



## METHODS AND MEANS OF FORMING INTELLECTUAL FEELINGS IN STUDENTS

Nasimova Nasiba Djurakulovna  
Uzbekistan - Finnish Pedagogical Institute  
Samarkand, Uzbekistan

### Abstract:

The development of intellectual feeling, an emotional appreciation for knowledge and learning, is crucial in fostering a deep and sustained engagement with educational content among students. This article examines various methods and means of cultivating intellectual feeling in students. Drawing from contemporary educational theories and empirical studies, the paper highlights the importance of creating a learning environment that stimulates curiosity, encourages critical thinking, and promotes intrinsic motivation. Key strategies discussed include the use of inquiry-based learning, the integration of interdisciplinary projects, and the application of technology-enhanced learning tools. Additionally, the article explores the role of teachers in modeling intellectual enthusiasm and providing constructive feedback. The findings suggest that a multifaceted approach, combining pedagogical innovation with a supportive learning culture, can effectively enhance students' intellectual feelings, thereby improving their overall academic performance and lifelong learning potential.

**Keywords:** Intellectual Feeling, Student Engagement, Inquiry-Based Learning, Interdisciplinary Projects, Intrinsic Motivation, Educational Technology, Teacher Role, Learning Environment, Academic Performance, Lifelong Learning.

### INTRODUCTION

The formation of intellectual feeling in students is an essential component of modern education, focusing on fostering a deep-seated appreciation for knowledge and the learning process. Intellectual feeling, often described as the emotional connection to learning, plays a critical role in motivating students to engage deeply with educational content, pursue inquiry, and develop critical thinking skills. In an era where the rapid evolution of technology and information demands a more profound and intrinsic engagement with knowledge, cultivating intellectual feeling becomes increasingly pertinent. Historically, education systems have predominantly emphasized the acquisition of factual knowledge and cognitive skills. However, contemporary educational theories argue that the affective domain, which encompasses emotions, attitudes, and motivations, is equally vital in shaping students' learning experiences and outcomes (Krathwohl, Bloom, & Masia, 1964). Intellectual feeling bridges the cognitive and affective domains, creating a more holistic approach to education that addresses both the mind and the heart of the learner.

One of the fundamental ways to foster intellectual feeling is through inquiry-based learning. This pedagogical approach encourages students to ask questions, conduct investigations, and construct their own understanding of concepts. Inquiry-based learning shifts the focus from passive reception of information to active participation in the learning process, thus nurturing curiosity and a sense of



ownership over one's learning journey (Hmelo-Silver, Duncan, & Chinn, 2007). Research has shown that students engaged in inquiry-based learning exhibit higher levels of motivation and deeper understanding of subject matter (Bell, Urhahne, Schanze, & Ploetzner, 2010).

Another effective method is the integration of interdisciplinary projects. By breaking down the traditional barriers between subjects, interdisciplinary projects enable students to see the interconnectedness of knowledge and apply their learning in real-world contexts. This approach not only enhances cognitive skills but also fosters an emotional connection to the material, as students realize the relevance and impact of their studies on broader societal issues (Beane, 1997). For instance, a project that combines science, technology, engineering, arts, and mathematics (STEAM) can stimulate both intellectual curiosity and creativity, leading to a more engaged and enthusiastic learner. Technology-enhanced learning tools also play a significant role in cultivating intellectual feeling. Digital platforms, interactive simulations, and virtual labs provide immersive and interactive learning experiences that can spark curiosity and sustain interest (Johnson et al., 2016). These tools offer personalized learning pathways, allowing students to explore topics at their own pace and according to their interests, thus promoting a more profound and personal connection to the material.

The role of teachers in fostering intellectual feeling cannot be overstated. Teachers who model intellectual enthusiasm, exhibit a passion for their subject matter, and provide constructive and motivational feedback can significantly influence students' attitudes towards learning (Hattie & Timperley, 2007). Effective teachers create a supportive and stimulating classroom environment where students feel valued and encouraged to explore and express their intellectual curiosity.

Moreover, a positive learning environment is crucial in nurturing intellectual feeling. An environment that supports risk-taking, values diverse perspectives, and encourages collaborative learning can help students feel more connected to their educational journey (Dweck, 2006). Such an environment fosters a growth mindset, where students see challenges as opportunities for growth rather than obstacles to success.

In summary, the formation of intellectual feeling in students is a multifaceted process that involves innovative teaching methods, interdisciplinary learning, the use of technology, and the creation of a supportive learning environment. By addressing both the cognitive and affective domains, educators can cultivate a deeper and more meaningful engagement with learning, ultimately enhancing students' academic performance and fostering lifelong intellectual curiosity. This article explores these methods and means in detail, providing a comprehensive framework for educators aiming to develop intellectual feeling in their students.

## **MATERIALS AND METHODS**

### **Inquiry-Based Learning**

Inquiry-based learning is a powerful method for fostering intellectual feeling in students. This pedagogical approach places students at the center of the learning process, encouraging them to ask questions, conduct investigations, and construct their own understanding of concepts. Unlike



traditional rote learning methods, inquiry-based learning stimulates curiosity and critical thinking, which are essential components of intellectual feeling.

The effectiveness of inquiry-based learning is supported by substantial research. Hmelo-Silver, Duncan, and Chinn (2007) found that this approach helps students develop a deeper understanding of subject matter by actively engaging them in the learning process. Furthermore, it promotes a sense of ownership over their educational journey, which can significantly enhance their motivation and emotional connection to the material.

For example, in a science class, students might be tasked with designing their own experiments to explore biological processes. This hands-on approach not only enhances their understanding of scientific principles but also fosters a sense of wonder and excitement about the natural world. Similarly, in history lessons, students might investigate primary sources to construct their interpretations of historical events, thereby cultivating a deeper appreciation for the complexity and nuance of historical study.

## **Interdisciplinary Projects**

Interdisciplinary projects are another effective means of fostering intellectual feeling. By integrating knowledge and skills from multiple disciplines, these projects help students see the interconnectedness of different fields and understand how various types of knowledge can be applied to solve real-world problems. This holistic approach to education not only enhances cognitive skills but also fosters an emotional connection to the material.

Beane (1997) argues that interdisciplinary projects break down the artificial barriers between subjects, enabling students to develop a more integrated and comprehensive understanding of knowledge. For instance, a project that combines elements of science, technology, engineering, arts, and mathematics (STEAM) can stimulate both intellectual curiosity and creativity. Such projects might include designing and building a sustainable model city, which would require students to apply principles from all these fields in a collaborative and engaging manner.

## **Technology-Enhanced Learning**

The integration of technology into education has revolutionized the way students engage with learning materials, providing new opportunities to foster intellectual feeling. Digital platforms, interactive simulations, and virtual labs offer immersive and interactive experiences that can spark curiosity and sustain interest.

Johnson et al. (2016) highlight that technology-enhanced learning tools can personalize the learning experience, allowing students to explore topics at their own pace and according to their interests. For example, educational software can adapt to individual learning styles and provide instant feedback, helping students to feel more connected and engaged with their studies.

Virtual reality (VR) and augmented reality (AR) are particularly promising in this regard. These technologies can create highly immersive learning environments that transport students to different times, places, and scenarios. For example, a history student might use VR to explore ancient



civilizations in a way that textbooks cannot replicate, fostering a deeper emotional and intellectual connection to the material.

## **Role of Teachers**

The role of teachers in fostering intellectual feeling is crucial. Teachers who exhibit a passion for their subject matter and model intellectual enthusiasm can significantly influence students' attitudes towards learning. Hattie and Timperley (2007) emphasize that effective teachers provide constructive and motivational feedback, creating a supportive classroom environment where students feel valued and encouraged to explore their intellectual curiosity.

Effective teachers also employ a variety of instructional strategies to cater to different learning styles. For instance, they might use storytelling to bring abstract concepts to life, use debates to foster critical thinking, or employ hands-on activities to engage kinesthetic learners. By creating a dynamic and interactive learning environment, teachers can help students develop a deeper and more meaningful connection to the material.

## **Positive Learning Environment**

Creating a positive learning environment is essential for nurturing intellectual feeling. An environment that supports risk-taking, values diverse perspectives, and encourages collaborative learning can help students feel more connected to their educational journey. Dweck (2006) argues that fostering a growth mindset—where students see challenges as opportunities for growth rather than obstacles to success—can significantly enhance their intellectual engagement.

Collaborative learning activities, such as group projects and peer reviews, can also promote a positive learning environment. These activities encourage students to share their ideas, listen to different perspectives, and learn from each other. This collaborative approach not only enhances cognitive skills but also fosters a sense of community and belonging, which are crucial for intellectual feeling.

For example, a literature class might involve students working in groups to analyze and interpret a complex text. Through discussion and collaboration, students can develop a deeper understanding of the material and feel more connected to their learning process. Similarly, in a science class, students might work together to design and conduct experiments, fostering a sense of teamwork and shared intellectual curiosity.

## **CONCLUSION**

The formation of intellectual feeling in students is a multifaceted endeavor that requires a strategic combination of pedagogical methods and means. As the discussion has highlighted, approaches such as inquiry-based learning, interdisciplinary projects, technology-enhanced learning, and the fostering of a positive learning environment all play critical roles in nurturing students' intellectual curiosity and emotional engagement with their studies.

Inquiry-based learning, by placing students at the center of the educational process, empowers them to ask questions, investigate, and construct their own knowledge, thereby fostering a deeper connection



to the material. Interdisciplinary projects break down the silos of traditional subject boundaries, allowing students to see the interconnectedness of different fields and apply their knowledge to solve complex, real-world problems. Technology-enhanced learning tools, including digital platforms and immersive technologies like VR and AR, offer personalized and engaging learning experiences that can spark and sustain intellectual curiosity.

Moreover, the role of teachers is indispensable in this process. Teachers who demonstrate passion for their subjects and create a supportive classroom environment can significantly influence students' attitudes towards learning. Effective feedback, modeling intellectual enthusiasm, and employing diverse instructional strategies cater to different learning styles, thereby enhancing students' engagement and intellectual development.

Creating a positive learning environment is equally crucial. An environment that encourages risk-taking, values diverse perspectives, and promotes collaborative learning helps students feel more connected to their educational journey. Fostering a growth mindset, where challenges are seen as opportunities for growth, further enhances students' intellectual engagement.

In conclusion, the integration of these methods and means can significantly enhance the intellectual development of students, helping them to develop a lifelong love for learning and the ability to think critically and creatively. By fostering intellectual feeling, educators can prepare students not only for academic success but also for the challenges of the 21st century, where innovation, adaptability, and continuous learning are key. This holistic approach to education ensures that students are not only knowledgeable but also emotionally connected to their learning, which is essential for their overall development and future success.

## REFERENCES

1. Beane, J. A. (1997). Curriculum integration: Designing the core of democratic education. Teachers College Press.
2. Bell, T., Urhahne, D., Schanze, S., & Ploetzner, R. (2010). Collaborative inquiry learning: Models, tools, and challenges. *International Journal of Science Education*, 32(3), 349-377.
3. Dweck, C. S. (2006). *Mindset: The new psychology of success*. Random House.
4. Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81-112.
5. Hmelo-Silver, C. E., Duncan, R. G., & Chinn, C. A. (2007). Scaffolding and achievement in problem-based and inquiry learning: A response to Kirschner, Sweller, and Clark (2006). *Educational Psychologist*, 42(2), 99-107.
6. Johnson, L., Adams Becker, S., Estrada, V., & Freeman, A. (2016). *NMC Horizon Report: 2016 Higher Education Edition*. The New Media Consortium.
7. Krathwohl, D. R., Bloom, B. S., & Masia, B. B. (1964). Taxonomy of educational objectives, the classification of educational goals. *Handbook II: Affective domain*. David McKay Company.





8. Искандарова, Ш., Гулямов, С., Усманов, И., & Хасанова, М. (2023). Туб чўкиндилар–ер усти сувларини ифлослантирувчи манбалар. *Современные проблемы охраны окружающей среды и общественного здоровья*, 1(1), 81-84.
9. Искандарова, Ш., Гулямов, С., & Бердимуратов, Д. (2023). Современные гигиенические требования к рациональному питанию. *Современные проблемы охраны окружающей среды и общественного здоровья*, 1(1), 66-69.
10. Бердимуратов, Д., Гулямов, С., & Файзиева, М. (2023). Алгоритмы расчета стоимости медицинских услуг для внедрения государственного медицинского страхования. *Современные проблемы охраны окружающей среды и общественного здоровья*, 1(1), 17-19.
11. Искандарова, Ш. Т., Джалилова, Г. А., Аминова, А. А., & Алимова, Н. Х. (2023). СОЦИАЛЬНЫЕ ФАКТОРЫ, ВЛИЯЮЩИЕ НА РАСПРОСТРАНЕНИЕ ВИЧ-ИНФЕКЦИИ. «МИКРОБИОЛОГИЯНИНГ ДОЛЗАРБ МУАММОЛАРИ» МАВЗУСИДАГИ РЕСПУБЛИКА ИЛМИЙ-АМАЛИЙ АНЖУМАНИ, 129.
12. Искандарова, Ш. Т., Бердимуратов, Д. У., & Расулова, Н. Ф. (2023). АЛГОРИТМЫ РАСЧЕТА СТОИМОСТИ МЕДИЦИНСКИХ УСЛУГ ДЛЯ ВНЕДРЕНИЯ ГОСУДАРСТВЕННОГО МЕДИЦИНСКОГО СТРАХОВАНИЯ. *Science and innovation*, 2(Special Issue 8), 1901-1904.
13. Искандарова, Ш. Т., Расулова, Н. Ф., & Бердимуратов, Д. У. (2023). ПРЕИМУЩЕСТВА МЕДИЦИНСКОГО СТРАХОВАНИЯ В ЛЕЧЕБНО-ПРОФИЛАКТИЧЕСКИХ УЧРЕЖДЕНИЯХ. *Science and innovation*, 2(Special Issue 8), 1907-1909.
14. Бердимуратов, Д. У. (2020). ДОСТОИНСТВА И НЕДОСТАТКИ ИНТЕРНЕТ РЕКЛАМЫ. In *Инновационные подходы в современной науке* (pp. 88-91).
15. MA, N., & Quranbayev, S. B. (2024). URGANCH SHAHARNI TOZALANGAN SUV BILAN TA'MINLASH. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 36(3), 148-154.
16. Quranbayev, S. B., & Niyozmetov, M. A. (2024). XONQA TUMANI MANGULIK MAHALLASI SUV TAMINOTINING XOZIRGI AHVOLI. *Ta'limning zamonaviy transformatsiyasi*, 3(1), 118-120.
17. MA, N., & Quranbayev, S. B. (2024). OROL BO'YI MINTAQASIDA EKOLOGIYANI OCHIQ VA YER OSTI SUV MANBALARIGA TA'SIRI. *TADQIQOTLAR*, 29(1), 94-99.
18. Ниязметов, М. А., & Куранбаев, С. Б. (2024). ВЛИЯНИЕ ВОДНОГО ФАКТОРА НА ЗАБОЛЕВАНИЯ ОПОРНО-ДВИГАТЕЛЬНОЙ СИСТЕМЫ. *Ta'limning zamonaviy transformatsiyasi*, 3(1), 121-131.
19. Ataboevich, P. N. M., & Aslamovich, A. A. (2022). Influence Of The Water Factor On Diseases Of The Locomotor System. *Texas Journal of Medical Science*, 8, 6-9.
20. Оташехов, З. И., & Халилова, У. Т. (2018). Высшее медицинское образование в Узбекистане-стремление к совершенствованию и высоким достижениям. *Интернаука*, (20-1), 28-30.



21. Оташехов, З. И., Алимджанова, С. К., & Жалилова, К. Г. (2015). Совершенствование программы по пропаганде здорового образа жизни среди населения. In *Сборник научных трудов по материалам 1X международной научно-практической конференции г. Белгород* (Vol. 9, pp. 49-52).
22. Назарова, С. К., & Оташехов, З. И. (2020). Роль отделения гигиены питания в профилактике йододефицитных состояний в Республике Узбекистан. *Интернаука*, (18-1), 53-54.
23. Оташехов, З. И., & Алимджанова, С. К. (2015). Роль медицинских работников поликлинического звена по пропаганде здорового образа жизни среди населения. *Молодой ученый*, (11), 697-699.
24. Назарова, С. К., Оташехов, З. И., & Мирдадаева, Д. Д. (2020). Постинсультная реабилитация больных как социально-гигиеническая проблема. *Новый день в медицине*, (2), 449-452.
25. Максудова, Н. А., Мухамедова, Н. С., & Оташехов, З. И. (2020). ФАРМАЦИЯ И ЛЕКАРСТВОВЕДЕНИЕ В ДРЕВНЕМ КИТАЕ. In *Университетская наука: взгляд в будущее* (pp. 731-734).