W6 High-Impact Practices in Forensic Science Education

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Learning Overview: After attending this presentation, attendees will learn how High-Impact Practices (HIPs)can be used in forensic science education and discover how to adapt their courses using common programing for students by: (1) identifying and describing a variety of HIPs; (2) recognizing useful HIPs dependent on the environment; and (3) discovering innovative HIPs that could be incorporated into their classroom.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by exploring a variety of HIPs and gaining insight into a broader scope of common methods useful in forensic science teaching. By discussing multiple types of HIP techniques and the application of these practices in forensic science education, attendees will be able to incorporate tools into their forensic science classrooms and programs.

HIPs are defined as active learning practices that promote deep learning through student engagement. Based on this definition, there are ten different learning experiences identified as HIPs: (1) first year seminar and experiences; (2) common intellectual experiences; (3) learning communities; (4) writing intensive courses; (5) collaborative assignments and projects; (6) undergraduate research; (7) diversity/global learning; (8) service learning or community-based learning; (9) internships; and (10) capstones courses / projects. These increase student engagement and success throughout their college career. Students should participate in at least two experiences throughout college, but it is highly recommended they participate in one experience per year.[1] Due to the importance of these experiences in students' college careers, these are also required for forensic science programs accredited through Forensic Science Education Programs Accreditation Commission (FEPAC). This workshop explores seven ways these can be incorporated in forensic science curriculum.

Over the years, there have been issues on student success, retention rate and attrition rate. A detailed insight on the impact of First-Year Seminar Experience (FYSE) on the forensic science program at Albany State University that resulted in increased retention and graduation rate will be provided. Data will be shown on the impact of FYSE and the way forward to repositioning of the program to enable greater learning experiences for students.

Living-Learning Communities (LLC) promote collaborative learning experiences by grouping students of a similar interest or major within the same area of a residence hall. LLCs focus on students' curricular experiences to create purposeful connections between the academic and social environments of college life. The development and organization of the LLC at the University of Central Oklahoma and examples of student growth and transformation will be discussed.

The "Forensic Science Seminar at Sea" and "Field Study in Forensic Science" are two programs implemented by the School of Criminal Justice, Forensic Science, and Security at the University of Southern Mississippi. These programs provide student-centered instruction by working with forensic scientists across multiple agencies. Topics will include program planning, curriculum development, risk management, benefits, and meeting guidelines for academic accreditation.

The case practicum model provides students with information to independently perform evidence assessment and laboratory analysis in a realistic forensic case setting. Active involvement from forensic science practitioners, an extensive peer review process, and completion of a forensic proficiency test contribute to this hands-on course. An overview of Boston University's practicum course, including insight into planning, delivery, and assessment, will be shared.

Project-based learning promotes critical thinking and problem-solving skills. Coupling this concept with casework and scholarly research bridges the real expectations and outcomes in forensic investigations and research expected in academia. Using current missing person cases, students complete an experiential learning project and their work has the potential to impact a real case.

A series of semester-long projects are used to create problem-solving methods used in a forensic chemistry course. The project supplements lecture and labs in crime scene and laboratory forensics with separate tracks related to bloodstain pattern interpretation, gamification of a forensic chemistry lab, and developing contemplative methods to enhance observational skills. The lectures, projects, and assignments that accompany these three tracks will be discussed.

The University of Central Oklahoma's (UCO's) Student Transformative Learning Record (STLR) is a non-proprietary model with a proven track record for increasing retention, student academic achievement, and workforce readiness. An overview of the STLR process, how it is assessed, and examples of transformational learning experiences within the UCO Forensic Science Institute will be shared.

Reference(s):

1. Kuh, G.H. High-Impact Educational Practices—What they are, who has access to them, and why they matter. *Association of American Colleges and Universities*. 2008.

Education, High-Impact Practices, Student Experiences

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