسبب المعلومة اكتساب مهارة اللقاء والمنافسة والمناظرة تربسبب قيم وتعاليم الدين الإسلامي في إحقاق الحق ونصرة المظلوم

ارتفاع مستوى الطلاب في الجانب العملي، وأصبحت لديهم تجربة أولى كبرت جازر الرهبة.

الأثر المعرفي - رسوخ المعلومة - تقريب وتبسيط العلم والحق والحقق و من المهم جداً أن يجمع عضو هيئة التدريس ولو بشكل جزئي بين العلم النظري والتطبيقي الأمر الذي يجعل الطالب أكثر تركيزاً ويخفف تكرار العلم أو التوضيح الملل.

تحسن الحوار والمنافسة بين الطلبة

تحديات تطبيق استراتيجية المحاكاة القضائية

أشار بعض أعضاء هيئة التدريس إلى وجود عدد من التحديات التي واجهتهم أثناء استخدامها للاستراتيجية.

وجود مسرح أو مكان مناسب مختلف عن الفاعات المخصصة للتدريس
تخصيص قاعة لذلك الغرض
توفير عدد أكبر من مراجع السوانق القضائية للاستعانة بها في اختبار القضايا المناسبة للعمل كذلك الاستعانة بأعلام قانونية وثائقية يمكن الاستفادة منها في عمل المحاكاة
تهنئة محاكم صورية، زيارات ميدانية للجهات العليا.
مقرات متاحة ومجهزة دائماً ليست تحتاج إلى أدوات.
قاعة محاكمة خاصة

التوصيات والتحسينات المستقبلية

فيما يلي مجموعة من التوصيات والتحسينات المستقبلية التي يمكن أن تعزز من فاعلية استراتيجية المحاكاة القضائية كأحد الاستراتيجيات التعليمية الهامة في مجال التدريس القانوني:

١ دمج المحاكاة القضائية كاستراتيجية تدريس على مستوى برامج القانون التعليمية وفي جميع المقررات، فيما عدا المقررات ذات الصلة بفلسفة القانون كمقرر تاريخ القانون ومقرر القانون المقارن.

٢ توفير تدريب متخصص لأعضاء هيئة التدريس على إدارة المحاكاة القضائية، لا سيما تدريبهم على إنشاء القضايا الافتراضية التي تغطي فروع القانون المختلفة، وذلك في حال عدم وجود قضايا واقعية أو مستوحاة من الواقع لها صلة بموضوع المقرر.

٢ توفير بيئة شبيهة بالمحكمة من حيث التصميم والانضباط والإجراءات تحت إشراف القسم العلمي، بحيث يتم تخصيص قاعة دراسة مستقلة خاصة لتدريس الطلبة فيها باستعمال استراتيجية المحاكاة القضائية، ومن ثم توثيق عملهم بالفيديو ونشره على مستوى الكلية.

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Why students do not turn on their webcam during online classes?

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Abstract

This action research study investigates the reasons students keep their webcams off during online classes and assesses the impact of implementing an optional criterion for webcam use. Findings indicate that after introducing the criterion, student participation increased, highlighting the importance of engagement strategies in remote learning environments.

Research Aims/Problem

This study aims to identify the reasons behind students' decisions to keep their webcams off during online classes and evaluate the impact of implementing an optional criterion for webcam use on student engagement.

RESEARCH QUESTION 1

- What are the primary reasons students choose not to use their webcams during online classes?

RESEARCH QUESTION 2

- How does the implementation of an optional webcam policy affect student participation rates?

Research Methodology

This study employs a descriptive mixed-methods approach, combining qualitative and quantitative data collection. The research was conducted on Master level students during the course Healthcare Epidemiology. A survey¹ was distributed to the 10 students in that batch, and eight students responded (80%). The survey assessed students' reasons as to why they kept their webcam off during the online session while asked to open their cameras. Moreover, two sessions were conducted online (Lecture 8 and Lecture 9) through "Microsoft Teams" and the average student attendance was recorded and compared to the instructor's duration. In Lecture 8, the opening of the webcam was required, and in Lecture 9, it was optional.

Outcomes

The average age for this cohort is **29.5** years old.

Figure 1. The student is currently employed.



Figure 2. Most of the time, when attending online classes, students use



Table 1. Sample characteristics (n=8)

	Age		Total	
	≥30	<30		
Employed	n%	n%		
	Yes	3 75.0	3 75.0	6
No	1 12.5	1 12.5	2	
Device used	Laptop	2 50.0	2 50.0	4
	Desktop	0 0.0	2 50.0	2
	Tablet	0 0.0	0 0.0	0
	Mobile phone	2 50.0	0 0.0	2
Number of reasons	1	1 12.5	2 50.0	3
	2	2 25.0	0 0.0	0
	3	2 25.0	1 12.5	3
	4	1 12.5	0 0.0	1
	5	0 0.0	1 12.5	1

Table 2. Students' reasons for keeping webcams off during online classes

Reasons	n%
I was concerned about my surroundings being visible to all	450.0
Other	450.0
I was more comfortable when webcam was off	337.5
Keeping webcam on slowed down my internet speed	337.5
It was a room to turn off webcam / Everyone's camera was off	225.0
I didn't want others to find me talking with friends/family members during the lecture	225.0
The camera on my device was not working	225.0
I felt distracted during lecture when my or other students' webcam was on	112.5
I was concerned about my appearance	112.5
I felt that everyone is looking at me	00.0
I didn't want others to find me sleeping/laying in the bed	00.0
I didn't want others to find me eating during lecture	00.0
I didn't want others to find me paying no attention to lecture	00.0
I didn't want others to find me doing things/task not related to lecture on the device	00.0
I didn't want others to find me moving away from computer/device during the lecture	00.0

Table 3. Other reasons were highlighted by students

- "If others opened it I would cus I'm used to it"
- "I experience eye strain and headache due to light and screen sensibility. I find it difficult to pay attention when I have those symptoms"
- "The family usually interrupts the class which force me to switch off to answer them and re-open"
- "My son has special needs, and he will keep knocking on the door. I will check on him very frequently"

Table 4. Log in duration for instructor and students in online sessions (in seconds)

	Instructor duration	Average student duration	% of class time
Lecture 8 (Before implementation)	7185	4991	69.5
Lecture 9 (After implementation)	5827	4278	73.4

Impact

This research revealed that allowing students the choice to use their webcams increased their attendance and participation rates. Initial findings suggest that autonomy in webcam use fosters a more comfortable learning environment, encouraging students to engage more actively.

Although students were asked to open their webcams in Lecture 8, only 70% complied, with an average attendance of 69.5%. On the other hand, in Lecture 9, 0% of students opened their webcams when it was made optional. However, attendance increased to 73.4% and participation in the chat box were observed.

Future Developments

Expand the study to include a larger, more diverse student population. Develop guidelines for educators on webcam use in online classes based on findings. Implement training sessions for students on the benefits of active participation in online learning environments.

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Abstract

This action research examines the impact of flipped classroom learning on EMS students' engagement and satisfaction compared to traditional lectures. Traditional methods often result in passive learning, limiting critical thinking and decision-making skills. The flipped classroom integrates pre-class instructional materials with interactive in-class activities, aiming to enhance student participation. This study involved 40 EMS students. Findings show higher engagement (4.2 vs. 3.6, p < 0.05) and satisfaction (4.3 vs. 3.7, p < 0.05) in the flipped group, with a strong correlation (r = 0.75, p < 0.01) between engagement and satisfaction. Students reported higher motivation, better knowledge retention, and increased confidence. Faculty observed deeper student engagement and more meaningful discussions. These findings suggest that flipped learning enhances engagement and satisfaction in EMS education. Institutions should consider adopting blended learning and faculty training to optimize student outcomes.

Research Aims/Problem

Traditional lecture-based EMS education often results in passive learning, limiting students' ability to develop critical thinking and practical skills essential for real-world emergency scenarios. Low engagement and satisfaction can negatively affect knowledge retention and decision-making. The flipped classroom model, which integrates pre-class instructional materials with interactive in-class activities, has been proposed as a strategy to enhance student participation and satisfaction. However, its effectiveness in EMS education remains underexplored. This study investigates whether flipping the classroom can improve engagement and satisfaction compared to traditional learning.

Research Questions

- Does the flipped classroom model improve EMS students' engagement compared to traditional learning?
- Do EMS students in a flipped classroom report higher satisfaction than those in a traditional classroom?
- Is there a significant correlation between student engagement and satisfaction in EMS education?

Research Methodology

Study Design & Participants:

This action research follows a comparative study design, evaluating the effectiveness of the flipped classroom model in EMS education. The study involved 40 EMS students (20 male, 20 female), divided into two groups:

- Flipped Classroom Group (20): Pre-class instructional materials (videos, readings) with in-class interactive discussions and problem-solving.
- Traditional Classroom Group (20): Lecture-based sessions with limited active learning.

Data Collection & Analysis:

- Engagement Survey (5-point Likert scale) measuring participation, attention, and involvement.
- Satisfaction Survey (5-point Likert scale) assessing students' perceptions of the learning experience.
- Observational Data tracking classroom participation rates and student feedback.

Statistical Analysis:

- Independent t-tests to compare engagement and satisfaction scores.
- Pearson correlation analysis to examine the relationship between engagement and satisfaction.
- Descriptive statistics for survey results.

Outcomes

The flipped classroom model resulted in higher engagement and satisfaction compared to traditional lecture-based learning.

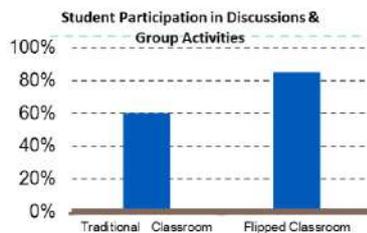
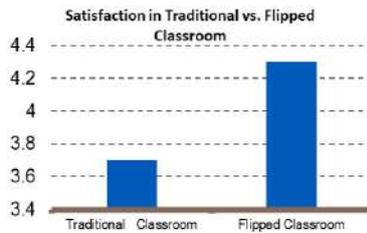
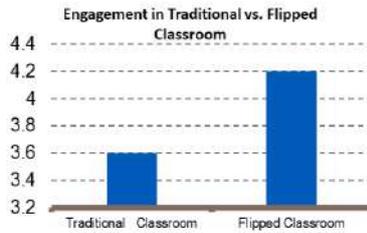
- 85% of flipped classroom students actively participated in discussions vs. 60% in traditional classrooms.
- Engagement scores: Flipped (4.2) vs. Traditional (3.6) (p < 0.05).
- Satisfaction scores: Flipped (4.3) vs. Traditional (3.7) (p < 0.05).
- Strong correlation (r = 0.75, p < 0.01) between engagement and satisfaction.

Reactions

Students: Reported higher motivation, better retention of knowledge, & increased confidence in class discussions.

Faculty: Observed greater student involvement, deeper critical thinking, and more active learning.

Departmental Impact: Increased faculty interest in implementing active learning strategies within EMS courses.



Impact

The flipped classroom model significantly improved student engagement and satisfaction, leading to a more interactive and effective learning experience in EMS education.

Key Impact Findings

- **After Flipped Classroom Implementation:** 85% of students actively participated in discussions. Engagement score: 4.2/5 (significantly higher participation). Satisfaction score: 4.3/5 (students felt more engaged and motivated).

Student & Faculty Quotes

"I felt more prepared and could participate better in discussions." **EMS Student**

"Students were more confident in applying knowledge, and discussions were more interactive." **Instructor**

"This approach transformed student engagement; I plan to use it in future courses." **Instructor**

Departmental Impact

- Faculty recognized the effectiveness of active learning and are exploring its integration into other EMS courses.
- Increased interest in faculty training on student-centered teaching methods.
- The study's findings support curriculum improvements that emphasize interactive learning.

Future Developments

Enhancing the Flipped Classroom Model

While this study demonstrated increased engagement and satisfaction, further improvements can be made to refine the flipped classroom model in EMS education.

Recommendations for Future Implementation

Expand to Larger Cohorts: Conduct future studies with larger student samples across multiple EMS courses to increase generalizability.

Long-Term Impact Assessment: Evaluate how the flipped model affects knowledge retention, skill application, and academic performance over time.

Blended Learning Approach: Combine flipped classrooms with case-based learning, simulations, and technology enhanced instruction to maximize engagement.

Faculty Development: Provide training and resources for EMS instructors to effectively implement active learning techniques.

Institutional Adoption: Encourage EMS programs to integrate flipped learning as part of standard teaching practices to enhance student engagement.

By refining and expanding the flipped classroom model, EMS education can continue to evolve, providing students with an interactive, engaging, and effective learning experience that better prepares them for real-world emergency medical practice.

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Bridging the Gap: Enhancing Leadership and Professional Development in Family Medicine Residency

Adam Fahad Aldhawayn, Assistant Professor, College of Medicine
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Abstract

Family physicians require leadership and professional skills beyond clinical training to navigate the evolving healthcare landscape.

The **Professional Development Program (PDP)** was established to bridge this gap by enhancing competencies in leadership, communication, and professionalism.¹

The program aligns with **Saudi Vision 2030** and **SaudiMed/CanMEDS competencies** to prepare family medicine residents for future leadership roles.^{2,3}

Research Aims/Problem

Family medicine residency programs primarily focus on clinical training, often lacking structured **leadership and professional development**, which limits residents' readiness for **healthcare leadership roles**.

The **PDP** was introduced to bridge this gap by integrating **leadership training and professional skill-building**.

Research Methodology

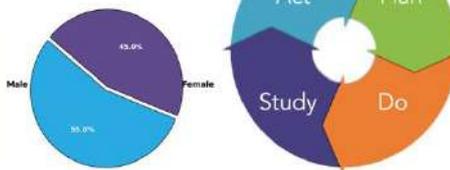
- How does the PDP **enhance** leadership, communication, and professionalism among family medicine residents?
- Does PDP improve resident **satisfaction and engagement**?
- How does it impact training **competencies** (Professional & Communicator)?



Outcomes

- PDP follows a **Plan-Do-Study-Act (PDSA) cycle**.
- Training components include:
 1. **Workshops**
 2. **Panel discussions**
 3. **Case-Based discussion**
- Data collected through **post-program assessments, surveys, and faculty evaluations**.

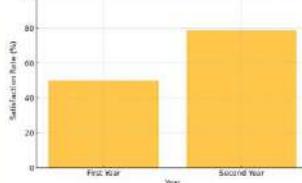
Gender Distribution of PDP Participants



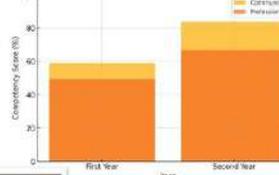
Mean Age: 29 ± 3 years

- Resident **satisfaction** increased from 50% (Year 1) to **78.6%** (Year 2).
- Competency growth: **Communicator** (58.9% → **83.5%**), **Professional** (49.3% → **66.8%**).
- Many PDP **graduates** now hold leadership positions in the Ministry of Health and other sectors.

Resident Satisfaction Improvement Over Two Years



Competency Development Over Two Years



Impact

This year, PDP collaborated with the **University's Center for Leadership**.

A **one-year specialized** leadership training program was implemented. Led by healthcare experts, designed to enhance professional growth and leadership capabilities.

PDP Implementation and Development



Future Developments

In Developing a structured **three-year leadership training program** tailored to family medicine residents.

Enhancing job market readiness and alignment with **healthcare workforce** needs.

Strengthening leadership development for **future healthcare leaders**.

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Learning, Attention, and Sleep: Exploring Neurocognitive Consequences of Poor Sleep Quality

Dr. Abdullah S. ALQarni

Assistant Professor of Sleep and Respiratory Medicine, College of Applied Medical Sciences



Background

- Sustained attention is a critical neurocognitive function that underpins learning.
- Sleep quality significantly impacts neurocognitive functioning, with particular effects on sustained attention capabilities.
- During the Ramadan and subsequent Eid periods, students experience notable alterations in their sleep patterns.
- During these times, students often exhibit signs of daytime sleepiness, poor concentration, and fatigue.

Research Aim

- This investigation sought to evaluate the relationship between sleep quality and sustained attention across three temporal periods pre-Ramadan, during Ramadan and post-Ramadan.

Research Methodology

- The study protocol involved administering a validated computerized 10-minute sustained attention assessment to a cohort of 19 healthy male university students (aged 19-22 years) across three specified periods: 2-3 weeks pre-Ramadan, third week of Ramadan, and post-Ramadan (Figure 1).
- Assessment parameters encompassed demographic variables and validated questionnaires to assess sleep quality (Consensus Sleep Diary, and Pittsburgh Sleep Quality Index (PSQI)).
- Sleep timing and duration were monitored using validated sleep diaries throughout the study periods.

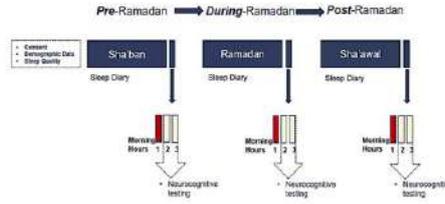


Figure 1: Schematic Representation of the Study Methodology

Results

Baseline Characteristics are shown in Table 1. Analysis stratified by sleep quality revealed distinct patterns based on sleep quality, as measured by PSQI (Figure 2).

Table 1: Baseline Characteristics

Characteristic	n (19)
n (male %)	19 (100%)
Age (years)	20.5 ± 0.9
Total PSQI Score (0 - 21 points)	7.2 ± 2.5
PSQI TST (hrs)	6.2 ± 1.7
Sleep Diary TST (hrs)	6.8 ± 1.4
Daytime Nap (hrs)	0.9 ± 1.3
Sleep Diary TST plus Daytime Nap (hrs)	7.6 ± 0.9

Data are presented in mean (SD)

- Participants exhibiting good sleep quality (PSQI ≤ 5) demonstrated no statistically significant (p-value > 0.05) variations in sustained reaction times across the three testing phases, with mean (±SD) values of 243.1 ± 8.9, 240.5 ± 13.7, and 235.8 ± 19.7 milliseconds for pre-Ramadan, during Ramadan, and post-Ramadan periods, respectively (Figure 2).

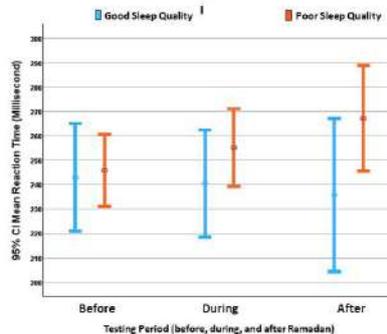


Figure 2: Attention-based Learning among students with good and poor sleep quality

- Conversely, subjects with poor sleep quality (PSQI > 5) exhibited a progressive, deterioration in sustained attention with 245.8 ± 27.5, 255.2 ± 28.6, and 267.2 ± 38.9 milliseconds for pre-Ramadan, during Ramadan, and post-Ramadan periods, respectively (Figure 2).

Conclusion

- These preliminary findings suggest that maintaining adequate sleep quality throughout pre-, Ramadan, and post-Ramadan might preserve sustained attention performance.
- Poor sleep quality, on the contrary, may adversely affect sustained attention performance during and after Ramadan.

Implication and Future Direction

- These preliminary findings suggest that maintaining adequate sleep quality throughout pre-, Ramadan, and post-Ramadan might preserve sustained attention performance.
- Future studies should explore academia-friendly solutions aimed at improving sleep quality.
- Additionally, research should investigate educational interventions that may help mitigate the negative impact on sustained attention.

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Abstract

The flipped classroom is a pedagogical approach that reverses traditional learning by delivering instructional content outside the classroom and using in-class time for active learning. This study aimed to evaluate the effectiveness of the flipped classroom in the Pharmaceutical Chemistry (4) course by analyzing student perceptions and feedback. An online survey was conducted among 17 enrolled students to assess their engagement, understanding, and overall satisfaction with the flipped learning experience. Findings revealed that 53% of students experienced the flipped classroom for the first time, and nearly half did not review the material beforehand. While over 50% rated the content as good to very good, a majority indicated that it required more depth. A slight improvement in understanding was noted by 53% of students, although 59% reported no significant impact on their grades. Moreover, 47% perceived the flipped classroom as somewhat less effective than traditional methods. The main areas identified for improvement included content quality and class interaction. This research highlights the potential and limitations of flipped learning in specialized pharmaceutical education. It underscores the need for enhancing pre-class materials and fostering more interactive

Research Aims

- Evaluate the impact of flipped classroom strategy on students' understanding and performance in Pharmaceutical Chemistry (4).
- Analyze students' perceptions of the flipped classroom compared to traditional instruction.
- Identify areas for improvement and propose strategies to enhance learning outcomes using the flipped model.

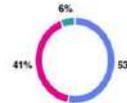
Research Methodology

- Design: Quantitative descriptive study.
- Instrument: An electronic survey designed using Microsoft Forms.
- Participants: 17 students enrolled in the Pharmaceutical Chemistry 4 course.
- Data Collection: The survey included both closed-ended and Likert-scale questions to gather student perceptions about flipped learning.
- Analysis: Descriptive statistical analysis using percentages and visualized through pie and bar charts.

Outcomes

First-Time Exposure:

• هذه هي المرة الأولى	9
• مرات 1-3	7
• مرات 4-5	1
• أكثر من 6 مرات	0



- Pre-Class Preparation: 47% of students did not review the educational materials before attending the class.
- Perception of Content Quality: Over 50% rated the pre-class materials as good to very good, but highlighted a need for more detailed explanations.
- In-Class Engagement: Only 24% (4 students) reported actively participating in classroom discussions.

Understanding Improvement:

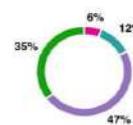
• لم يتحسن فهمي ووجدت الحصة صعبة في مهارات التفكير النقدي	1
• فهمي لم يتحسن ووجدت الحصة بسيطة	3
• لم يوجد فرق لم ألاحظ أي تغيير	4
• قد تم المساعدة كثيراً عبرت بقله الفهم في هذه المهارة	9



Impact on Grades: 59% of students said the flipped classroom had no significant effect on their academic performance.

Overall Satisfaction:

• أفضل بكثير	0
• أفضل إلى حد ما	1
• مماثلة	2
• أسوأ إلى حد ما	8
• أسوأ بكثير	6



Impact

- The flipped classroom model introduced students to a more autonomous learning process.
- Although many students did not observe significant grade improvement, over half acknowledged some enhancement in their comprehension.
- Students appreciated the flexibility of reviewing content at their own pace, yet many expressed the need for more direct, in-class explanations.
- The feedback highlighted a gap between content delivery and in-class engagement, suggesting targeted improvements in instructional design.

Future Developments

- Enhance Content Quality
- Increase In-Class Engagement
- Orientation and Support Provide
- Feedback Loop Improvement

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Abstract

This action research explores how project-based learning (podcasts, websites), AI chat technologies (ChatGPT, Grammarly, Cobalt's AI), and group work impact EFL students' grammar proficiency, engagement, and perceptions versus traditional methods. A mixed-methods, quasi-experimental design involved 40-50 Grammar 2 students (12-week intervention). Survey data (Likert-scale, open-ended) suggest enhanced engagement, perceptions, and contextual grammar application. Findings support adopting innovative, student-centered EFL grammar instruction.

Research Problem

Traditional grammar instruction (lectures, drills) often yields low engagement and superficial learning in EFL students (Grammar 1) (Richards & Rodgers, 2014). Grammar 2 integrates project-based learning (podcasts, websites), AI chat technologies (ChatGPT, Grammarly, Cobalt's AI), and group work to improve outcomes. Limited empirical research on their combined efficacy in enhancing grammar proficiency, engagement, and perceptions in EFL grammar instruction hinders adopting innovative, student-centered approaches (Zhang & Ma, 2023).
Overarching Research Question
How does the integration of project-based learning, technology, and group work impact EFL students' grammar proficiency, engagement, and perceptions compared to traditional methods?

Research Methodology

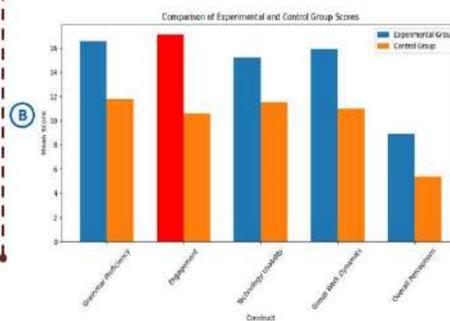
- Design:** Mixed-methods action research with a quasi-experimental design.
- Participants:** 46 EFL students.
- Experimental Group:** PBL (podcasts, websites), AI chat technologies (ChatGPT, Cobalt's AI), group work.
- Control Group:** Traditional methods (lectures, drills).
- Intervention:** 12 weeks. Experimental group collaborates on projects, uses AI tools for feedback.
- Data Collection:** Survey: Grammar proficiency, engagement, perceptions (Likert-scale, open-ended).
- Analysis:** Descriptive statistics for Likert-scale responses (means, frequencies); thematic coding for open-ended responses.

Outcomes

1 Quantitative Results: The integration of PBL, AI chat technologies, and group work significantly outperformed traditional methods across all measured constructs ($p < 0.001$). Engagement increased substantially (17.1 vs. 10.6, difference = 6.5), indicating heightened student motivation, consistent with prior research on PBL's efficacy (Almulla, 2020). Perceived grammar proficiency improved (16.6 vs. 11.8, difference = 4.8), suggesting enhanced grammar application. Technology usability (difference = 3.7) and group dynamics (difference = 4.9) also demonstrated notable gains, with 89% of participants preferring this approach (8.9 vs. 5.4).

2 Qualitative Insights: Thematic analysis revealed that students valued the practical application of grammar through projects (e.g., "Podcasts facilitated improved tense usage"). AI tools, such as ChatGPT, were reported to enhance engagement (e.g., "Brainstorming tasks were engaging"), though challenges included group coordination difficulties (e.g., "Unequal participation was an issue") and the need for additional AI training (e.g., "Additional guidance with ChatGPT was needed"), aligning with research on technology-mediated language learning (Godwin-Jones, 2022).

Construct	Experimental Mean	Control Mean	Difference
Grammar Proficiency	16.6	11.8	4.8
Engagement	17.1	10.6	6.5
Technology Usability	15.2	11.5	3.7
Group Work Dynamics	15.9	11	4.9
Overall Perceptions	8.9	5.4	3.5



Impact

This study demonstrates the effectiveness of integrating PBL, AI chat technologies, and group work in EFL grammar instruction:

- Enhanced Grammar Proficiency:** Improved contextual application (difference = 4.8).
- Increased Engagement:** Greater student motivation (difference = 6.5).
- Effective Technology Use:** Students reported higher confidence in AI tools (difference = 3.7), aligning with research on AI's role in language learning (Zhang & Ma, 2023).
- Improved Collaboration:** Strengthened group dynamics (difference = 4.9).
- Student Preference:** 89% favored this approach over traditional methods. These results support the adoption of student-centered methods to improve grammar learning and engagement in EFL settings.

This approach fosters a dynamic classroom environment, encouraging educators to rethink traditional grammar teaching strategies for more meaningful learning experiences.

Future Developments

Future iterations will address group coordination challenges by implementing structured roles and peer evaluations. More AI training (e.g., ChatGPT workshops) will enhance usability and minimize technical barriers. Expanding to larger, diverse EFL cohorts and incorporating objective grammar tests will strengthen findings. Long-term studies can explore sustained impacts on grammar retention and fluency, ensuring PBL/AI/group work becomes a scalable, evidence-based approach for EFL grammar pedagogy.

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Evaluation Problem-based Learning as a Continues Assessment Tool in Endocrine Pharmacology

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, Pharmacy department

Mentor: Dr Rana Almeri

Abstract

This study assesses the use of Problem-Based Learning (PBL) in a fourth-year pharmacy course. Post-PBL evaluation showed notable improvement in knowledge, skills, and satisfaction. Findings support integrating PBL into pharmacology education to enhance real-world application and care management.

Research Aims/Problem

- To evaluate the effectiveness of PBL as a continuous assessment method.
- To determine its impact on knowledge acquisition, skills, and student satisfaction.

RESEARCH QUESTIONS

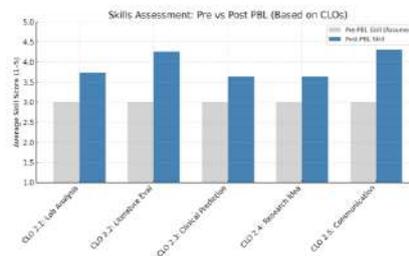
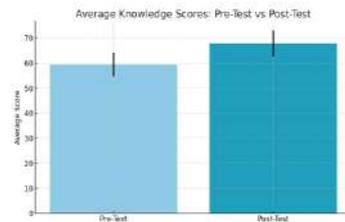
- Does PBL improve students' knowledge and understanding of endocrine pharmacology?
- How does PBL influence students' problem-solving, collaboration, and communication skills?
- Are students more satisfied with PBL compared to traditional assessments?

Research Methodology

- 19 students in 4 groups (A-D)
- Pre-test → PBL sessions → Post-test & survey
- Real patient cases aligned with course learning outcomes (CLOs)
- Evaluation via tests (MCQs, SAQs, case scenarios) and Likert-scale surveys

Outcomes and Impact

- ☺ Demonstrated 14.9% improvement in knowledge scores following PBL sessions.
- ☺ Positive student feedback on satisfaction, collaboration, and real-world application.
- ☺ Increased confidence in pharmacology communication and problem-solving skills.
- ☺ Reinforces the need for engaging, case-based learning in pharmacology courses.



Future Developments

- Institutions should formally adopt PBL as a standard continuous assessment approach in pharmacology and beyond.
- Faculty development is critical to facilitate effective PBL session design and delivery.
- Case repositories and shared digital platforms can enhance cross-institutional collaboration.
- Future research should explore longitudinal impacts, scalability across course levels, and alignment with national pharmacy competency frameworks.
- Given that PBL has been utilized in medical education since the 1960s, the delayed implementation in pharmacology classrooms underscores the urgent need to modernize our educational practices to reflect global trends.

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Educational Impact Statement

PBL, though widely established since the 1960s and adopted early in medical curricula worldwide, remains underutilized in many pharmacy programs. This project highlights its untapped potential as a continuous assessment tool. Its integration represents a shift from passive learning toward active, student-centered approaches essential for developing clinical reasoning and therapeutic decision-making.



Integrating Active Learning Strategies from a Modular-Based Curriculum into a Semester-Based Course: An Action Research Project in Clinical Laboratory Sciences



Dr. Abdulrab Ahmed M. Alkhanjaf, College of Applied Medical Sciences, Najran University

This Action Research Project was undertaken to improve student engagement and learning in the "Laboratory Administration and Quality Management" course, delivered in a semester-based format within the Clinical Laboratory Sciences program at Najran University. The intervention was inspired by active learning strategies applied in the College of Medicine's modular system, including case-based discussions, continuous formative feedback, and integration of real clinical documentation. These methods were adapted to suit the semester structure without altering the course's overall format. Results showed a statistically significant improvement in continuous assessment performance and observable gains in student engagement and reflective thinking.

Problem: Students exhibited low engagement with theoretical content and had difficulty connecting abstract concepts to real clinical practices.

Aim: To explore how active learning strategies—originating from a modular context—can enhance learning outcomes in a semester-based course.

Research Questions:

Can modular-based active learning strategies be effectively integrated into a semester-format course?

What impact do these strategies have on student performance and engagement?

This project followed the **Action Research Cycle:**
Plan → Act → Observe → Reflect

Intervention Design:

- Weekly **clinical case scenarios** to foster discussion
- Use of **real hospital forms and policies**
- **Formative assessments:** quizzes, reflections, peer feedback
- Adapted strategies from the **College of Medicine's modular-based courses**, without altering the semester course structure

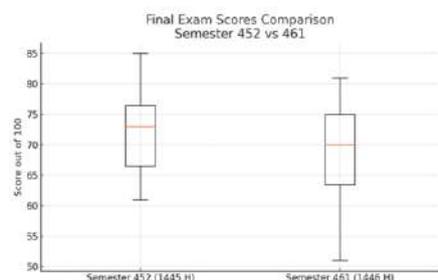
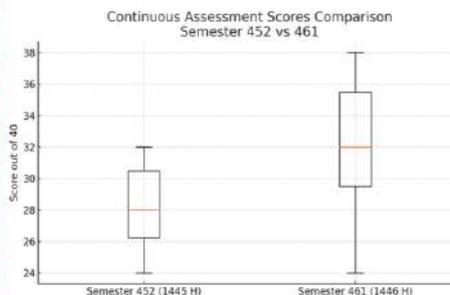
Data Collection:

- Cohorts: Semester 452 (pre-intervention) and 461 (post-intervention)
- Metrics: Final and continuous assessment scores
- Analysis: Unpaired t-tests and descriptive student feedback

Outcomes

- 1 Continuous assessment scores significantly improved:
 - Semester 452: Mean = 28.17
 - Semester 461: Mean = 32.00
 - $p = 0.0379$ Statistically significant.
 - Final scores (summative) showed no significant difference ($p = 0.3883$), indicating stable exam performance despite instructional change.
- 2 Faculty reported better class participation and critical thinking.
 - Students expressed more confidence and connection with real-world practice.

Metric	Semester 452	Semester 461
Mean Continuous Score (/40)	28.17	32.00
Mean Final Score (/100)	72.3	68.6
Continuous Score P-value	0.0379	Significant
Final Score P-value	0.3883	Not Significant



Impact

- 1 The strategy improved engagement and performance without disrupting exam consistency.
 - Students were better prepared through active participation. "I felt more engaged in every class, not just studying for exams." "The case scenarios made the material easier to understand and apply."
- 2 Faculty reported improved teaching satisfaction.

Discussion: The findings highlight that **modular-based, active learning strategies**—when adapted to **semester-based teaching**—can effectively improve **student engagement** and **formative performance**. The **significant increase in continuous assessment scores** supports the value of:

- Regular interaction
- Ongoing feedback
- Contextualized, real-world learning

The project highlights how **pedagogical innovation** can be achieved without major curriculum reform. Active learning strategies are a **valuable bridge** between theory and real-world professional practice.

Future Developments

Implementation Roadmap: Goals Over Time



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Enhancing Motivation and Engagement in EFL Classrooms through Gamification

Dr. Basim Nadhreen

English Language Institute
Umm Al-Qura University

The professional Mentor: Dr. Fatima Al-Ghamdi



Abstract

This action research explores the effect of implementing gamification on students' motivation in a Saudi EFL classroom. Over a couple of weeks intervention, interactive games targeting vocabulary, grammar, and speaking were integrated into lessons with first-year university students. An increase in mean scores was observed between the *pre- and post-questionnaires*, reflecting improved motivation and engagement. Students reported feeling more confident, actively participated in class activities, and developed positive relationships with peers. The findings highlight gamification as an effective strategy to boost learner motivation, foster collaboration, and create a more enjoyable and supportive language learning environment.

Research Aims/Problem

The lack of motivation among first-year university science students in Saudi Arabia studying English as a Foreign Language (EFL) has been a recurring challenge, particularly regarding engagement inside the classroom. Research suggests that motivation significantly impacts students' success in language acquisition. This action research aims to explore the efficacy of gamification strategies in fostering student motivation and enhancing engagement.

Many students perceive English learning as tedious and stressful, leading to low participation, reduced confidence, and reluctance to engage with the textbook materials. A significant number of students fear making mistakes, which further hinders their willingness to communicate.

To address this, gamification strategy will be implemented, allowing students to engage in interactive activities that reinforce learning while making the classroom environment more enjoyable and less intimidating.

This study aims to answer the following questions:

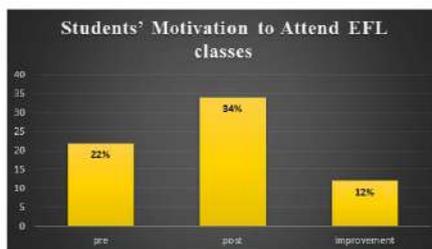
1. What are the primary reasons behind students' lack of motivation in the EFL classroom?
2. To what extent does gamification impact student motivation and engagement?
3. Does the integration of gamification activities improve their confidence and willingness to participate in lessons?

Research Methodology

This action research involved 38 first-year science stream students at Umm Al-Qura University. The study followed an action research model: identifying the problem via a pre-questionnaire, implementing a couple of weeks game-based learning intervention, and conducting a post-questionnaire and reflections. Data were collected through pre/post-questionnaires, teacher observation checklists, and student reflections. Quantitative data were analyzed by comparing mean scores before and after the intervention to measure changes in motivation and engagement.

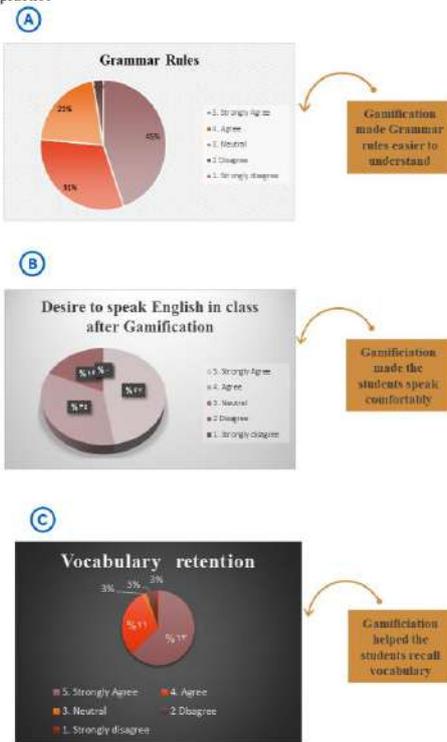
Outcomes

The action research led to intended outcomes: increased student motivation, confidence, and participation. Unexpectedly, students also developed stronger peer relationships through collaborative games. Their positive reactions were evident in improved post-questionnaire scores and enthusiastic class engagement. The implemented game, *Word Catch Memory*, served as a spark for previously passive students. It encouraged them to participate actively and engage more confidently in classroom activities. These outcomes confirm the success and broader relevance of gamification in enhancing EFL learning environments.



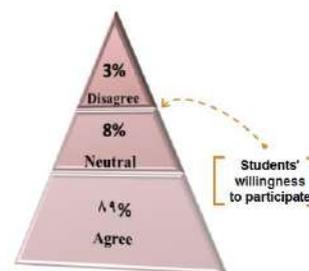
Students' Motivation to study English before and after the intervention.

Also, the results of this research highlight three prominent gains: improved vocabulary retention, increased desire to speak, and simplified understanding of grammar rules. Gamification created an engaging, low-pressure environment where students felt encouraged to use new words, express themselves more freely, and grasp complex grammar structures through fun and interactive practice



Impact

1. The impact of this study on students was evident in their increased motivation, active participation, and enthusiasm during lessons. Gamification helped reduce classroom anxiety and fostered positive peer interaction. One student reflected, "It was such an enjoyable experience that broke down the fear barrier between us and created a sense of camaraderie." Regarding the best game, another shared, "each one was better than the other."



2. On a personal level, this research had a positive impact on me as the teacher. Observing the shift in student responses from the pre-questionnaire made me feel that I was making a real difference. The process of implementing this study allowed me to engage in experiential learning, exploring and selecting suitable virtual and non-virtual games—and deepened my reflective teaching practice.

Future Developments

In the short term, I will continue using gamified activities with more units to keep students engaged. In the medium term, I plan to share my experience with colleagues and offer simple workshops to encourage the use of games in their classes. In the long term, I hope to work with the curriculum team to include gamification in the EFL program and create a shared collection of fun and useful teaching resources for all instructors. These steps aim to make English learning more enjoyable and motivating for students.

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Learner's perception for PBL approach in developing skills (Communication, problem solving and critical thinking, SDL) and attitude at college of Medicine IAU, Dammam

Dr. Farhat Nadeem Iqbal Saudagar, Assistant Professor, College of Medicine, IAU

Professional mentor's name: Dr. Maiadah Alfares



Abstract:

Problem Based Learning (PBL) is widely accepted teaching and learning methods in medical curriculum for undergraduate students. PBL helps medical students to learn actively in a small group, enhances many aspects of skills, like self-directed learning (SDL), problem solving (or clinical reasoning), critical thinking and communication skills (1,2,3). It also motivates and supports and provide professional attitudes to the medical students to transit from preclinical year to clinical year (4,5). Literature report shows that these skills and attitudes are essential to in built for all the higher education graduates also to competes in the changing job market demands (6).

Results and Outcomes:

Table 1 The demographical and characteristics of participants

Characteristics	Count	Percentage
Gender		
Female	268	59.29%
Male	184	40.71%
Academic Year		
2nd Year	238	52.65%
3rd Year	214	47.35%

Table 2 Respondents' Perceptions Towards Communication and Presentation Skills

Communication Aspect	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Mean	Standard Deviation
Group discussion for setting up the task	6.05% (27)	6.28% (28)	18.83% (84)	25.11% (112)	43.72% (195)	3.94	1.19
Presentation in front of your group	3.34% (15)	2.00% (9)	12.47% (56)	24.28% (109)	57.91% (260)	4.31	0.99
Interaction with peers while presenting	4.50% (20)	6.98% (31)	15.09% (67)	27.25% (121)	46.17% (205)	4.04	1.14
Clarifying peer's doubts after presentation	4.99% (22)	7.71% (34)	21.09% (93)	22.22% (98)	43.99% (194)	3.93	1.19
Maintaining eye contact while presenting	3.60% (16)	4.04% (18)	17.98% (80)	24.94% (111)	49.44% (220)	4.13	1.07

Research Aim and Objectives

1. Assess students' perceptions of the effectiveness of PBL in developing communication and presentation skills.
2. Evaluate students' views on the role of PBL in enhancing problem-solving skills.
3. Investigate students' perspectives on the impact of PBL on critical thinking development.
4. Examine the effectiveness of PBL in fostering self-directed learning (SDL) and integration skills.
5. Explore students' perceptions of how PBL influences the development of professional attitudes necessary for future medical practice.

Research Methodology

This research is a cross-sectional study conducted through an online questionnaire.

The questionnaire was distributed anonymously through a social media platform after obtaining approval from the Institutional Review Board (IRB).

Inclusion: 2nd and 3rd year medical students.

Exclusion: 1st and 4th to 6th year medical students.

All participants were fully informed about the study's purpose and were required to voluntarily agree to participate and tick the consent box before completing the questionnaire form.

It consists of 7 parts, addressing different skills and professional attitudes. A five-point Likert scale was used, where 1 strongly disagree and 5 strongly agree.

For all items, responses of 4 (agree) and 5 (strongly agree) were grouped into one category for data analysis to determine insights regarding students' perceptions of PBL and its role in medical education.

Results and Outcomes:

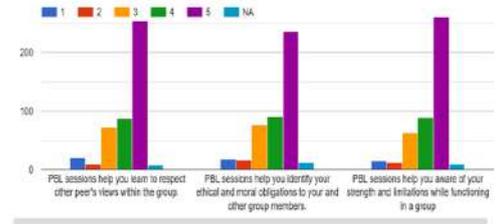


Fig. 3: Feedback on effectiveness of PBL for development of Professional Attitudes

Impact And Conclusions:

The findings of this study indicate that the majority of medical undergraduates perceive the PBL approach as an effective method for developing essential academic and professional skills and attitudes. PBL has demonstrated a strong impact on communication, presentation, problem-solving, and critical thinking, which are crucial competencies in medical education. Furthermore, PBL has shown effectiveness in facilitating the transition from preclinical to clinical practice by linking theoretical knowledge with real-world applications. The results also suggest that PBL fosters self-directed learning and the development of professional attitudes, which are necessary for lifelong learning and ethical medical practice.

Future Developments And Recommendations:

Based on these findings, it is recommended that PBL continues to be integrated into the medical curriculum to enhance students' learning experiences. Faculty members should focus on optimizing PBL sessions by providing constructive feedbacks on PBL case scenarios to the PBL committee, to make it well-structured and contextualized to a local settings and encouraging active student participation. Further enhancements can be made by working more on incorporating interdisciplinary PBL activities to strengthen horizontal and vertical integration of knowledge. Additionally, periodic assessments and feedback mechanisms should be implemented to evaluate the effectiveness of PBL and make necessary refinements. Future studies should explore the long-term impact of PBL on clinical performance and professional development to further validate its benefits in medical education.

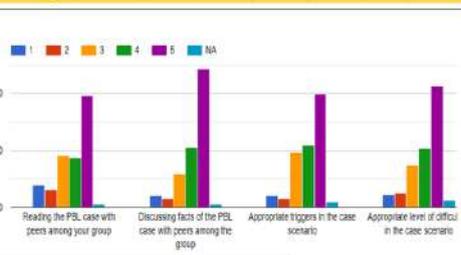


Fig. 1: Feedbacks on effectiveness of PBL for development of critical thinking skill

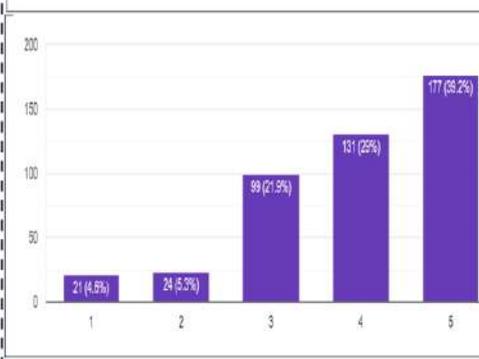


Fig. 2: Feedbacks on effectiveness of PBL for development of SDL

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Summary

Problem-Based Learning (PBL) is a student-centered instructional strategy where learners tackle real-world programming or system design challenges. This study evaluates the impact of PBL on student performance, engagement, and analytical thinking in introductory computer science courses. The findings demonstrate measurable improvements in students' abilities to solve complex problems and apply theoretical concepts through hands-on practice.

Research Aims/Problem

Traditional computer science instruction often emphasizes theory over practice. Students may struggle to apply concepts to unfamiliar programming problems, leading to disengagement and superficial understanding. There is a need for teaching methods that develop real-world problem-solving and collaboration skills.

RESEARCH QUESTION 1

- How does PBL influence student performance in programming tasks?

RESEARCH QUESTION 2

- What effect does PBL have on analytical thinking and problem-solving?

RESEARCH QUESTION 3

- How do students perceive their learning experience through PBL?

Research Methodology

Participants: 60 undergraduate students in "Introduction to Programming"

Design: Quasi-experimental with control and experimental groups

Duration: 12 weeks

Instruments:

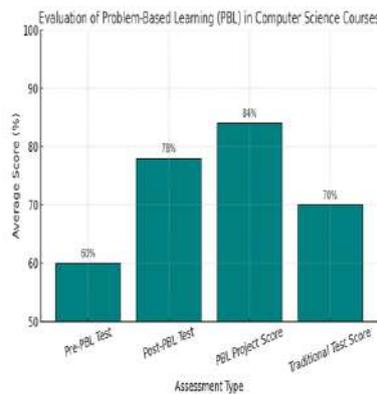
- Pre- and post-assessments
- Problem-based project evaluation rubrics
- Student self-reflection logs
- End-of-course feedback survey

Activities:

- Weekly real-world programming challenges
- Group-based system design projects
- Peer review and feedback sessions

Results & Evaluation

- 1 The effectiveness of PBL was assessed through a combination of tests and project evaluations. Students showed a marked improvement from the Pre-PBL Test (60%) to the Post-PBL Test (78%), reflecting enhanced understanding and application of course concepts. The PBL Project Evaluation yielded a high average score of 84%, indicating strong engagement and practical skill development. In comparison, students in the control group, who followed a traditional instructional method, achieved an average score of 70%, highlighting the relative advantage of the PBL approach.
- 2



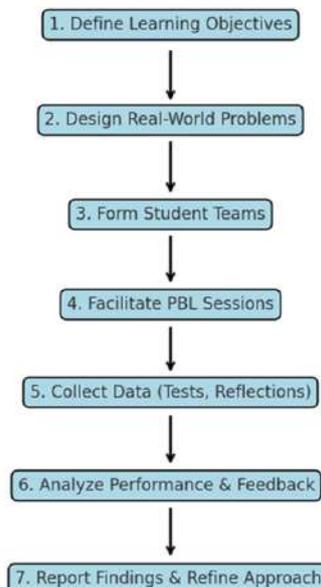
Data Collection & Analysis

The study utilized both quantitative and qualitative data to evaluate the impact of Problem-Based Learning (PBL).

• **Quantitative Data:** Test scores and project grades were collected and analyzed using paired t-tests to assess statistical significance in student performance before and after PBL implementation.

• **Qualitative Data:** Student reflections and feedback were analyzed using thematic coding to identify common themes related to engagement, learning experiences, and perceived benefits of PBL.

Research Plan



Key Insights (Enhanced)

Improved Performance:

- 1 Students in the PBL group showed an **18% improvement** from pre- to post-test, indicating significant gains in understanding programming concepts.

Effective Skill Application:

- 2 **Final project scores averaged 84%**, showing students could successfully apply their knowledge to real-world problems with minimal guidance.

Deeper Conceptual Understanding:

Reflections revealed **stronger grasp of core principles**, better problem-solving strategies, and a boost in **confidence** when approaching new challenges.

Positive Learning Experience:

Students described PBL as **"engaging," "practical,"** and **"team-oriented,"** appreciating the hands-on and collaborative nature of the approach.

Improved Teamwork and Communication:

Collaborative projects encouraged students to develop **effective communication**, task delegation, and **time management**—skills essential for professional success.

Future Developments

To build on the success of PBL in introductory courses, the following initiatives are planned:

- **Broaden PBL Integration:** Extend PBL methodologies into advanced programming and software engineering courses.
- **Develop Scenario Repository:** Create a repository of real-world PBL scenarios aligned with regional industry needs to enhance relevance and application.
- **Faculty Training:** Provide professional development for instructors in designing and facilitating effective PBL activities.
- **Leverage AI Tools:** Integrate AI-assisted tools to support personalized learning paths and adaptive guidance within PBL projects.

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Abstract

Reflective writing involves students maintaining a written journal to document and critically analyze their learning experiences over time. This study examines the impact of reflective writing on students' academic learning and engagement with course content, focusing on its role in enhancing comprehension, critical thinking, problem-solving, academic writing, and active participation in the learning process. Using a mixed-methods approach, data were collected through pre- and post-test surveys, reflective assignments, and interviews with 13 Early Childhood Department students at IAU. Findings revealed a significant improvement in reflective writing skills, with all students achieving a perfect score (5/5) in their second reflection compared to their first (2/5). High final grades (A or A+) further demonstrated its positive impact. Students reported improvements in critical thinking, self-learning, time management, and academic writing, reinforcing reflective writing's role in deepening learning and engagement.

Research Aims/Problem

It has been observed that when students are assigned reflective writing tasks during course and field training, they often complete these tasks merely to fulfill grade requirements, showing little attention to the content or adherence to proper reflective frameworks, such as the 'Gipps model' (Figure 1).

This study aimed to explore how reflective writing enhances students' academic learning and engagement with course material, with an emphasis on its contribution to improving comprehension, critical thinking, problem-solving, academic writing, and active participation in the learning process. Also, the researcher addressed the challenges students face during reflective writing to provide strategies for overcoming these obstacles and enhance the effectiveness of reflective practice in improving academic learning and engagement.

RESEARCH QUESTION

What impact does reflective writing have on students' academic learning and engagement with course content?

Research Methodology

This study used a single cycle of Action Research design, where the researcher focuses on a particular issue and seeks solutions to that problem. Using a mixed-methods approach, data were collected through pre- and post-test surveys, reflective assignments, and semi-structured interviews with 13 Early Childhood Department students at IAU. The researcher developed an intervention (Table 1) to address the identified issues. This involved a unit of six lessons designed to tackle challenges in reflective writing.

Table 1. The intervention (Plan for Action)

Week	Lesson	Hours
1	What is reflective writing? How do I write it? Gibbs Cycle. Exercises on reflective writing (Pre-test survey).	3
2	Attending a forum and writing a report (focusing on listening & general writing).	3
3	Reflective Writing 1 (Classroom Environment in Kindergarten).	3
4	Unplanned discussions based on learners' perspectives on their practices while working with children and reflecting on them.	3
5	Reflective Writing 2 (Behavioral problem in Kindergarten Classroom).	3
6	Discussions about the benefits gained during the course (Post-test survey). Interviews with students.	3
Filed Training in Kindergarten school (Four days in a week) for observing and writing reflection.		

Outcomes

1 Intended Outcomes

- Students showed significant improvement in their reflective writing skills, with all students earning a perfect score (5/5) on their second reflection, compared to an average score of 2/5 on their first. High final grades (A or A+) further demonstrated its positive impact (Table 2).

2 - Students reported that reflective writing helped them identify their strengths and weaknesses, improve self-assessment and awareness, enhance critical thinking, and develop strategies for both personal and academic growth (Table 3).

Unexpected Outcomes

- The significant increase in reflection scores from the first to the second reflection exceeded expectations, showing rapid mastery of reflective writing.
- The feedback from students also reassured me that the intervention was successful, which made me feel that the time and effort invested in developing this study were worthwhile.

"At the beginning, I couldn't write a proper reflection—I felt the randomness and the inability to organize the writing. However, after taking the course, I learned how to write a proper reflection."

Table 2. Students' reflection scores along with their final grades in the course.

Student Number	Reflection (1) score/5	Reflection (2) score/5	Final Grade of the Course
1	2	5	C+
2	2	5	A
3	2	5	A+
4	3.5	5	A
5	3	5	A
6	5	5	A+
7	2	5	A
8	2	5	A+
9	2	5	B+
10	2	5	B+
11	2	5	B
12	2	5	A
13	2	5	A

Figure 1. Gibbs's Reflective Writing Cycle



Table 3. Students' Perspectives on Reflective Writing in Pre- & Post-Test Results

#	Sentence	Agree		Somewhat Agree		Disagree	
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
1	Awareness and Understanding of Reflective Writing	30.80%	85.00%	53.80%	15.00%	15.50%	0.00%
2	Perceived the value or importance of Reflective Writing	53.80%	85.00%	46.20%	15.00%	0%	0%
3	Engagement in Reflective Writing	7.70%	30.00%	79.90%	70.00%	15.40%	0.00%
4	Confidence in Writing Reflectively	23.10%	77.00%	69.20%	23.00%	7.70%	0.00%
5	Familiarity with Reflective Writing Frameworks (e.g., Gibbs Cycle)	38.50%	77.00%	30.80%	23.00%	30.80%	0.00%
6	Impact of reflective writing on Learning & Course contents	46.20%	77.00%	30.80%	23.00%	23.10%	0.00%
7	Reflective writing assists in identifying strengths & weaknesses	61.50%	85.00%	38.50%	15.00%	0.00%	0.00%
8	Enjoyment of Reflective Writing	23.10%	54.00%	69.20%	46.00%	7.70%	0.00%

Impact

1 The intervention effectively improved students' reflective writing skills, boosting their academic engagement and personal development. By the end of the study, students gained a deeper understanding of how reflective writing supports learning and became more confident in engaging with course content meaningfully.

2 The enhancement in students' writing, critical thinking, problem-solving, and self-awareness underscores the value of reflective writing as a powerful pedagogical tool for fostering both academic and personal growth. (Figure 2)

Some Students' Voices

- Reflective writing helps me express myself better and identify my strengths and weaknesses
- Reflective writing enhances my creativity and expands my vocabulary. It allows me to analyze different situations and make better decisions
- The feedback helped guide my thinking and improve my academic skills. It helped me see how to connect ideas more clearly and made me more aware of how to analyze situations

Figure 2. Some selected participant quotations to reflect their authentic voices

Future Developments

Figure 3 shows my short-term, medium-term, and long-term goals for future work

- LONG-TERM**: I will write the manuscript of the Action Research to submit for publication
- MEDIUM-TERM**: I would like to include peer reviews to help students gain alternative perspectives into their reflective practice
- SHORT-TERM**: I will provide more personalized feedback to address specific areas of difficulty for some students.

Figure 3. Short-term, medium-term, and long-term future work

References





The effectiveness of flipped-classroom in teaching prescription writing skills for dental students



PFUTL Participant: Dr Hatem M. Abuhashish
Department of Biomedical Dental Sciences, College of Dentistry, Imam Abdulrahman Bin Faisal University
PFUTL Mentor: Dr Dana A. Almohazey

Abstract

Aim: This action research compared the implementation impact of traditional lecture-based learning (LBL) and flipped classroom-based learning (FBL) in teaching prescription writing skills to undergraduate dental students. **Methods:** Forty-six students (22 males & 24 females) were included. The LBL approach was applied at the 3rd year level, while the FBL approach was applied at the 5th year level. The prescription writing skills were assessed as the difference between pre-and post-teaching implementation using clinical reasoning assessment (CRA). Students' satisfaction with the FBL experience was assessed by a Likert scale. **Results:** Post-teaching scores in FBL were higher vs LBL. The baseline and post-teaching scores differences in FBL were higher than in LBL, particularly in female students. Generally, 78% of the students had +ve score differences in FBL. **Conclusion:** FBL is an effective teaching method for prescription writing skills in dental male and female students.

Research Aims/Problem

RESEARCH QUESTIONS

- 1) Does the FBL approach improve prescription writing skills among dental students compared to the traditional LBL approach?
- 2) Is there a difference in the impact of the FBL approach on prescription writing skills between male and female dental students?
- 3) How does student satisfaction with the FBL approach compare to LBL in the context of learning prescription writing skills?

Research Methodology

LBL: 3rd year students had a traditional lecture about principles & guidelines of medical prescription writing.

FBL: same batch at 5th year

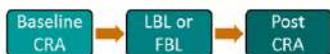
A week prior to the session, students receive study materials (notes, articles, & video).

In session, students completed a 20-minute individual readiness assurance test (iRAT) on blackboard.

This was followed by a 10-minute team readiness assurance test (tRAT) discussion within groups.

Instructors provide 15 minutes of feedback and discussion on the iRAT and tRAT assessments.

Groups prepared and presented case studies about prescription errors (90 minutes), receiving instructor feedback based on a rubric.



A baseline and post-teaching assessments by CRA.

Outcomes

- 1) The baseline scores of LBL and FBL were similar. Post-teaching scores in FBL were significantly ($p < 0.001$) higher vs LBL. The baseline vs post-teaching scores were significant ($p < 0.05$) in LBL, while more significant ($p < 0.001$) in FBL (Figure 1). The baseline and post-teaching scores differences in FBL were significantly ($p < 0.01$) higher than LBL (Figure 2).
- 2) Female students had higher ($p < 0.01$) score differences in FBL vs LBL, while male students showed similar trend, but not statistically significant. In LBL, male students had higher ($p < 0.05$) score differences vs females (Figure 3). Overall, 78% of the students (72% males & 83% females) had +ve score differences in FBL (Figure 4).

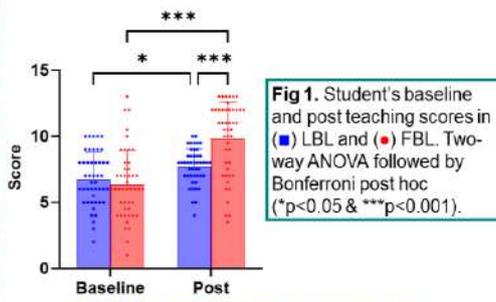


Fig 1. Student's baseline and post-teaching scores in (■) LBL and (●) FBL. Two-way ANOVA followed by Bonferroni post hoc ($*p < 0.05$ & $***p < 0.001$).

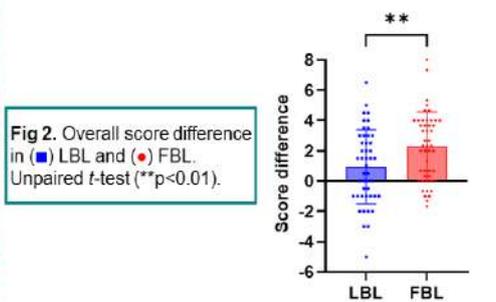


Fig 2. Overall score difference in (■) LBL and (●) FBL. Unpaired t-test ($**p < 0.01$).

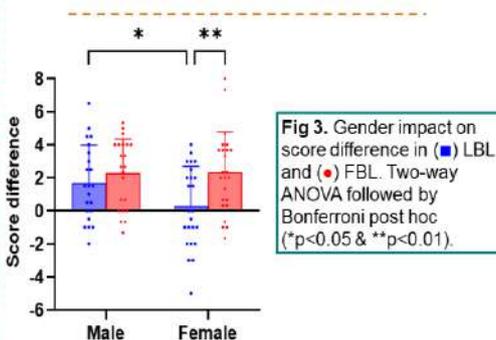


Fig 3. Gender impact on score difference in (■) LBL and (●) FBL. Two-way ANOVA followed by Bonferroni post hoc ($*p < 0.05$ & $**p < 0.01$).

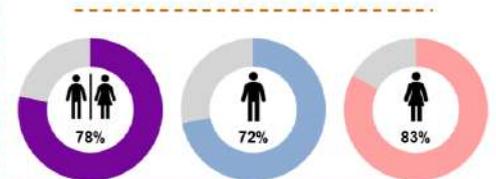


Fig 4. Students % of positive score difference after FBL

Impact

Using the blackboard survey, students demonstrated strong satisfaction towards FBL's promotion of self-study, problem-solving, knowledge recall, and retention. They also agreed that FBL improves their communication skills, teacher-student relationship, and time management. Students were overall satisfied with the FBL experience (Figure 5).

Questions in Students' FBL satisfaction survey	
Q1.	FBL promotes the self-study and problem-solving abilities vs LBL.
Q2.	FBL helps in the recall of basic pharmacological concepts vs LBL.
Q3.	FBL helps in better retention of knowledge vs LBL.
Q4.	FBL helps in improving communication skills vs LBL.
Q5.	FBL facilitates a better teacher-student relationship vs LBL.
Q6.	FBL is time consuming & not applicable in educational setups vs LBL.
Q7.	In general, the FBL was a better teaching method vs LBL.

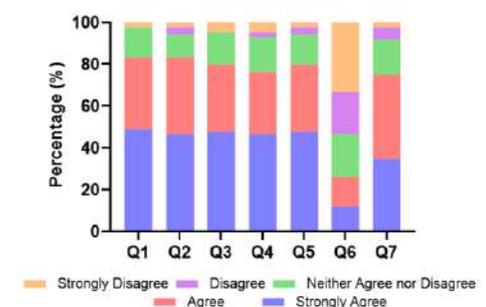


Fig 5. Students' satisfaction about their FBL experience

Future Developments

- Short-Term:**
 - Explore further FBL study materials (videos).
 - Implement FBL in beginning/end of semester.
- Medium-Term:**
 - Integrating FBL in other dental courses.
 - Integrate Interprofessional Education (IPE).
- Long-Term:**
 - Establish FBL as standard practice.
 - Encourage research publication on FBL.

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Abstract

This study aims to investigate the effectiveness of using handwritten notes to enhance grammar learning for tertiary EFL students. The study was conducted on a class of 11 female students at their final year. Data was collected through a pre/post-test. In-class observation and post intervention interviews were also conducted to glean comprehensive information and elicit participants' perceptions. Results showed improvement in participants' performance in grammar. Moreover, participants demonstrated less boredom and more engagement during classes. These results have significant implications for theory and practice.

Research Aims/Problem

I undertook this action research in quest to resolve a perplexing issue in my classroom. The students demonstrated an extremely weak grammatical competence. The rationale for the proposed intervention is based on theories of generation effect and robust evidence on the effectiveness of handwritten notetaking compared to digital notetaking.

RESEARCH QUESTION 1

- To what extent does handwritten notes enhance retention of grammatical rules?

RESEARCH QUESTION 2

- What are students' perceptions on the impact of using handwritten notes on their emotions?
- Insert your questions here.

Research Methodology

- A. The study employed a mixed-methods approach to sufficiently answer its questions. Data was collected through pre and post-tests and individual interviews as well.
- B. At the outset of the study, participants completed a grammar test. During the following four grammar classes, participants were asked to take handwritten notes and to study for the post test using handwriting. Afterwards, a post-test was administered.

Outcomes

- 1 Using handwritten notes enhanced students' retention of grammar rules (Figure 1).
- 2 Using handwritten notes slightly increased their enjoyment and decreased their boredom during classes.

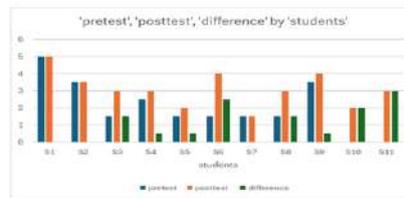


Figure 1. Increase in students' scores after the intervention

Impact

- 1 Even though the results do not show significant improvement in the measured areas, still, they are satisfactory given the very low English proficiency of the participants in this study.

Future Developments

- The results further support the generation effect theory in learning. The study also extends current literature on handwriting by exploring its impact on language learning emotions.
- The study also has practical implications for practitioners. Primarily, it indicates the necessity to re-integrate handwriting into language learning classrooms to tackle some of the language related difficulties.

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PBL to Enhance Cognitive Skills among Nursing Students

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Najla Alansari

INSERT IMAGE HERE

Abstract

In the dynamic and complex field of nursing, cognitive skills such as critical thinking, and problem-solving are essential(1). Traditional teaching methods in clinical nursing education focus on memorization and passive learning, which may not effectively foster cognitive skills.

PBL offers an innovative approach that aligns with the demands of modern nursing practice. PBL engages students in problem-solving and critical thinking, to enhance their cognitive skills and prepare them for real-world clinical situations (2).

Research Aims/Problem

While traditional methods provide foundational knowledge, they may not be as effective in helping students apply theoretical knowledge in practice. Students may also struggle with retaining information over time, which can affect their clinical decision-making and ability to provide high-quality care. To evaluate the effectiveness of Problem-Based Learning (PBL) versus traditional learning in improving nursing students' cognitive skills in neonatal nursing care lab.

RESEARCH QUESTION 1

- What is the effect of Problem-based learning method on problem solving skills and critical thinking among pediatric nursing students?

Research Methodology

A. Study Design: Randomized-control trial design (pre-post test: PBL group and control group). Sample size = 60 students.

B. Procedure:

Intervention: Implement the PBL approach for the experimental group of pediatric Nursing students over a 4-week period. The control group will follow traditional learning methods during this period.

Pre and Post-Test: After the intervention, both groups completed the same cognitive skills assessments to measure changes in their abilities.

Outcomes

- 1 The study showed that the mean and standard deviation of participants related to problem solving and critical thinking post test is highly greater than the mean and standard deviation post-test. Further, the P-value of problem solving and critical thinking skills is not significant P-value is > 0.05.

The mean and standard deviation of intervention group related to academic score is greater than the control group. Additionally, the mean and standard deviation of participants related to problem solving and critical thinking skills are greater than the control group.

Groups	N	Mean	Mean difference	T-test	P-value
PBL pretest	30	17.25			
PBL posttest	30	23.31	5.41	0.02	<0.05
Control pretest	30	19.22			
Control posttest	30	20.41	1.4	0.04	<0.05

Table 1. Comparison between PBL and control group pre-and posttest

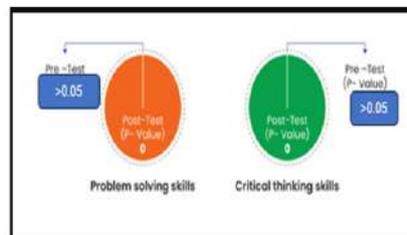


Figure 1. P-value of pre and post problem solving and critical thinking skills

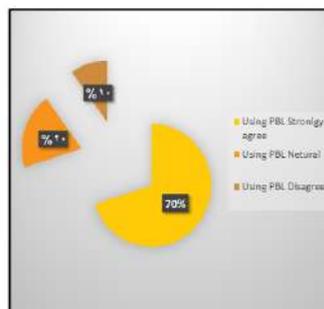


Figure 2. Students Feedback Survey

Impact

- 1 This study concluded that problem-based learning teaching methodology has effect on problem solving skills and critical thinking. Therefore, nursing education could include different teaching methodology to enhance learning and develop problem solving skill among nurses.
- 2 Many studies have already highlighted the affectivity of problem-based learning. Previous study conducted on PBL revealed the same result after the implementation of learning strategy of PBL. The study statistics P-value < 0.05 found the difference between traditional and problem-based learning teaching strategy on critical thinking among nursing students of n=147. Similarly, the present study also found the P-value.



Future Developments

- Problem based learning may be included in curriculum.
- Faculty would be prepared to apply this strategy as teaching methodology.
- Students would be prepared very well about the PBL strategy and its implementation.
- Conduct a study with a large sample size.
- Conduct Simulation-Problem-based learning (S-PBL) in the labs to prepare students before clinical settings.

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From Watch to Practice:

The Impact of Video Learning on Clinical Performance in OBGYN



Latifah Alamer, College of Medicine

Abstract

This action research investigates the impact of video-assisted learning on medical students' performance in obstetric and gynecologic (OBGYN) clinical examinations.

Students were divided into two groups: Group A received traditional teaching (live demonstration & hands-on practice), while Group B received the same with the addition of an instructional video provided prior to and reviewed during the session.

Objective Structured Practical Examination (OSPE) scores showed that Group B outperformed Group A, with a statistically significant difference ($p = 0.0106$).

The findings suggest that video demonstrations improve clinical skill development and can be a valuable supplement to traditional methods in medical education.

Research Aims/Problem

Research Problem: Students often struggle to retain complex examination sequences taught through traditional live demonstrations, leading to variability in OSPE performance.

Research Aim: To assess whether video-assisted teaching improves students' clinical examination skills in OBGYN.

Research Question: Does the integration of instructional videos with traditional teaching improve students' OSPE performance in OBGYN examinations compared to traditional teaching alone?

Research Methodology

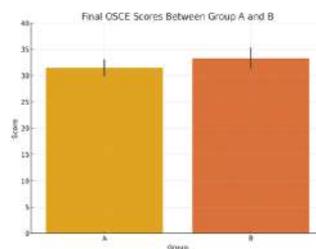
This study was conducted with 5th year medical students attending an OBGYN examination session. Students were randomized into two groups:

- Group A (Traditional Teaching): Received a live demonstration followed by hands-on practice.
- Group B (Video-Assisted Learning): Received an instructional video one day before the session and viewed it again just prior to the live demonstration and hands-on practice.

Both groups were evaluated using a standardized OSPE checklist with a maximum score of 35. Performance scores were analyzed using an independent samples t-test.

Outcomes

- Intended Outcomes:**
 - Group B demonstrated improved OSPE performance, indicating better skill development and retention.
 - Students exposed to the video resource appeared more confident and organized during examinations.
- Unintended or Unexpected Outcomes:**
 - Students in Group A requested access to the video after the session for revision purposes.
 - Some students reported watching the video multiple times, which they felt reinforced their understanding.
- Reactions & Benefits:**
 - Student feedback emphasized that repeated access to video allowed them to visualize the steps and reduce anxiety during hands-on tasks.
- How do we know this ?**
 - Quantitative Evidence:** Group B had significantly higher average OSPE scores (P value = 0.0106).
 - Qualitative Feedback:** Informal comments and post-session discussions with students and faculty reinforced the benefits.



The chart confirms that students who had access to video demonstrations performed **better on average** than those who received only live demonstrations.

Impact

- Improved OSPE Performance:** The video-assisted group showed statistically significant improvement ($p = 0.0106$), highlighting the benefit of supplementary visual tools.
- Quotes from Students:**
 - "The video helped me understand the sequence and reduced my stress during the hands-on part."
 - "I watched the video twice before the session and felt very prepared."

These outcomes suggest that integrating video instruction can enhance both competence and confidence in clinical examination skills.

Future Developments

- Short-Term:** Upload the instructional videos to the institutional learning platform for use in future sessions.
- Medium-Term:** Develop a full suite of clinical skills videos across all OBGYN stations for pre-session access.
- Long-Term:** Conduct a multi-center study to explore the long-term retention of skills & OSPE performance across different specialties.

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Abstract

The field of nuclear and radiation physics often involves abstract concepts and experiments that can be challenging for students to fully grasp through traditional teaching methods. The inherent safety concerns and the specialized equipment required for hands-on radiation experiments can further limit students' direct engagement and exploration. This can potentially hinder their conceptual understanding and diminish their motivation towards learning this crucial area of physics (1, 2). Emerging technologies offer promising avenues to address these challenges. Virtual Reality (VR) provides immersive and interactive environments that can simulate complex experiments without the constraints of physical laboratories. (2-4).. This study seeks to provide empirical evidence for the potential benefits of these innovative pedagogical approaches within the local educational context (4-6).

Research Methodology

- This study will employ a quasi-experimental design, utilizing pre-test and post-test measures with control and experimental groups. Participants will be randomly assigned to one of two groups: Dry Lab Group and VR Group
- The participants will be undergraduate students (First-Year Medical Students) at Taif University enrolled in medical physics course that includes radiation experiments. A sample size of students will be recruited for this study. Convenience sampling will be used to recruit participants.
- The motivation questionnaire will assess various dimensions of motivation, including interest/enjoyment, perceived competence, and effort after dry lab activities and VR Simulation.
- Quantitative data from the pre- and post-tests will be analyzed using appropriate statistical methods, such t-tests, to compare the learning gains and changes in motivation levels between the groups.

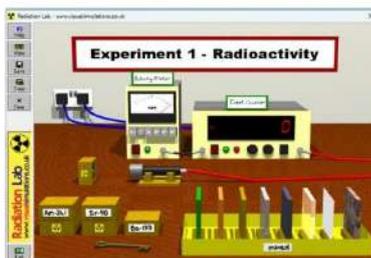


Figure 1. virtual – Reality Radiation lab simulator

Research Aims/Problem

This research proposes to investigate the effectiveness of integrating dry lab and VR simulations into the curriculum for radiation experiments at Taif University. Specifically, it aims to evaluate their impact on students' conceptual understanding of radiation physics and their motivation towards learning the subject matter. By comparing learning outcomes and motivational levels between students utilizing dry lab and VR simulations

RESEARCH QUESTION 1

- To what extent does the use of dry lab and virtual reality simulations enhance students' conceptual understanding of radiation experiments compared to traditional laboratory methods?

RESEARCH QUESTION 1

- Is there a significant difference in the level of motivation towards learning about radiation experiments between students who utilize dry lab simulations and those who utilize virtual reality simulations?

Outcomes

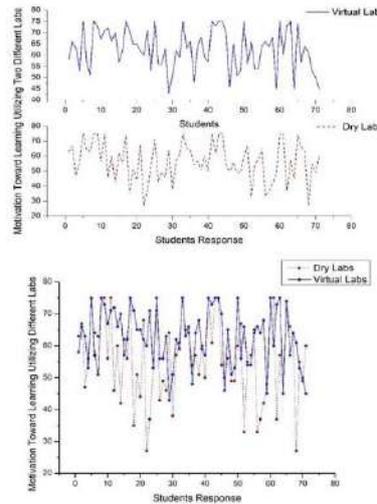


Figure 2. Comparison of motivation toward learning utilizing Dry & Virtual radiation labs

Based on the Fig.1 & Fig.2 shown above, the motivation toward learning utilizing dry & virtual radiation physics labs are shown separately and combined for comparison in both graphs. It is clearly seen that students' motivation toward learning is significantly higher when using Virtual Radiation Physics Labs compared to Dry Labs. This suggests that the interactive and immersive nature of virtual labs may enhance engagement and interest in the subject. The higher motivation levels could also reflect students' preference for hands-on, technology-driven learning environments over more traditional or less interactive methods.

Impact

This research is expected to provide empirical evidence on the effectiveness of VR simulations in enhancing students' knowledge and motivation in radiation experiments. It also identifies the potential benefits and limitations of using VR in physics education at Taif University. Another good impact is that to offer practical recommendations for integrating dry labs and VR into the physics curriculum. Contribute to the growing body of literature on the use of technology in science education. Potentially lead to improved teaching practices and student learning outcomes in physics and related disciplines at Taif University and beyond.

Statistic	Dry Labs	Virtual Labs
Mean	56.39450718	63.63636364
Variance	108.055123	83.33333333
Observations	71	71
Pearson Correlation	0.28402488	
Hypothesized Mean Difference	0	
df	70	
t-Stat	-5.5100712	
P(T<=t) one-tail	0.00026363	
2-Tailed	0.00052726	
P(T<=t) one-tail	1.989514479	
2-Tailed	0.000107725	
t-Statistic	1.989514479	

Table 1: t-Test: Paired Two Sample for Means

Future Developments

In conclusion, this research study investigated the effectiveness of integrating dry lab and VR simulations of radiation physics experiments for the first-year medical students enrolled in medical physics course. Based on this research study, the potential future development and future directions can be pursued to further enhance the integration of dry labs and virtual reality (VR) in medical education according to the needs of the students. It is also recommended to expand this approach across curriculum, in other areas of medical science, such as anatomy, physiology, or pharmacology, to evaluate their impact across disciplines. Another interesting area is the integration of the proposed approach with Augmented Reality (AR) and Artificial intelligence (AI) for a more immersive and interactive learning experience, particularly for complex procedures or spatial understanding in hazardous radiation experiments

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Abstract

This study evaluated the effectiveness of a gamified learning module in enhancing 4th-year dental students' motivation, engagement, and diagnostic accuracy in clinical periodontology education. A single cohort of 36 students participated in a 6-week gamified learning intervention. Small groups (4-5 students) analyzed periodontal case studies and proposed diagnoses and decision tree. A 15-minute lecture introduced a decision tree for periodontal diagnosis, followed by interactive gamification (Kahoot/Slido) to reinforce concepts. Pre- and post-tests assessed diagnostic accuracy, while the Simplified Intrinsic Motivation Inventory (S-IMI) measured motivation and engagement. Retention was evaluated using a follow-up case analysis 2 weeks post-intervention. Male students achieved 100% diagnostic accuracy by Week 6, showing earlier proficiency than female peers ($p < 0.001$). Females demonstrated steadier improvement, with significantly higher self-perceived competence ($p = 0.049$) and moderately greater enjoyment ($d = -0.53$) and interest ($d = -0.45$) compared to males, suggesting stronger engagement with the gamified learning approach.

Research Aims/Problem

To evaluate the effectiveness of a gamified learning module in improving the accuracy of periodontal diagnosis in 4th-year male and female dental students, measured through a pre- and post-test design.

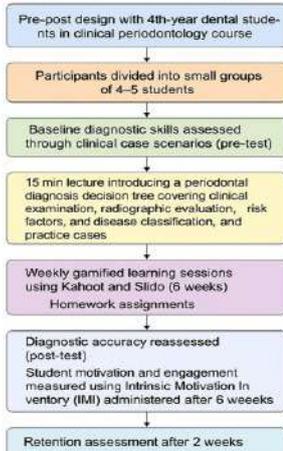
RESEARCH QUESTION 1

- How does gamification affect male and female dental students' motivation and engagement in learning periodontal diagnosis?

RESEARCH QUESTION 2

- To what extent does gamified learning improve retention of periodontal diagnostic skills among male and female dental students?

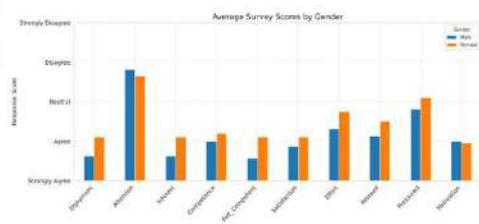
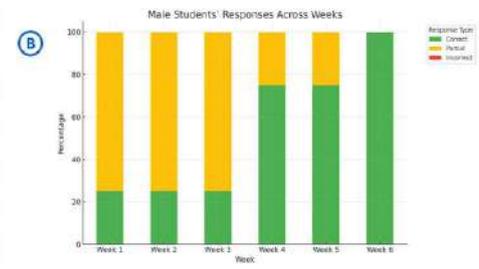
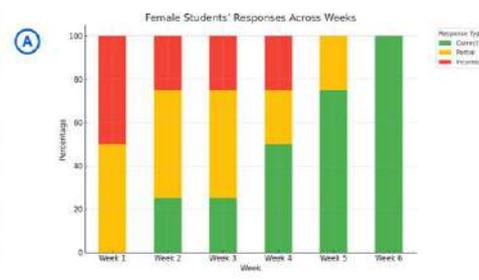
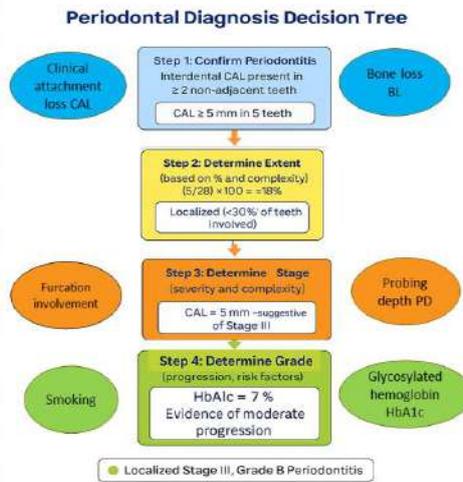
Research Methodology



The study compared pre-post diagnostic performance and analyzed IMI scores to evaluate the impact of gamification on learning outcomes and engagement.

Outcomes

The gamified learning intervention yielded distinct gender-based outcomes in both performance and perceptions. Male students demonstrated faster mastery of diagnostic skills, achieving 100% accuracy by Week 6, while female students progressed more gradually but reported significantly higher self-perceived competence ($p = 0.049$, $d = -0.67$). Unexpectedly, female students also showed greater engagement (Enjoyment: $d = -0.53$; Interest: $d = -0.45$), despite their slower initial performance progression. Both groups benefited from the intervention, with staff observing improved case discussion participation and diagnostic confidence during clinical sessions. The department benefited through actionable data on gender-responsive teaching strategies, evidenced by post-intervention feedback sessions where 85% of students requested expanded gamified content.

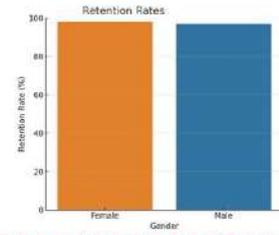


Impact

The project transformed periodontal diagnosis into an interesting task, with students quotes: "At first I doubted my diagnostic decisions, but the gamified feedback helped me trust my clinical judgment. Now I can explain my reasoning clearly to patients" and "The competitive quizzes kept me practicing cases I'd normally avoid. I didn't realize how much I'd learned until I felt fully prepared when diagnosing real patients in clinic"

Quantitative impact included:

- Performance: Male accuracy rose from 40% (Week 1) to 100% (Week 6); females improved from 35% to 100% with fewer partial responses ($\chi^2 = 165.93$, $p < 0.001$).
- Motivation: 78% of females vs. 56% of males rated the module "highly engaging" in post-course evaluations.
- Retention rates was assessed after 2 more weeks, it remained high across genders, with 98% of female students and 97% of male students demonstrating maintained diagnostic accuracy, confirming the intervention's effectiveness for long-term learning.
- The division approved integration of gamified tools into two additional periodontology courses.



Future Developments

Short-term (0-1 year): We will refine the gamification platform by incorporating gender-specific adaptive learning paths and train other faculty to implement these modules. The optimized program will be piloted with 3rd-year students to evaluate early clinical skill development.

Medium-term (1-3 years): An AI-powered adaptive learning system will be developed to personalize case difficulty and feedback. Will implement this system across dental disciplines (e.g., oral surgery, endodontics), while clinical outcome tracking will measure real-world improvements in procedural accuracy and treatment planning.

Long-term (3-5 years): We aim to institutionalize gamified learning in national periodontal curricula and establish quality metrics linking training to patient outcomes. An open-access global platform will share curated case libraries and implementation toolkits.

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Enhancing Cognitive and Psychomotor Skills in Maxillofacial Surgery Residents Through Self-Directed Learning and Analysis of surgical videos



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Abstract

This action research aims to evaluate the effectiveness of self-directed learning and self analysis of surgical videos in enhancing the cognitive skills of maxillofacial surgery residents. By comparing their skills and confidence pre- and post-educational intervention, we seek to determine how well these educational methods prepare residents for performing orthognathic surgery from start to finish.

Research Aims/Problem

The aim of this research is to assess the impact of self-directed learning and surgical video analysis on the cognitive skills and confidence of in performing orthognathic surgery. The study seeks to determine how effectively these educational approaches prepare residents for the complete surgical process.

RESEARCH QUESTION 1

- What is the influence of self-directed learning and surgical video analysis on the development of cognitive competencies among maxillofacial surgery residents?

RESEARCH QUESTION 2

- How do these instructional methods enhance residents' self-efficacy in executing orthognathic surgery?

Research Methodology

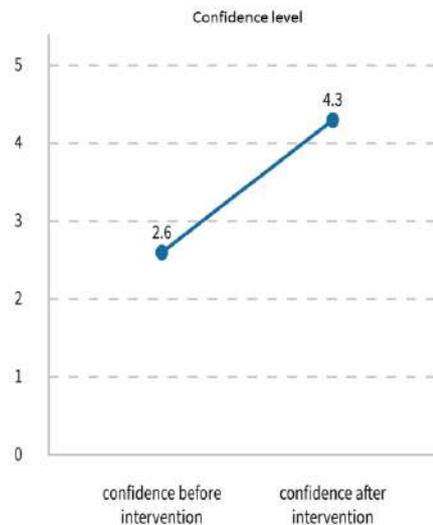
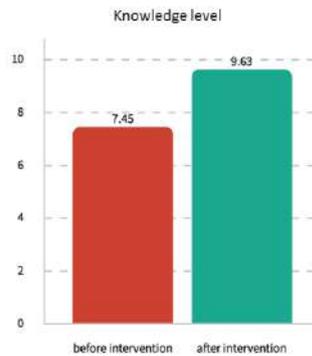
-Participants, maxillofacial surgery residents R1-R5

-Intervention. Access was given to an orthognathic surgery video

- Pre-Assessment. to assess their confidence & skills prior to watching the videos.
- Residents independently watch and analyze the videos.
- They document observations on technique similarities and differences in group discussion.
- Residents are then asked to perform orthognathic surgery independently.
- Post-operative Assessment. A questionnaire was filled out evaluating their skills and confidence post-procedure.

Outcomes

- 1 Data from the questionnaires and performance reviews highlights trends in knowledge improvements. Chart of pre- and post-assessments provide measurable outcomes of the educational intervention. outcomes include improved cognitive understanding and psychomotor skills in residents, translating into enhanced surgical competence and confidence.
- 2



Impact

- 1 recommendations were made to incorporate structured self-study sessions with video analysis into resident training programs, potentially leading to a more efficient learning curve and improved surgical outcomes
- 2 Summary of the impact: This may include some quotes from students and colleagues who were involved in some way in the project, and/or facts and figures that illustrate the change before and after.

Future Developments

This research stands to confirm the positive impact of self-directed learning and video analysis on surgical training, setting the stage for integrating these techniques into formal curricula

For short-term: analysis of surgical videos must be a part of preparing to every surgical procedure.

medium-term: observe the effect of self-directed learning in the improvement of residents' surgical performance

long-term: future work to incorporate video analysis in the resident's evaluation



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Abstract

This action research explores the use of group discussion and educational games to enhance pharmacy students' understanding of chemical reaction mechanisms. Twelve third-year Pharm D students engaged in a six-week intervention combining collaborative discussions and interactive games. Pre- and post-test results showed a 51.8% improvement in performance. Qualitative feedback highlighted increased engagement, better conceptual clarity, and more enjoyable learning. The findings suggest that active, student-centered strategies significantly improve comprehension of complex chemical concepts in pharmaceutical education.

Research Aims/Problem

This study aims to investigate the effectiveness of collaborative group discussions and educational gaming strategies in enhancing pharmacy students' understanding of chemical reaction mechanisms. The focus is on improving conceptual clarity, problem-solving ability, and student engagement..

RESEARCH QUESTIONS

- To what extent does group discussion enhance pharmacy students' understanding of reaction mechanisms?
- How do educational games influence the retention and application of mechanistic concepts?
- What are the students' perceptions of using these interactive strategies in their learning process?

Research Methodology

Participants:

Twelve third-year Pharm D students enrolled in an Organic Chemistry course at a pharmacy college.

Research Design:

A classroom-based action research using a mixed-methods approach.

Intervention:

Over 6 weeks, the following interventions were implemented:

- **Group Discussion Sessions:** Weekly collaborative sessions in small groups, focusing on reaction pathways (e.g., SN1, SN2, E1, E2, addition-elimination).
- **Educational Games:** Mechanism card-matching games, competitive reaction puzzles, and online Kahoot-style quizzes with reaction mechanism challenges.

Research Methodology

Data Collection Tools:

- Pre- and post-tests (multiple-choice and short-answer questions on reaction mechanisms).
- Student reflection logs.
- Teacher observation checklists.
- Anonymous post-intervention feedback surveys.

Outcomes

1. Improved Academic Performance

- Average post-test scores increased by **51.8%**.

2. Increased Student Engagement

- More active participation during lessons
- Students led peer discussions and asked deeper questions

3. Improved Knowledge Retention

- Games and group work helped reinforce key concepts
- Students retained information better over time

5. Positive Student Feedback

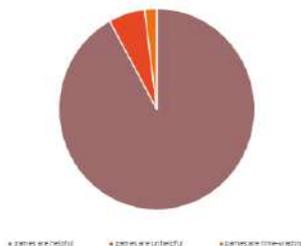
- 92% found games helpful
- 83% felt more confident with mechanisms

Supportive Learning Environment

- Reduced anxiety around complex topics
- Promoted teamwork and academic bonding

Assessment	Mean Score (out of 20)	Improvement (%)
Pre-Test	10.8	-
Post-Test	16.4	+51.8%

The impact of gaming on the understanding of chemical reaction mechanism



Impact

- Students described the approach as "fun," "memorable," and "less stressful"

- 1 The findings suggest that **active learning methods**, such as group discussions and educational games, significantly enhance comprehension of complex topics like reaction mechanisms. Group discussions created a safe space for questioning and deeper conceptual exploration, while games promoted repetition and recall in a low-pressure, fun environment. The **peer interaction** promoted by discussions helped clarify misunderstandings and build academic confidence. Games, on the other hand, provided instant feedback and a novel way to reinforce learning. The improvement in post-test scores supports the claim that interactive strategies can outperform traditional lectures alone.
- 2

Future Developments

This action research demonstrates that integrating group discussion and educational games into pharmacy education significantly improves students' understanding of chemical reaction mechanisms. These strategies not only foster better academic outcomes but also create a more engaging and enjoyable learning environment.

For future work, some points should be under consideration:

- Incorporate structured group discussion weekly, especially after new mechanisms are introduced
- Encourage other instructors to adapt these methods for teaching similarly complex topics.
- Further research could explore long-term retention and adaptation in other scientific disciplines.

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Abstract

This study addresses L2 learners' attitudes towards podcasts as a tool that can improve one's speaking skills. It contributes to the literature because this subject has been only minimally addressed in the Saudi context. Studies have noted the increasing popularity of podcasting technology in language learning, and how it can be effectively integrated into the English as a Foreign Language curriculum. Twelve Imam ben Abdulrahman University students enrolled in a conversation course for 15 weeks (one term) of podcast listening sessions. Pre- and post-task podcast recordings were assigned both before and after 15 weeks to identify any changes in students' speaking performance. The findings demonstrated that the intensive 15-week podcast listening sessions fostered significant improvement.

Introduction

The term *podcast* is derived from 'iPod' and 'broadcast' and describes the recorded audio or video content made accessible for personal digital devices. The Oxford University Press (2005, p.22) defines a podcast as 'a multimedia digital file made available on the internet for downloading to a portable media player, computer, etc. As suggested by (McGraw-Hill, 2008) audio podcasts are the most popular media because they are more freely accessible compared with video podcasts.

During the COVID-19 pandemic, mobile devices became a more significant part of students' lives, following the restrictions on face-to-face public gatherings and on-campus teaching González Enriquez et al (2023) report that undergraduate students were using their smartphones for about 9 hours daily during the pandemic. Hence, software developers and teachers began to develop and incorporate various mobile apps to promote teaching and learning. At this time, universities began to adopt the use of podcasts in educational activities.

Research Aims/Problem

The current study investigated the impact on Saudi undergraduate students studying EFL at the university level of listening to English podcasts. To the best of the author's knowledge, little attention has been paid to improving speaking skills via podcasts, especially at the university level. The results have implications for language practitioners in the educational field in both the Kingdom of Saudi Arabia and other EFL contexts.

RQ1: Does listening to EFL podcasts improve the speaking skills of L1 Arabic speakers learning L2 English, as measured by pre- and post-speaking tests?

RQ2: What are students' attitudes towards using podcasts as a tool to improve their speaking skills (Huang, 2009).

Research Methodology

Participants and setting

- Twelve participants aged 19 to 22 years were selected from among a target population enrolled in their first year in the English Language and Translation Department at (IAU).

Instruments

- pre- and post-tasks
- a note-taking report for each podcast episode
- Luke's English Podcast
- Self-Assessment survey on Student Attitudes and Perceptions of Podcast Technology in improving English conversational skills

Overall task completion 2 - Task Requirements	Overall task completion 1 - Delivery	Fluency	Language use	Language speaking domain 2 - Fluency	Language speaking domain 1 - Pronunciation
2.33	2.5	2.17	2.5	2.67	2.67

Table. 1. Rabi'c Part A&B: A sample of one of the students' score data sheets for a pre-test activity.

Outcomes

Using a Mann-Whitney U test, a statistically significant difference between pre- and post-test activities considered separately was identified ($p < 0.05$). Similarly, a statistically significant difference was found for the total score, as the pre-test results had lower values ($M = 14.33$, $SD = 1.63$) than the post-test results ($M = 19.33$, $SD = 1.51$, $p < 0.01$). The differences between the pre- and post-test scores are visualised in Fig. 1.

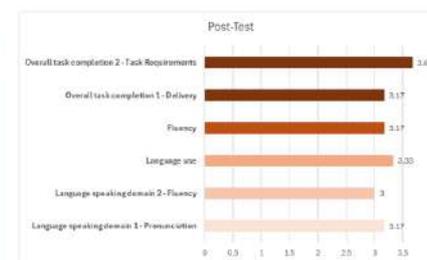
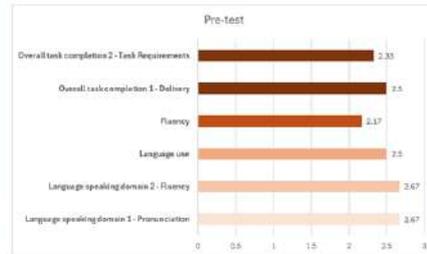


Fig. 1. Overall differences between the pre- and post-test scores

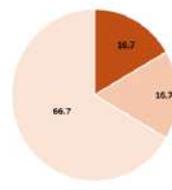


Fig.2.The use of podcasting Technology

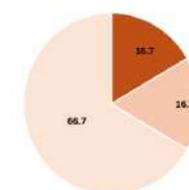


Fig.3 The podcast assignment improve pronunciation

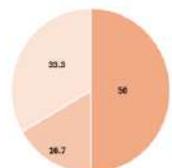


Fig.4.Using podcast more in assignment

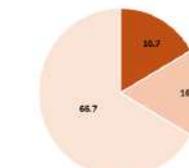


Fig.5.Using podcast to improve fluency

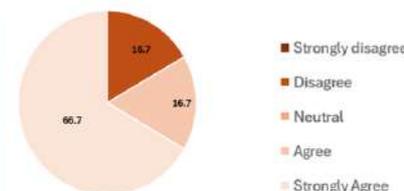


Fig.6. Listening daily to Luke podcast improve speaking skill

Impact

- The Student Self-Assessment Survey (Huang, 2009) results revealed that the participants evaluated their progress positively.
- The students' evaluations also reflected their experiences in the post-test speaking activities.
- Although some case studies (Vandergrift & Goh, 2012) claim that listening to a series of podcasts is not sufficient to improve individuals' pronunciation, more research is needed to analyse similar cases and develop hypotheses with larger samples.
- Various factors can affect pronunciation and fluency skills, such as the environment, the speaker's language and the delivery method.
- The study results revealed that most participants indicated a positive improvement after using podcasts, regardless of their L1 Arabic, when the pre- and post-test results were combined.

- The study results support the finding by Lee et al. (2008) that podcasts have huge potential for empowering students' articulation

Future Developments

- Other factors should be accounted for, such as age, including young learners. In relation to their different proficiency levels.
- Future studies should involve an additional group of participants with different levels of EFL proficiency to look for a statistically significant improvement. As there were only six students in this study, the results are not generalisable.
- Other languages could be included to investigate whether the students' pronunciation might improve, and the length of the study could be extended to 1 year or longer.
- Other studies that include male participants may report different findings.
- Future studies may be able to refine these results with a more detailed focus on the specific amounts of exposure available to L2 learners and the different extents to which these exposures impact their ability to produce native-like linguistic structures.

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Enhancing Respiratory Therapy Learning Outcomes Through Case-Based Learning

Dr. Masarrah Yousif Aljaroof - Mohamad Al-Mana College for Health Sciences



Abstract

This action research explored the use of intensive Case-Based Learning (CBL) to improve student performance in a foundational respiratory therapy course. Students completed two quizzes—before and after a graded CBL assignment. Results showed statistically significant improvement in both knowledge and skills domains, confirming the effectiveness of the intervention in reinforcing clinical thinking and application. This project highlights the value of reflective teaching strategies in allied health education.

Disclaimer

This project was completed for the PFUTL Fellowship in Higher Education and is intended solely for educational, learning and reflective practice — not for scientific publication.

Research Aims/Problem

To evaluate whether a structured case-based intervention that incorporating peer discussion improves performance in both knowledge (K) and skills (S) learning outcomes.

□ Problem: Traditional delivery may limit student engagement with real-world patient cases, making it difficult to bridge theory and practice.

Research Questions

- Does the CBL intervention significantly improve student performance in fundamental courses level?
- Do improvements differ between knowledge and skill domains?

Research Methodology

A. Target CLOs:

K: Understand foundation of respiratory care and relevant physical principles.
S: Apply critical thinking to clinical decision-making, perform basic RT procedures

B. Intervention:

A 10- Scenarios Case-Based Learning (CBL) assignment simulated complex clinical decision-making, integrating foundational science, applied calculations, and patient-centered scenarios.

C. Design:

Pre-post quiz comparison (Quiz 1 → CBL → Quiz 2)

D. Participants:

Undergraduate RT students

E. Analysis:

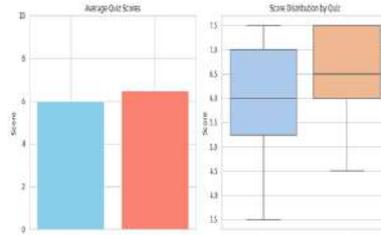
Descriptive stats, Shapiro-Wilk, paired t-test

Outcomes

The intervention led to meaningful improvements in both knowledge and clinical reasoning. Students expressed greater confidence in applying RT concepts, and increased engagement and participation were observed. Based on these results, broader application of the CBL model is planned in upcoming semesters to support outcome-based education.

Score Summary		
Metric	Quiz 1	Quiz 2
Mean Score	6.05	6.50
% Improvement	-	+7.47%
Std Dev	0.89	0.78
Min-Max	3.5-7.5	5.0-7.5

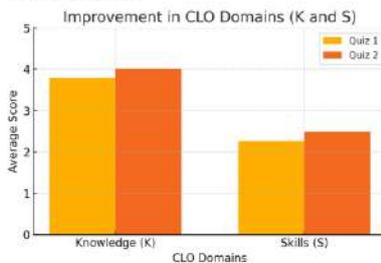
Paired t-test: $t = 2.79, p = 0.012 \rightarrow$ Statistically significant



- The visual comparison in the bar graph shows an increase in the average score from Quiz 1 (~6.05) to Quiz 2 (~6.5), reflecting a positive learning impact. The boxplot further supports this finding, with a higher median and reduced variability in Quiz 2 scores, suggesting more consistent performance and a general uplift in students' understanding.

Sub-analysis by CLOs			
Domain	Quiz 1	Quiz 2	% Gain
K	3.79 / 4.5	4.01 / 4.5	+5.8%
S	2.26 / 3.0	2.49 / 3.0	+10.2%

Both knowledge and skills improved, with a greater impact observed in skills—showing that CBL effectively supports clinical decision-making with RT students.

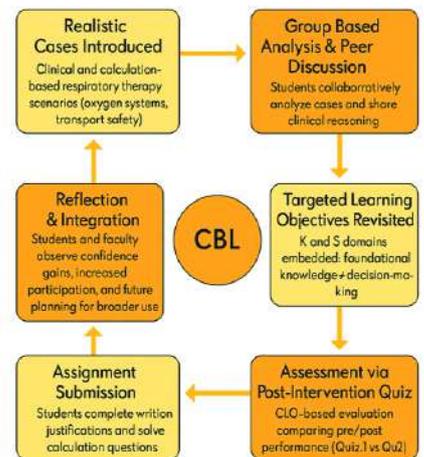


- Gains were observed in both Knowledge and Skills domains

Impact

- This project demonstrated that structured CBL assignments can improve understanding and critical thinking in respiratory therapy students. The measurable gains and student feedback show strong alignment with course learning outcomes.
- Students: "It helped me apply what I learned instead of memorizing."
Faculty: "I noticed students were more confident discussing clinical cases."

Structured Flow of Case-Based Learning (CBL) Intervention



Future Developments

Implement CBL earlier and more frequently. Future analyses: Use categorical data (e.g., GPA, attendance) to explore performance trends

Takeaway Message

"Real cases build real understanding CBL makes learning stick."

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The role of psychological guidance to enhance student well-being and academic success

Dr. Naoufel Omar Mahfoudh, Assistant Professor, Applied College



Abstract

This study examined the relationships between approach strategy competencies, cultural adaptation, implementation challenges, and perceived effectiveness of mentoring interventions.

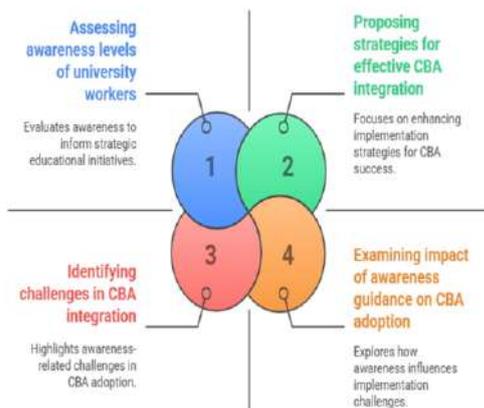
The results indicate a significant positive relationship between approach strategy competencies and cultural adaptation with perceived effectiveness, while implementation challenges showed marginal significance. Based on these findings, recommendations include investing in academics' professional development, enhancing cultural competence, allocating adequate resources, promoting collaboration, implementing data-driven practices, addressing systemic barriers, promoting self-care among mentors, and continually evaluating and adapting mentoring programs. These recommendations aim to improve the effectiveness of counselling interventions and support student well-being in universities in three countries.

Research Aims/Problem

The Competency-Based Approach (CBA), often also referred to as Competency-Based Education (CBE) or Competency-Based Learning is an educational model that focuses on what students know and can do (their competencies) rather than primarily on the amount of time they spend in a course or classroom. Learning is structured around specific, measurable, and transferable learning outcomes—the competencies—that students must demonstrate mastery of before progressing.

This study aims to provide insights into the key factors that influence the successful adoption of competency-based education, as well as practical recommendations for enhancing awareness guidance strategies to support the effective integration of CBA in higher education institutions.

Research Objectives in Competency-Based Approach Integration

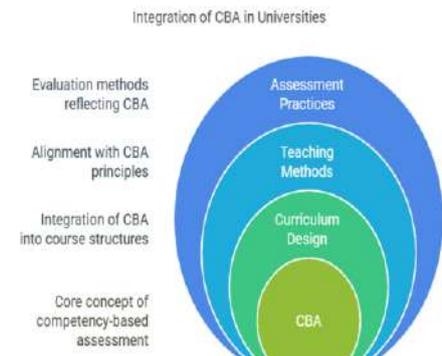
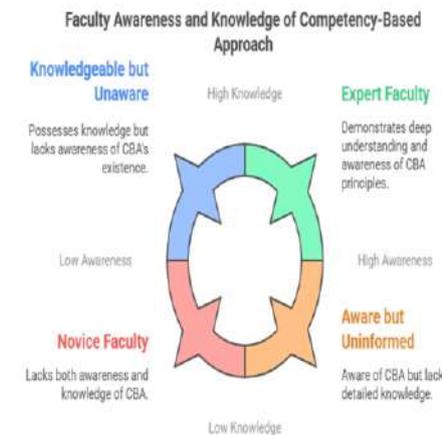
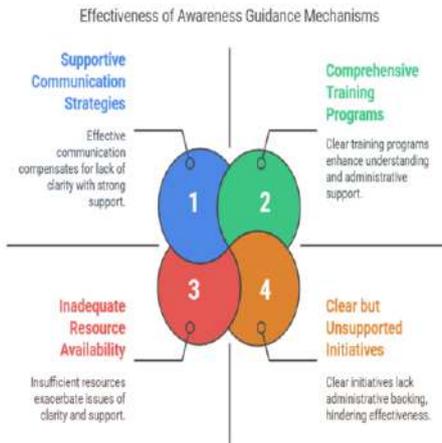


Research Methodology

This study investigated the role of awareness guidance in the integration of the competency-based approach (CBA) in universities across three countries: Jordan, Saudi Arabia, and the United Arab Emirates (UAE).

The study utilized a quantitative research design to gather and analyze data from university faculty members (academics) and students in these countries.

Outcomes

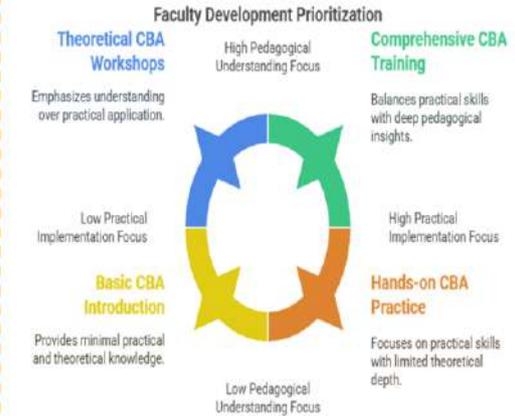


Universities that prioritize providing accessible training, clear communication, and administrative backing will likely experience higher levels of perceived effectiveness in implementing CBA.

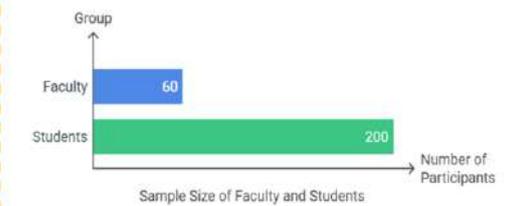
For universities aiming to successfully integrate CBA, it is essential to focus on comprehensive awareness programs that equip faculty and students with the knowledge, resources, and support needed to navigate the transition to competency-based learning.

Impact

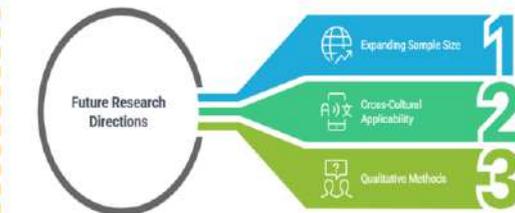
The results suggest that the more faculty members understand CBA and its impact on their teaching practices, the more they perceive the integration process as effective. Faculty awareness, which includes understanding the principles and applications of CBA, is pivotal in determining the success of its adoption.



Future Developments



Enhancing Research on CBA and Awareness Guidance



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Dr. Nazish Rafique
Professor of Physiology, College of Medicine (IAU)
Professional mentor (Dr. Nihad Abdul Razak Amanullah)

Introduction

There is a worldwide trend of change in Medical Education from a subject-based towards a system-based approach. Several studies from various Medical universities all over the world indicate that a system-based integrated curriculum may be considered one of the major reforms to prepare better future physicians. Inspired by international and national changes in medical education, an effort was made to design and implement a "Unique Horizontally and vertically Integrated teaching methodology" (HAVIT) for the students of preclinical years at Imam Abdulrahman Bin Faisal University (IAU) Dammam KSA.

This early clinical exposure (vertical integration) can help the students to link the theory of basic science subjects with the clinical practice, thereby promoting deep learning. Moreover, the horizontal integration can help the students to integrate and interconnect the knowledge of various basic science disciplines like Physiology, anatomy, biochemistry, pharmacology and microbiology.

Research Aims/Problem

The aim of this study was to find out the impact of HAVIT on the students learning in preclinical years. Moreover, we also wanted to find that either HAVIT is better than traditional teaching.

Research questions

- Does HAVIT improve students' performance in exams?
- What is the Students' and faculty feedback on HAVIT?
- Should HAVIT be continued in future?

Research Methodology

The proposed plan of HAVIT for the class of MED-301 was approved by the Management Committee of IAU in the year 2023. For the effective implementation of HAVIT, 10 Modular committees were formed. Each modular Committee was headed by an "Expert and experienced Team leader" and included 10-12 highly relevant team members from all the basic science and the specific clinical science departments. Several training sessions and workshops were conducted to train the faculties. Each committee formulated a Case based study guide, Multidisciplinary HAVIT PowerPoint, Multidisciplinary HAVIT Tutorial, HAVIT questions for the exam and HAVIT timetable before the beginning of their module.

Student and faculty feedback questionnaire was administered at the end of the year.

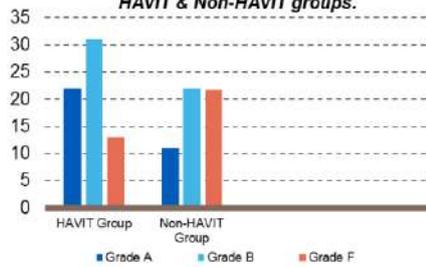
Comparison of exam results was done between HAVIT and Non-HAVIT groups.

Outcomes

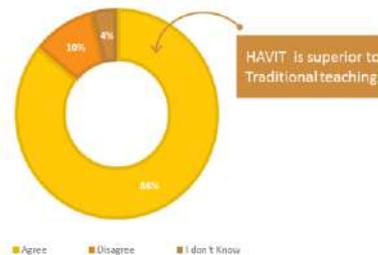
After the implementation of HAVIT, the percentage of students scoring grade A increased from 11% (non-HAVIT) to 22%(HAVIT), (p value 0.003) whereas the number of students scoring grade F decreased from 21.6%(non-HAVIT) to 13% (HAVIT); (p value 0.02), in the MED-301 exams (aggregated exam results).

A feedback response was received from almost 240 Students and 34 faculty members. More than 85% of the students responded that HAVIT makes understanding and learning easy; 86% students and 92% faculty responded that HAVIT could help in producing better future physicians. Moreover, 90% of the students and 92% of faculty members agreed that HAVIT enhances critical thinking and helps in the practical application of basic science knowledge.

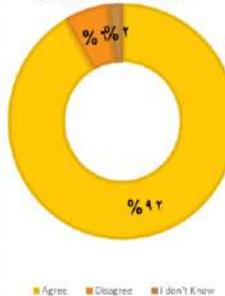
Comparison of exam results between HAVIT & Non-HAVIT groups.



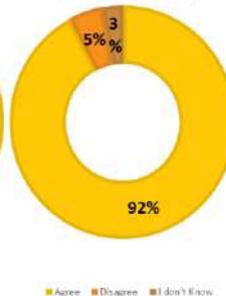
Students' feedback on HAVIT



HAVIT should be continued in future (STUDENTS' FEEDBACK)



HAVIT should be continued in future. (FACULTY FEEDBACK)



Impact

HAVIT had the following major impacts on the students, teachers and curriculum.

Impact on students

- 1: An improvement in the exam results of the students.
- 2: Better knowledge application by Linking the theory of basic science subjects to clinical practice.
- 3: Better integration of the knowledge of various basic science subjects.
- 4: Enhancing problem solving and critical thinking skills.
- 5: Preparing better future physicians.
- 6: Helping in passing national and international (SMLE&USMLE) exams.
- 7: Early preparation for clinical practice.
- 8: Smooth transition from basic to clinical years.

Impact on curriculum & faculty

- 1: Logical sequencing of the timetable.
- 2: Identification of Curriculum overlapping.
- 3: Prevention of Curricular hypertrophy and curricular overload.
- 4: Identification of missing important Topics in the curriculum.
- 5: Enhanced collaboration between various departments.
- 6: Faculty development.

Future Developments

Currently almost 500 students of MED-201 & MED-301 are gaining benefit from HAVIT.

Based upon the student's performance in the exams and the faculty and student feedback, it has been decided by the 2nd Year and 3rd year management committee to continue this teaching methodology in future or all the students of pre-clinical years at IAU.

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The Impact of Faculty Behaviors on Student Engagement and Participation in Classroom Settings

Nouran Ajabnoor, Jazan University, Applied College

Professional Mentor: Dr. Mohammed Alkathiri



Abstract

Engagement plays a significant role in promoting student learning outcomes, with educators' behaviors and support having a positive influence on student engagement and participation (Dingel & Punt, 2023). Faculty can create either a welcoming or a stressful learning environment. Encouraging and supporting students to express their thoughts and ask questions without fear of judgment can enhance their motivation to participate actively in classroom discussions and activities (Li & Xue, 2023). This action research explores how faculty behaviors affect students' willingness to engage and participate in various classroom activities, such as discussions, collaborative work, and other interactive learning methods.

Research Aims/Problem

Research Aim is to identify specific faculty behaviors and classroom settings that promote or hinder student participation.

Research Problem: Current research has limited understanding of how faculty behaviors directly influence students' levels of engagement and participation in classroom settings. This gap in literature overlooks critical aspects of the student learning experience and the potential for enhancing it through effective teaching practices.

RESEARCH QUESTION 1

- What specific faculty behaviors are perceived by students as most impactful on their willingness to participate in class?

RESEARCH QUESTION 2

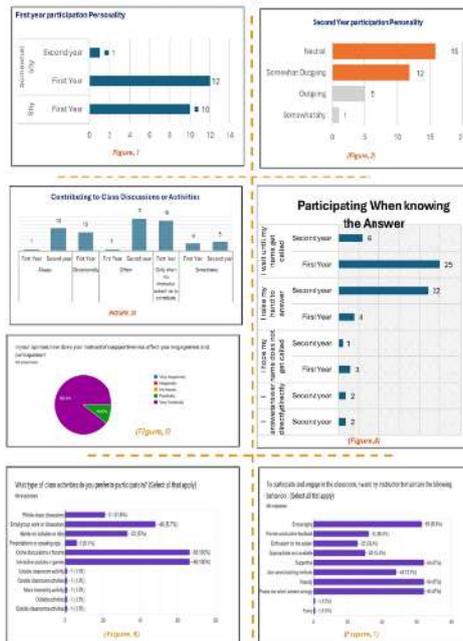
- How do variations in faculty communication styles affect students' comfort levels in engaging with the material and contributing to discussions?.

Research Methodology

A survey consisting of 10 questions was developed to assess the impact of faculty encouragement on student engagement and participation in classroom settings. Two faculty members were selected for this study: one teaches first-year students and is recognized for her supportive approach, while the other teaches second-year students. In total, 66 students completed the survey.

Outcomes

1. **The analysis** of classroom participation reveals notable differences between first-year and second-year students. First-year students tend to identify as "shy" or "somewhat shy," significantly impacting their willingness to engage in class discussions. They primarily participate "occasionally" or only when prompted by instructors, as depicted in the data. In contrast, second-year students exhibit a more outgoing demeanor, participating "often" or "always," and actively engage by raising their hands and answering questions without hesitation.
2. **Supportive** instructor behavior plays a crucial role in encouraging participation across both cohorts, with 89.4% of students rating the impact of instructor supportiveness as "very positive." This finding underscores the importance of comfort in fostering engagement, as highlighted by 97% of students identifying supportiveness as critical for participation.
3. **While** most students preferred activities like online discussions, interactive quizzes, and gaming, presentations ranked as the least favored method of participation. **Overall**, the transition from first to second year demonstrates a shift towards greater engagement and comfort in classroom settings, emphasizing the significance of supportive teaching practices in enhancing student participation.



Participants Direct Quotes:

1. "Friendly and not angry. Also, I wish my teacher understood I am a little shy and need encouragement"
2. "My teacher always encourages me even if I answered wrong. She tried to give more explanation to help figure the correct answer"

3. "I need more time to get used to college. I want my teacher to be restricted but friendly and smiley otherwise I will be nervous"
4. "If my teacher support me I will participate. I am shy and feel shy to answer even if I know the answer."
5. "I engage if I feel comfortable with faculty"

Impact

1. **Shyness of First-Year Students:** First-year students often feel shy indicating that the transition to higher education can be challenging. Targeted interventions should be developed to support these students.
2. **Confidence of Second-Year Students:** Second-year students demonstrate greater confidence and willingness to participate. Mentorship programs can facilitate support from second-year to first-year students.
3. **Preference for Interactive Activities:** Students prefer interactive formats like online discussions and quizzes over traditional methods like presentations. Faculty should adapt teaching strategies to enhance engagement, particularly for first-year students
4. **Evolution of Participation:** Understanding the shift from shy first-year students to more outgoing second-year students can help institutions expedite this transition, fostering better learning outcomes and a collaborative classroom environment.

Future Developments

1. **Enhanced Orientation Programs:** Developing orientation sessions for first-year students that incorporate confidence-building activities and participation strategies to facilitate their transition into higher education.
2. **Peer Mentorship Programs:** Establishing mentorship opportunities where second-year students assist first-year students in enhancing their classroom participation and engagement techniques.
3. **Interactive Learning Tools:** Investing in technology-driven tools such as online discussions, gamified quizzes, and other interactive activities to boost participation, especially for less confident students.

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Enhancing Medical Students Skills in Liver and Spleen Examination Using the Pendleton Feedback Model

Dr. Raed Alsulaiman,

Consultant gastroenterologist, Assistant Professor, Internal Medicine Department, King Fahad Hospital of the University, Imam Abdulrahman bin Faisal University



Abstract

Clinical examination skills are fundamental to medical education, yet students encounter difficulty with effective liver and spleen examination techniques. Structured feedback models, such as the Pendleton Feedback Model, can enhance learning, confidence, and competency in clinical skills. This study investigates the impact of implementing the Pendleton Feedback Model in medical student training to improve liver and spleen examination techniques.

Research Aims/Problem

Medical students frequently experience difficulty in mastering clinical examination techniques, particularly in palpation, percussion, and auscultation. Traditional feedback approaches may lack structure and individualization, limiting their effectiveness. This research aims to assess whether structural feedback using the Pendleton Model enhances students' technical skills, confidence, and self-awareness in performing liver and spleen examinations.

Objectives:

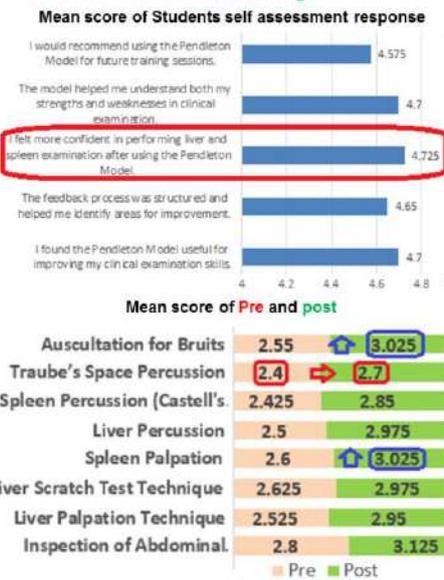
- To evaluate the baseline competence of medical students in liver and spleen examination.
- To implement the Pendleton Feedback Model during bedside teaching sessions.
- To assess the improvement in examination skills post-intervention

Research Methodology

This study involved 40, 4th year medical students who were assessed before and after receiving structured feedback using the Pendleton Feedback Model. Their performance in eight key clinical examination techniques was graded using a standardized rubric. A Wilcoxon signed-rank test was used to analyze statistical significance. Additionally, a self-assessment survey (Likert scale: 1-5) measured student perceptions of improvement and confidence.

Outcomes

- Improved liver and spleen examination skills among medical students, bridging gap in clinical examination.
- Positive student feedback on the use of Pendleton Feedback Model.
- Extracting evidence supporting the incorporation of structured feedback models in clinical teaching.



Descriptive Statistics

	Pre Mean±SD	Post Mean±SD
Inspection - Observation of Abdominal Contour	2.8±1.1	3.1±1.0
Palpation - Liver Palpation Technique	2.5±1.0	2.9±0.9
Palpation - Scratch Test Technique for Liver Span	2.6±1.1	2.9±1.1
Palpation - Spleen Palpation Technique	2.6±1.1	3.0±1.1
Percussion - Liver Percussion	2.5±1.1	2.9±1.0
Percussion - Spleen Percussion (Castell's Sign)	2.4±1.1	2.7±1.0
Percussion - Traube's Space Percussion	2.4±1.1	3.0±1.1
Auscultation - Auscultation for Bruits	2.5±1.2	3.1±1.0

Wilcoxon Signed Ranks test

	Mean Rank			z	p
	-ve	+ve	Ties		
Inspection-Observation of Abdominal Contour	13	17	3.606		<.001
Palpation-Liver Palpation Technique	17	23	4.123		<.001
Palpation-Scratch Test Technique for Liver Span	14	26	3.742		<.001
Palpation-Spleen Palpation Technique	17	23	4.123		<.001
Percussion-Liver Percussion	19	21	4.359		<.001
Percussion-Spleen Percussion (Castell's Sign)	9	22	9	2.428	0.015
Percussion-Traube's Space Percussion	12	28	3.464		<.001
Auscultation-Auscultation for Bruits	19	21	4.359		<.001

Impact

This study highlights the effectiveness of structured feedback models in clinical skills training. By implementing the Pendleton Feedback model, educators can:

Foster a positive learning environment

Improve bedside technical competency

Enhance student engagement & self-reflection

Future Developments

- Long-term skill retention following Pendleton-based training.
- Comparison with other feedback models.
- Implementation across different clinical skills

Limitations

- Small number of participants

Conclusion

The Pendleton Feedback model significantly improves medical students' technical examination skills and confidence.

Incorporating structured feedback mechanisms into clinical training can enhance student learning, patient care, and medical education.

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Promoting Rational Thinking among Undergraduate Medical Students

Dr Ruqaiyah Ismael Bedaiwi, University of Tabuk, Faculty of Applied Medical Science
Professional Mentor: Dr Reem Al-Ba'adi



Abstract:

Making the decisions in the medical field is one of the crucial aspects that should be developed during the learning journey. Promoting rational thinking among medical students is one of the effective strategies to boost conceptualization, problem solving and making the correct decision. In this action research, the skilled level of Bloom's taxonomy (scenario-based open book exam and scientific debate approaches) was implemented to develop student rationalism. This was conducted in three phases: pre-implantation phase, assessing the approach phase and post-implementation phase. Findings indicated improvement in the medical students' competencies using both approaches and this concluded the effectiveness of the used approaches, especially scientific debate.

Research Aims/Problem:

Skilled level of Bloom's taxonomy strategies should be implemented to recall medical students' rationalism. As an effective decision in health care setting is essential and implementing rational thinking strategies can improve that. Therefore, in this action research, medical students' rationalism was enhanced using the scenario-based open-book exam and scientific debate approaches.

1. Scenario-based open-book exam:

Does scenario-based open-book exam improve medical students' rationalism?

2. Scientific debate:

Does scientific debate improve medical students' rationalism?

Research Methodology:

Student progress was assessed by applying a scenario-based open exam and scientific debate approaches to develop medical students' rational thinking. This was performed in three phases: pre-implantation phase, assessing the approach phase and post-implementation phase and linked with their progress regularly.

A. Pre-implementation phase:

In this phase, student knowledge and conceptual thinking were evaluated in the first weeks through discussing a medical scenario with open-ended questions.

B. Assessment the approach phase:

In this phase, the scenario-based open book assessment and scientific debate were implemented.

C. Post-implementation phase:

This phase validates if the implemented approached improves student competencies and measured using open ended questions.

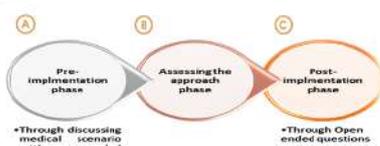


Figure 1: The figure shows the three stages of Research methodology .

Outcomes:

1 Improving student conceptualism through Scenario-based open-book exam:

In this approach, the student performance improved by 14% in the post-implementation phase only. The student showed the same level in the earlier phases A and B.



Figure 2: The bar chart shows the medical students progress among the three phases using Scenario-based open-book exam.

2 Improving student conceptualism using scientific debate:

In this approach, the student improved in each phase. 34% of improvement was recognised in the assessment approach phase and increased by 12% in the last phase C.

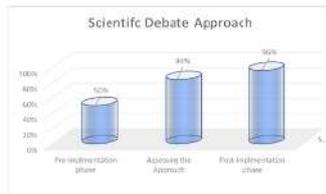


Figure 3: The bar chart shows the medical students progress among the three phases using scientific debate .

3 Comparing student progress among the various phases:

The student progress compared using both approached among B and C phases. The only recognisable method was in the second phase (Assessing the approach). However, the final end outcomes was nearly the same.

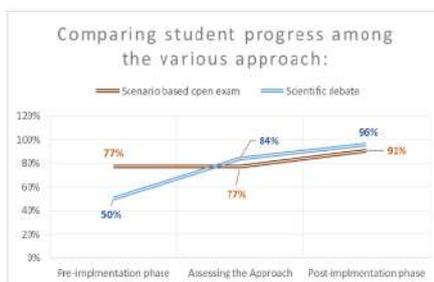


Figure 4: The bar chart shows the medical students progress among the three phases using scientific debate .

Impact:

- The implemented research improved the overall medical student rationalism which evaluated using open-ended questions in the last phase.
- Although scenario scenario-based open exam approach improved the student level in the phase C, scientific debate showed the progress in both phases (B,C).
- The difference between the two approaches might be linked to the preparation time that the medical student spent prior assessment. However, both approaches can induce student conceptualization.

Future Developments:

There are well defined problems that is related to data collection and decision making and by strict adherence to standard operating procedures these mistakes will not be managed ⁽¹⁾. For that the rational thinking should be boosted to conceptualization, problem solving, and reasoning ⁽²⁾. Having different strategies to enhance students' rational thinking will endue student competencies by improving their skills in their learning journey, research and profession ^(3,4). In this action research, scenario based open exam book and scientific debate was applied and students showed a progress using both assessments. Therefore, I do recommend the following:

1. In short term:

Applying both strategies on both medium and highest-level courses.

2. In Medium term:

Evaluating the student regularly and checking the possible improvement from the student side.

3. In Long term:

- Initiating peer learning for the ones in higher level to their newly engages colleagues.
- Incorporate these strategies with simulated real cases.
- Incorporate these strategies with E learning.

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Introduction

Basic radiology interpretation is a crucial skill for medical students. Inadequate competence in X-ray interpretation has been linked to management errors and poor patient outcomes, highlighting the need for more effective training in this essential area [1].

Previous studies have demonstrated a significant improvement in performance among medical students following an intervention, which has proven effective in radiology, resulting in enhanced radiological analysis and judgment [2-4].

Chest X-ray is a cornerstone of clinical radiology, and mastering its interpretation is essential.

This action research aims to investigate the effectiveness of a focused teaching session on normal chest X-ray interpretation for medical students.

Research Question

The study compares medical students and intern's interpretation accuracy and confidence levels before and after a structured teaching intervention.

It helps to identify gaps in students' current knowledge and to determine whether the teaching session enhances their ability to accurately interpret normal chest X-rays, contributing to their overall diagnostic skill development.

Research Question:

How does a focused teaching session on normal chest X-ray interpretation impact medical students' ability to interpret chest X-rays correctly and confidently?

Expected Outcomes:

- Increased confidence.
- Engagement with peer feedback.
- Student Satisfaction.
- Improvement in interpretation accuracy

Hypotheses:

- **Null hypothesis:** Students will not show measurable improvement post-intervention.
- **Alternative hypothesis:** Students will show measurable improvement post-intervention.

Research Methodology

This is a pre- and post-intervention action research study, conducted with a total of 19 participants (12 medical interns and 7 sixth year medical students), enrolled in a radiology elective rotation during January-February 2025. Each session had 4-5 participants.

Pre-Intervention Assessment:

Participants were shown a set of 5 anonymized chest X-rays (all were normal) and asked for their interpretation -given options were normal, abnormal or I am not sure (Round 1).

Intervention: A 60-minute interactive lecture focusing on normal chest X-ray interpretation.

Post-Intervention Assessment:

Immediately after the teaching session, the same set of 5 chest X-rays were shown to the participants. Their interpretations will be recorded again (Round 2).

Peer-review feedback: Open discussion focuses on identifying potential pitfalls and understanding the challenges they have encountered



Example of provided Chest X-Ray images.

Data Analysis

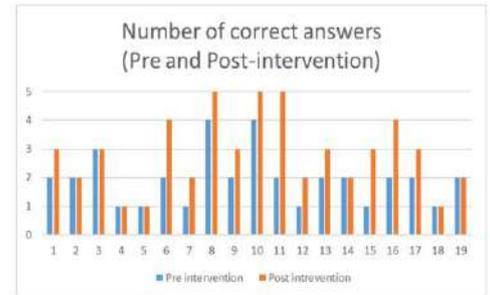
Paired t test was utilized to assess the effect of intervention by comparing students' pre and post performance on various scales.

Results

Total participants:

P value =0.0003 (statistically significant).

- Interns: P value= 0.0047
- Medical students: P value=0.0209



Impact

The study demonstrated an overall improvement in radiological analysis.

- 12 out of the 19 participants had at least an additional correct answer in the post intervention round.
- Interns performed better compared to medical students.

These findings suggest that through a well-designed interventional program, it is possible to improve learning and study skills among medical students.

Future Developments

We aim to expand the study design by:

Short-Term Plans:

- Expanding the study module to accommodate a larger number of participants to validate results.
- Including additional radiological interpretations, such as both basic and advanced imaging techniques (e.g., cross-sectional imaging).

Long-Term plans:

- Integrating Artificial Intelligence (AI) and Machine Learning to enhance interpretation accuracy and assist learning.
- Implementing customizable learning platforms that allow for personalized education pathways.
- Conducting studies on the comparative effectiveness of various teaching methods to identify the most efficient approaches.

References





Exploring Our Future: A Student-Led Career Discovery Activity

Dr. Sumaiah Alrawiai, Assistant professor, College of Public Health

Introduction

- Choosing a major and career path during college can be difficult for many undergraduates due to many factors such as too many options, limited exposure to possibilities, and feeling unprepared.
- Career interventions can improve the readiness, confidence, and clarity in both short- and long-term career planning for students

Research Aims

RESEARCH AIM 1

- To engage students in collaborative activity by exploring a specific career path, identifying related job titles, and outlining necessary certifications.

RESEARCH AIM 2

- To assess students' perceptions and learning outcomes of the activity in supporting their career decision-making process.

Research Methodology

- We use a pre-post session online survey to assess students' knowledge and preferences regarding the career options under career clusters and the certifications that can be obtained for these career options.
- Students were divided into groups and task with researching and presenting to their peers during the session the different options under the career cluster they were assigned.
- The class has 24 students present during the session, 23 of them completed the pre-session survey (96%). While 11 completed the post-session survey (46%).

Outcomes

1. In the pre-session survey one of the certification that was mentioned the most was the CPHQ certificate
2. In the post-session survey, all participants answered yes to "Did you benefit from today's session?"
3. In response to what part was most helpful, most of the students find the part about certifications to be the most useful.
 - "Learning about the different kinds of certification."
 - "The certifications needed for each career path."
4. Here are examples of the suggestions by students on how to improve the next career session:
 - "Know more about each career that is out of hospital and self employed."
 - "We determine the type of certificates, whether in-person or online, and the prices of the certificates."
 - "Yes, to make it later in next year"



Figure 1: pre-session survey



Figure 2: post-session survey

Impact

1. Students respond positively to the career discovery session. This is a quote by one student reflecting their sentiment: "I actually had an amazing time with this lectureI guess after this class I got a new vision of my future career"
2. From my perspective as an educator, the focus was not only on the career discovery but how the students arrive at it. Thus, the session was presented by the students to the students through group work done within the session itself
3. Repetition of the session, with some improvement, could be beneficial to the students based on the feedback from this session

Future Developments

Short term: Plan another, more lengthy, in-depth session for students in their final year of study

Medium term: Invite people from different career paths to share their experience and suggestions with students

Long term: Provide career counseling by faculty, alumni, and people from the industry to students through a career counseling office

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Assessing the Application of Practice Points as a New Strategy in Students' Assignments (Application of Different Consultation Models in Case Scenarios)

Dr. Suhaila Abdalkarim, Assistant Professor, Jazan University, Faculty of Medicine



Abstract

- Effective application of consultation models is essential in medical education to enhance student competency in patient interactions.
- This study evaluates the effectiveness of "Practice Points" as a structured approach to simplify and enhance the application of consultation models.
- Quasi-experimental design was employed, involving 145 fourth-year medical students at Jazan University.
- Data collection included pre- and post-assessment surveys, assignment analysis, and focus group discussions.
- Results indicate improved understanding, confidence, and application of consultation models among students.
- The findings support the integration of Practice Points into medical education curricula to bridge the gap between theoretical knowledge and practical application, ultimately improving student preparedness for clinical practice.

Research Aims/Problem

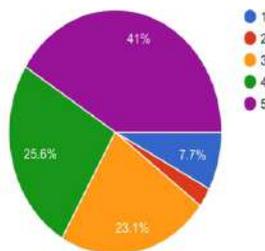
- To assess the effectiveness of Practice Points as a pedagogical tool in medical education by evaluating their role in improving students' ability to apply consultation models in case scenarios.

Research Methodology

- Participants: 145 fourth-year medical students at Jazan University.
- Study Design: Quasi-experimental design comparing assignment outcomes before and after implementing Practice Points.
- Data Collection: Pre- and post-assessment surveys on confidence and perceptions. Assignment analysis for clarity, depth, and model application.
- Focus group discussions for qualitative insights.
- Data Analysis: Quantitative: Statistical evaluation of confidence levels and assignment quality.
- Qualitative: Thematic analysis of student perceptions.

Outcomes

- 1 Understanding of Consultation Models: Most students reported good to very good understanding.
- 2 The New Comprehensive Consultation Model (2007) was most frequently cited as helpful.
- 3 Application of Models and Practice Points: Majority found Practice Points helpful and clear. Students frequently referred to Practice Points in assignments.
- 4 Confidence and Satisfaction: Increased confidence in applying consultation models. High satisfaction with Practice Points in assignments.
- 5 Impact on Skills and Assignment Quality: Improved application of consultation models. Assignments enhanced medical interview skills.
- 6 Recommendations for Future Use: Students support continued use of Practice Points. Identified areas for improving teaching methods.



The results from the Practice Points indicate a strong positive impact on students' understanding of interview techniques. With 41% of respondents rating their understanding as a "5," it suggests that a significant portion of students found the practice points exceptionally beneficial. Additionally, 25.6% rated their understanding as a "4," further reinforcing the effectiveness of the program. The lower percentages for ratings "1" and "2" (7.7% and 23.1%, respectively) indicate that only a small number of students felt that their understanding was lacking. This distribution suggests that the majority of students felt positively about the enhancement of their interview skills through the practice points, highlighting the value of this educational approach. Overall, the results reflect a successful implementation of the program in enhancing interview technique comprehension among students.

Conclusion

Practice Points offer an innovative strategy to improve student learning and clinical competency. This research highlights their effectiveness in enhancing assignments and fostering better integration of consultation models into medical education.

Future Developments

- Supports curriculum development and learner-centered strategies.
- Enhances student preparedness for real-world clinical challenges.
- Provides a scalable approach to bridging theory and practice.
- Students support continued use of Practice Points.
- Identified areas for improving teaching methods.

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Exploring Barriers to Faculty Adoption of Active Learning at Imam Abdulrahman Bin Faisal University (IAU)



Yahya A. Alzahrani, Assistant Professor, College of Applied Medical Sciences
PFUTL Mentor: Dr. Maher M. Alquaimi

Abstract

Active learning (AL) teaching strategies engage students in the learning process through activities such as discussions, problem-solving, and collaborative tasks, fostering deeper understanding and critical thinking. Despite its benefits, faculty at Imam Abdulrahman Bin Faisal University (IAU) face barriers to adopting AL.

This study utilized a validated questionnaire to identify barriers to AL implementation among IAU faculty. The research explored barriers across four categories: student preparation and engagement, instructional support, instructor comfort and confidence, and institutional environment

Research Aims/Problem

Aim: To identify barriers that may prevent IAU faculty from implementing AL teaching strategies in their teaching practices.

Problem: While AL is widely recognized for enhancing student outcomes, its adoption at IAU is limited due to various barriers, including student readiness, resource availability, faculty confidence, and institutional support. Understanding these barriers is critical to designing effective interventions.

RESEARCH QUESTIONS

- What are the primary barriers to implementing AL among IAU faculty across student, instructional, instructor, and institutional domains?
- How do factors such as gender, academic rank, years of experience, and attendance to developmental sessions influence the number of reported barriers?

Research Methodology

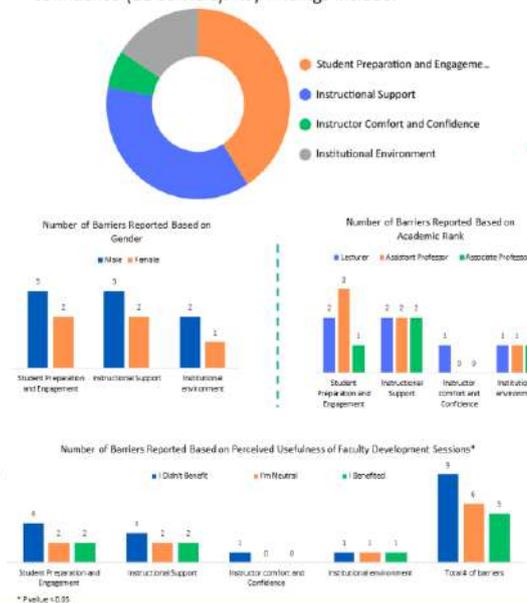
The study employed a cross-sectional survey design, targeting IAU faculty across various colleges. A validated questionnaire was adapted to assess barriers to AL implementation, covering four categories: student preparation and engagement (5 items), instructional support (4 items), instructor comfort and confidence (4 items), and institutional environment (4 items). Responses were collected on a 7-point Likert scale ranging from Strongly Disagree to Strongly Agree.

Data were analyzed using descriptive statistics, inferential tests and Bivariate analyses to identify significant differences among faculty in terms of self-reported barriers.

Factor 1: Student Preparation and Engagement	Factor 2: Instructional Support
<ul style="list-style-type: none"> • My students do not know how to engage in active learning. • My students do not come prepared for in-class activities. • My students play the system to avoid learning objectives. • My students are resistant to engage in active learning. • My students do not expect to engage in active learning during lecture. 	<ul style="list-style-type: none"> • Educational support staff do not provide enough personalized support for me to make changes in my classes. • There is not enough easily accessible material to use active learning in my course. • There is insufficient technological support to ensure active learning works in my classroom. • My classes do not have the teaching assistant support necessary for active learning.
Factor 3: Instructor Comfort and Confidence	Factor 4: Institutional Environment/Rewards
<ul style="list-style-type: none"> • I get anxious when trying active learning in class. • I am uncomfortable teaching differently than the norm of lecturing. • I am not confident that I have adequate skills to use active learning in my classes. • I am more comfortable in the role of a lecturer rather than a facilitator. 	<ul style="list-style-type: none"> • The teaching policies at my institution do not support active learning. • My colleagues are generally encouraging about using active learning. • My colleagues are not supportive of changing to a curriculum that uses active learning. • There is no incentive to innovate in my teaching.

Outcomes

Data were collected from 30 faculty members (22 female, 8 male). The study identified a total of 171 barriers across four categories: student preparation and engagement (70 barriers), instructional support (63 barriers), institutional environment (27 barriers), and instructor comfort and confidence (11 barriers). Key findings include:



Impact

The findings underscore the critical role of professional development in reducing barriers to AL implementation. Faculty who found developmental sessions beneficial reported fewer obstacles, suggesting that targeted training can enhance confidence and resource awareness.

The study highlights the need for institutional strategies to address student readiness and instructional support, particularly for Assistant Professors and faculty with extensive experience.

By addressing these barriers, IAU can foster a teaching environment that promotes AL, potentially improving student engagement and learning outcomes across disciplines.



Future Developments

1. Expand the sample size to enhance generalizability across IAU colleges.
2. Explore qualitative insights through interviews to understand the context of reported barriers.
3. Develop and evaluate targeted interventions based on perceived benefits of developmental sessions.
4. Investigate the impact of institutional policy changes to support AL adoption, such as incentives for innovative teaching or enhanced technological support.

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