

Interdisciplinary Learning

Knowledge and Employability courses are designed to help students transition from school to the workplace and community, prepare for responsible citizenship, and be recognized and valued by employers and further education providers for their skills, abilities and work effort. They are also designed to meet the educational needs of students who learns best: when the focus is on the development and application of reading, writing and mathematical literacy, and essential employability skills through experiential learning activities • when meaningful connections are made between schooling and personal experiences. Generally, students in Knowledge and Employability courses: think best in terms that are visible, immediate and practical • • think logically about things and events, but usually in the context of their immediate experience are able to coordinate two aspects of a problem at the same • time, and can mentally reverse actions or operations (e.g., build classification systems and then break them down into subgroups) have difficulty abstracting principles from the past or future, projecting a trend, imagining or hypothesizing. An important element in meeting the learning styles and needs of students in Knowledge and Employability courses is interdisciplinary learning. Interdisciplinary learning is a teaching approach that combines the curricular objectives and methods from more than one discipline focusing on a central theme, issue, problem or work. Benefits of Interdisciplinary learning activities can have a number of advantages for teachers and students. Interdisciplinary Interdisciplinary learning: Learning allows students to develop an awareness of the interconnectedness that exist among the disciplines,¹ and

between disciplines and the real-world application of

knowledge

^{1.} Jacobs, 1989.

- focuses on higher-level thinking and decision making, which encourages students to become aware of and make choices about behaviours and thought processes they will be engaged in while learning
- gives students greater control of their learning and encourages them to assess and set goals for what needs to be accomplished to complete objectives
- motivates students with the knowledge that what they are learning has immediate real-world application.

Implementing Interdisciplinary Learning

The programs of study and resources for Knowledge and Employability courses are distinctive, in part, because they deliberately promote cross-curricular, community and workplace connections. By identifying and building on these connections, teachers can implement effective interdisciplinary learning in the classroom.

Cross-curricular Connections

Knowledge and Employability courses promote the integration of subjects to emphasize their interrelationships and connections to other school subjects. To be consistent with the philosophy of Knowledge and Employability courses—that students learn best when they can clearly recognize connections, applications and relevance to a variety of everyday experiences—teachers may wish to develop thematic units or integrate one subject with units and/or projects in other subjects. When using subject-area materials in the Studio, teachers may use the tools from other subjects to make cross-curricular connections. Many of these links are identified throughout the Studio.

Community and Workplace Connections

Knowledge and Employability courses provide students with practical and applied opportunities to develop basic reading, writing and mathematical literacy. Community and workplace experiences ensure that learning continues within applied contexts and connect the school with environments beyond school. Examples of community and workplace connections include tours to local business and industry, mentorships, job shadowing and work experience.

Strategies for Implementing Interdisciplinary Learning Consider the following strategies for implementing

interdisciplinary learning.

• Develop cross-curricular units using central and essential questions that suggest the content and learning processes (skill and strategies) that students will be engaged in.

- Allow students to gather information from various disciplines. Cross-curricular research connects students to an authentic real-world experience of critical and creative thinking to solve problems.
- Introduce subjects by first finding out what students already know.
- Ensure that all learning in core subjects begins at a concrete level, with reference to real-life applications. Establish links to the lives of students naturally and contextually, heightening their interest and motivating them by explaining the importance that the material holds for them.²
- Continually emphasize the purpose of learning and using different skills, knowledge and strategies. Help students understand the need for academic knowledge as it applies to success in their lives and workplaces.
- Look for ways to reinforce knowledge, skills and attitudes addressed in core subjects through concrete applications in occupational courses and other subject areas (e.g., "measurement" may be taught in mathematics and applied in the occupational courses).
- Use concrete, physical objects or experiences to show students what the concept "looks like."
- Use questioning techniques that begin at a concrete, applied level and gradually build more abstract understanding.

^{2.} National Association of Secondary School Principals, 1996.