

# 5 Benefits of Student-Directed Inquiry in Science Education

## WHAT IS STUDENT-DIRECTED INQUIRY?

Student-directed inquiry (SDI) is an approach where students are in control of their learning. SDI resembles the work of researchers where students make observations, ask questions and investigate 'real-world' phenomena [1].



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### Motivation & Engagement

In SDI, students make decisions about their learning. Thus, their learning is personally meaningful and they are more likely to take an active role [2].

2

### Autonomy

Through SDI, students develop learner agency where they decide their learning path. Students also regulate their learning by working at their own pace and managing their time [3].



### Collaboration & Communication

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SDI allows students to collaborate with their peers while sharing their thoughts and ideas. Additionally, students practice voicing their opinions in concise and organized ways [4].



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### Understanding the Nature of Science

When SDI is applied in science education, students mimic the work that scientists do. They participate in authentic science activities which helps them understand the true nature of science [2].



### Science Identity

5

When students are interested in their science learning, they may feel empowered as science contributors. Moreover, they may feel connected to the science community, thus developing a positive science identity [5].



#### References

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