Strategies to Support Peer Collaboration

Research has shown that collaborative learning can promote cooperation and improve academic achievement for a broad range of learners in K-12 classrooms (Barkley, Cross, & Major 2014, cited by Lash, T., Jeong, G., Wherfel, Q., & Israel, M. (2017). Activities that involve learning to code and coding to learn and create, offer opportunities to develop important teamwork skills that prepare students for further learning, work and life.

Instructional Goals:

- Design activities for students to develop and use collaboration skills to achieve shared learning goals.
- Provide opportunities for collaboration and interaction where all efforts are valued.
- Encourage interpersonal and social group skills for students with varying communication and collaboration strengths and challenges.

Instructional Strategies:

1. **Create a collaborative classroom environment**
   - Prepare to be flexible
     i. Design lessons and classroom layout to allow you to move from whole group to small group to individual instruction easily
   - Consider physical arrangement of classroom
     i. Will students work at tables, desks, on the floor?
     ii. Can students move around room?
     iii. Consider students who may not be able to move around easily, sit on the floor, etc
   - Display Tips Sheets, Checklists, Vocabulary, so students can easily reference them during activities

2. **Explicitly teach and model collaboration**
   - Teach and use collaborative language to support students in asking for and offering help (Refer to *Collaborative Discussion Framework*)
   - Use and display Student Tip Sheets to support collaboration (e.g. Giving Feedback, We Collaborate)

3. **Remind students to use collaborative strategies and language**
   - Use prompts, such as, "Listen to your friend's ideas", "Try to help each other, before you ask me for help."
   - Refer to Tips Sheets and other tools to use as a reference or for self-monitoring (*see Strategies to Support Collaborative Discussion Framework)*

4. **Explore and practice different models of group work and collaboration**
   - Consider using combinations of less structured and more structured groupings and models (e.g. pairs, groups of 3 or 4, use of timers, assigned roles)
   - Consider cross-age groupings (Coding Buddies) to promote peer tutoring opportunities
   - Consider strengths and needs of individual students when grouping students.
   - Monitor to ensure all students are actively involved
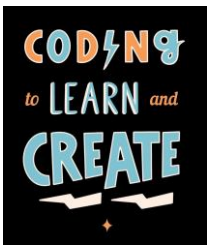
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Adapted with permission from:

Lash, T., Jeong, G., Wherfel, Q., & Israel, M. (2017). Helpful strategies for peer collaboration during K-12 computer science instruction. Project TACTIC: Teaching All Computational Thinking through Inclusion and Collaboration. Retrieved from of Illinois, Creative Technology Research Lab website: https://CTRL.education.illinois.edu/TACTICal/Collaboration